Online Access for Health Professionals in Washington State

Janet G. Schnall, MS, AHIP
HEAL-WA Librarian
schnall@uw.edu
healwa.org
Objectives

• Describe the purpose of the HEAL-WA program
• Identify at least 3 key HEAL-WA resources (e.g., databases, eBooks) relevant to your professional practice in dietetics and nutrition for children with special health care needs
• List 2-3 strategies for searching the HEAL-WA website
What is Evidence-Based Dietetics Practice?

Evidence-based dietetics practice is the use of systematically reviewed scientific evidence in making food and nutrition practice decisions by integrating best available evidence with professional expertise and client values to improve outcomes.

Approved by ADA House of Delegates February 2006
Updated by ADA 2007
Evidence-Based Practice

The EBM Triad

- Individual Clinical Expertise
- Best External Evidence
- Patient Values & Expectations

EBM
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
HEAL-WA  heal-wa.org
Health Electronic Resource for Washington

- Began: January 2009
- Website: offers online access to a collection of health information resources
- Who has access? selected health care providers in Washington  YES, Dietitians and Nutritionists!
- Mission: provide you with access to evidence-based information to support patient care
What is included in HEAL-WA?

- **Resources**: electronic databases, online texts, and eJournals
- Includes information resources specific to dietitians, such as **CINAHL**
- Other excellent resources: **MEDLINE, DynaMed, Cochrane, Natural Standard**
- Gives practitioners access to timely, evidence-based answers to patient care Q’s
How do I get to HEAL-WA?

- Site address: heal-wa.org
- Use the “Getting Started” links to set up your UW NetID and password
  - You will need your license number in order to set up your UW NetID
  - May take up to 24 hours for your access code to be recognized
HEALWA
Health Evidence Resource for Washington State

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

TOOLKITS  DATABASES  EBOOKS  EJOURNALS  REFERENCE  HELP  ABOUT

Do you have opinions about medical cannabis?
Mar 07, 2014

LPNs Now Eligible
Feb 04, 2014

MDConsult cancellation
Dec 03, 2013

Six new professions added to HEALWA eligibility
Jul 15, 2013

VisualDx Mobile - New Download Instructions
Apr 08, 2013

Diagnosis & Therapy ▼
DynaMed,

Guidelines & Evidence ▼
Cochrane

Search for Articles ▼
PubMed, MEDLINE, CINAHL

Drugs, Labs, Diagnostic Tests ▼
LexiComp

Complementary & Alternative Medicine
Natural Standard

Patient Care Management ▼
Nursing Reference Center

Multicultural Information ▼
EthnoMed, RHIN

Information for Patients ▼
MedlinePlus,
Patient Ed Reference Center

Contact HEAL-WA ▼

Getting Started

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.
How do HEAL-WA resources stack up as evidence?

- Systematic Reviews, Meta-Analyses
  - ex. Cochrane
- Evidence Summaries, Evidence Guidelines
  - ex. DynaMed, Nursing Reference Center, Natural Standard, NGC
- Research Articles
  - Randomized Controlled Trials (RCTs), Cohort Studies, Qualitative Studies
    - ex. MEDLINE, CINAHL
- Background Information, Expert Opinion
  - ex. Textbooks
HEAL-WA Multiple Search

Do you have opinions about medical cannabis?
Mar 07, 2014

PNs Now Eligible
Feb 04, 2014

IDConsult cancellation
Dec 03, 2013

Six new professions added to HEALWA eligibility


Subjects: ANALYSIS of variance; BASAL metabolism; BODY composition; BODY weight; CARNITINE; CHILDREN -- Health; CHILD nutrition; COMPARATIVE studies; DIET in disease; DIET therapy; DIETARY supplements; INGESTION; LONGITUDINAL method; NUTRITION -- Evaluation; NUTRITION -- Requirements; OUTCOME assessment (Medical care); PRADER-Willi syndrome; RESEARCH -- Finance; RESPIRATORY quotient; STATISTICAL hypothesis testing; T-test (Statistics); UBIQUINONES; X-ray densitometry in medicine; TREATMENT effectiveness; FOOD diaries; DATA analysis -- Software; DESCRIPTIVE statistics; FLORIDA; Pharmaceuticals and pharmacy supplies merchant wholesalers; Food (Health) Supplement Stores


Subjects: Diets; Food Intake; Prader Willi Syndrome; Weight Control; Childhood (birth-12 yrs); Preschool Age (2-5 yrs); School Age (6-12 yrs); Adolescence (13-17 yrs); Male; Female
eBooks/Textbooks

- Current Diagnosis and Treatment: Pediatrics—21st ed. (2011)
- Nutrition and Diet Therapy (2011)
- Sports Nutrition (2012)
Search Databases Efficiently for Research Journal Articles

**MEDLINE or CINAHL**

- Includes references to original research articles on a topic:
  - Most with abstracts
  - Some with links to full text
- You will see the same interface when searching **MEDLINE** or **CINAHL** (or **Cochrane**) on HEAL-WA
CINAHL

- Cumulative Index to Nursing and Allied Health Literature
- Provides coverage from 1937+ of nursing and 17 allied health disciplines literature, including Nutrition & Dietetics
- Can easily search for Research articles
## Limit Your Results

<table>
<thead>
<tr>
<th>Limit Your Results</th>
<th>Limit your results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Text</strong></td>
<td>□</td>
</tr>
<tr>
<td><strong>Abstract Available</strong></td>
<td>□</td>
</tr>
<tr>
<td><strong>Published Date from</strong></td>
<td>Month ☑, Year: ☑ to Month ☑, Year: ☑</td>
</tr>
<tr>
<td><strong>Peer Reviewed</strong></td>
<td>□</td>
</tr>
<tr>
<td><strong>Research Article</strong></td>
<td>☑</td>
</tr>
<tr>
<td><strong>Exclude MEDLINE records</strong></td>
<td>□</td>
</tr>
<tr>
<td><strong>Clinical Queries</strong></td>
<td>□</td>
</tr>
<tr>
<td><strong>Publication Type</strong></td>
<td>□</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>□</td>
</tr>
</tbody>
</table>

### References Available
- **Publication Year from**
  - Year from: □
  - Year to: □
- **Author**: □
- **Publication**: □
- **English Language**: ☑
- **Exclude Pre-CINAHL**: □
- **Include Pre-CINAHL**: □
- **Evidence-Based Practice**: □
- **Journal Subset**: □
  - All
  - Africa
  - Allied Health
  - Alternative/Complementary Therapies
- **Language**: □
  - All
  - Afrikaans
  - Chinese
  - Danish
- **Pregnancy**: □
- **Inpatients**: □
- **Outpatients**: □
CINAHL Publication Type Limits

- Clinical trial
- Critical path
- Meta Analysis
- Meta Synthesis
- Practice guidelines
- Randomized Controlled Trial
- Research
- Standards
- Systematic review
1. An α-lactalbumin-enriched and symbiotic-supplemented v. a standard infant formula: a multicentre, double-blind, randomised trial.
Rozé, Jean-Christophe; Barbarot, Sébastien; Butal, Marie-José; Kapel, Nathalie; Waligora-Dupnet, Anne-Judith; De Montgoërial, Inès; Leblanc, Magali; Godon, Nathalie; Souches, Pascale; Darmoun, Dominique; et al.; British Journal of Nutrition, 2012 Jun 14; 107 (11): 1616-22. (journal article - randomized controlled trial, research, tables/charts) ISSN: 0007-1145
Subjects: Infant Formula; Probiotics; Milk Proteins; Dermatitis; Atopic; Prebiotics; Infant, Newborn: birth-1 month; Infant: 1-23 months
Database: CINAHL Plus with Full Text

2. Probiotics, prebiotics infant formula use in preterm or low birth weight infants: a systematic review.
Mugambi, Mary N; Musekiwa, Alfred; Lombard, Martani; Young, Taryn; Blaauw, Renée; Nutrition Journal, 2012; 11: 58. (journal article - research, systematic review) ISSN: 1475-2891 PMID: 22928998
Subjects: Child Development; Infant Formula; Medical Practice; Evidence-Based; Prebiotics; Probiotics; Infant: 1-23 months; Infant, Newborn: birth-1 month
Database: CINAHL Plus with Full Text

3. Synbiotics, probiotics or prebiotics in infant formula for full term infants: a systematic review.
Mugambi, Mary N; Musekiwa, Alfred; Lombard, Martani; Young, Taryn; Blaauw, Reneé; Nutrition Journal, 2012; 11 (1): 81. (journal article - research, systematic review) ISSN: 1475-2891 PMID: 23035863
Subjects: Child Development; Infant Formula; Prebiotics; Probiotics; Infant: 1-23 months; Infant, Newborn: birth-1 month
Database: CINAHL Plus with Full Text

4. Supplementation of infant formula with probiotics and/or prebiotics: a systematic review and comment by the ESPGHAN committee on nutrition.
Braegger C; Chmielawska A; Decsi T; Kolarak S; Mihatsch W; Moreno L; Pleshek M; Puntis J; Shamir R; Szajewska H; et al.; ESPGHAN Committee on Nutrition; Journal of Pediatric Gastroenterology & Nutrition, 2011 Feb; 52 (2): 238-50. (journal article - research, systematic review) ISSN: 0277-2116 PMID: 21150647
Subjects: Gastrointestinal System; Infant Formula; Oligosaccharides; Prebiotics; Probiotics; Infant: 1-23 months
Database: CINAHL Plus with Full Text

Add to folder | Times Cited in this Database: (2)
Probiotics, prebiotics infant formula use in preterm or low birth weight infants: a systematic review

Mary N Mugambi1, Alfred Museliwa2, Martani Lombard3, Taryn Venter4

Abstract

**Background:** Previous reviews (2005 to 2009) on preterm infants fed mixed feeds focused on prevention of Necrotizing Enteroctis, probiotics, prebiotics led to improved growth and clinical outcomes.

**Methods:** Cochrane methodology was followed using randomized controlled trials (RCTs) containing probiotic(s) or prebiotic(s) to conventional infant formula. The difference (MD) and corresponding 95% confidence intervals (CI) (RR) and corresponding 95% CI for dichotomous outcomes. Heterogeneity was assessed using forest plots and a chi2 test. An I2 test assessed inconsistencies across studies.

**Results:** Four probiotics studies (N=212), 4 prebiotics studies (N=98), no significant differences in weight gain (MD 1.96, 95% CI -2.64 to 6.56, MD 35.20, 95% CI 17.61 to 78.02, 2 studies, n=34), number of study groups: 1, 1 study. Prebiotics: (GOS/FOS) yielded no significant difference in weight gain (MD 0.69, 95% CI -0.11 to 1.50) and enteral feed (MD -0.79, 95% CI -2.20 to 0.61, 2 studies, n=86). Systematic group (MD 0.80, 95% CI 0.48 to 1.12, 2 studies, n=86). GOS/FOS + prebiotics group (MD 2.10, 95% CI 0.96 to 3.24, n=27) and (MD 0.96, 95% CI -0.31 to 2.23, 2 studies, n=27) by Cochrane methodology.

**Conclusions:** There is not enough evidence to state that supplementation of preterm or low birth weight infants fed probiotics, prebiotics, preterm infant, Low birth weight infants clinical outcomes that were not adequately addressed by previous reviews.

The Human Research Ethics Committee at the University of Stellenbosch, South Africa reviewed the review protocol (unpublished), ruled that all data to be collected for this review was from the public domain and was therefore exempt from ethical approval.

Objective

To assess if addition of probiotics or prebiotics to preterm infant formula led to improved growth and clinical outcomes in preterm or low birth weight infants.

**Methods**

**Eligibility criteria**

All randomized controlled trials (RCTs), irrespective of language, which compared the use of preterm infant formula containing probiotic(s) or prebiotic(s) to conventional preterm infant formula without or with placebo amongst preterm infants born ≤37 weeks gestation, low birth weight infants with ≤2.5 kg at birth and hospitalized, receiving formula feeds and / or parental feed were considered. Studies published as abstracts were included if sufficient information could be obtained to assess study quality and obtain relevant study findings.

**Outcome measurements**

Primary outcomes included: Short term growth parameters (assessed for entire study duration approximately 4 weeks): weight gain (grams/day or grams/week), linear growth (cm/week), head growth (cm/week). Secondary outcomes included: Complications: Incidence of NEC (defined as suspected or confirmed positive Bell stage II or more), Sepsis (defined as signs or symptoms of infection and positive blood culture), Other infections (example bacteremia defined as blood cultured positive for bacteria), Mortality / death. Adverse events during entire study duration: Number of days on parenteral, volume of days on parenteral, mortality / death. Adverse events during entire study duration: Number of days on parenteral, volume of days on parenteral, mortality / death.

---

Table 1 Search strategy used in PUBMED

1) Search (probiotic OR prebiotic) AND (infant formula OR infant feeding OR formula OR milk formula) AND (preterm or premature or low birth weight babies) AND (randomized controlled trial) OR controlled clinical trial OR random allocation LIMITS: Human

2) Search (probiotic OR prebiotic) infant formula OR prebiotic infant formula OR prebiotic OR prebiotic AND (infant formula OR infant feeding) AND (preterm or premature) AND randomized controlled trial OR controlled clinical trial OR random allocation LIMITS: Human

Central Register for Controlled Trials 2009, Scopus (1990 to 19/01/2010), EBSCO host (1960 to 15/11/2009), OVID (1950 to 01/12/2009), SPORT Discus (1960 to 19/01/2010), Web of Science (1970 to 19/01/2010), Science Direct (1950 to 30/11/2009), EMBASE (1980 to 01/12/2009), CINAHL (1981 to 19/01/2010), PUBMED / MEDLINE (1966 to 10/04/2010), Latin American Caribbean Health Sciences literature (LILACS), (1965 to 19/01/2010), NLM Gateway (1950–1966). RCTs published in non-English language journals were translated by independent translators who were familiar with the subject matter. The search strategy used to search PUBMED is shown on Table 1. This search strategy was modified to search other electronic databases.

We conducted a hand search on abstracts of major conference proceedings such as the Pediatric Academic Society meetings (www.pas-meetings.org, www.abstracts2view.com), cross checked references cited in RCTs and in recent reviews (published from 2005 to 2009) for additional studies not identified by electronic searches and specialty journals which were not included in any database such as Demetria, Chinese Journal of Microbiology and International Journal of Probiotics and Prebiotics.

To identify ongoing and unpublished studies, we contacted experts in the field, manufacturers of infant formula containing probiotics and prebiotics, searched
## CINAHL Basic Tips

<table>
<thead>
<tr>
<th>Try This…</th>
<th>Tell CINAHL…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limit to Research Articles</td>
<td>Check the <em>Research Article</em> box to show only research articles in your results</td>
</tr>
<tr>
<td>Limit to Peer Reviewed Articles</td>
<td>Check the <em>Peer Reviewed</em> box to show only results from peer reviewed journals in your results</td>
</tr>
<tr>
<td>Exclude PubMed Results</td>
<td>Check the <em>Exclude MEDLINE Records</em> box to show only results unique to CINAHL</td>
</tr>
<tr>
<td>Limit to Evidence-Based Practice</td>
<td>Check the <em>Evidence-Based Practice</em> box to retrieve articles from evidence-based practice journals</td>
</tr>
<tr>
<td>Find Similar Results</td>
<td>View a citation of interest and click the title to see the Detailed Record. Click on <em>Find Similar</em></td>
</tr>
<tr>
<td></td>
<td><em>Results</em> on the left side of the screen.</td>
</tr>
<tr>
<td>Search by CINAHL Heading</td>
<td>Select a citation of interest and click the title to see the Detailed Display. Inspect the <em>Major</em></td>
</tr>
<tr>
<td></td>
<td><em>Subjects and Minor Subjects</em> fields in the citation record. Click on an individual term to run a</td>
</tr>
<tr>
<td></td>
<td>search on that subject heading or copy desired terms into individual search boxes to create a new search.</td>
</tr>
</tbody>
</table>
Search MEDLINE for Research Articles

- MEDLINE (1940’s+) is included on PubMed
- Indexes 5,200 biomedical journals
- Covers all aspects of biosciences and healthcare
- 75%-80% of citations have abstracts
- Updated 5x/week
Two MEDLINE Strategies for Finding Evidence-Based Citations

1. Use Publication Type limits
   • Randomized Controlled Trial
   • Meta-Analysis
   • Practice Guideline
   • Clinical Trial
   • Consensus Development Conference

2. Limit to Systematic Reviews in Subject Subset
Searching: MEDLINE with Full Text

-probiotics
  AND Infant formula

Limit your results

Full Text
Publication
Abstract Available
EBM Reviews
Human
Gender
All
Female
Male

Date of Publication from
Month
Year:

Author

English Language

Review Articles

Animal

Age Related
All
Infant, Newborn: birth-1 month
Infant: 1-23 months
All Infant: birth-23 months

Subject Subset
All
AIDS
Systematic Reviews

Publication Type
All
Randomized Controlled Trial

Journal & Citation Subset
All
AIDS
Bioethics
Core Clinical (AIM)
1. Association between funding source, methodological quality and research outcomes in randomized controlled trials of synbiotics, probiotics and prebiotics added to infant formula: a systematic review.

(English); Abstract available. By: Mugambi MN; Musekiwa A; Lombard M; Young T; Blaauw R, BMC Medical Research Methodology [BMC Med Res Methodol], ISSN: 1471-2288, 2013 Nov 13; Vol. 13, pp. 137; Publisher: BioMed Central; PMID: 24219082

There is little or no information available on the impact of funding by the food industry on trial outcomes and methodological quality of synbiotics, probiotics and prebiotics research in infants...

Subjects: Food Industry economics; Infant Formula administration & dosage; Randomized Controlled Trials as Topic economics; Infant: 1-23 months; All Infant: birth-23 months; All Child: 0-18 years

PDF Full Text (274.4KB)

2. Synbiotics, probiotics or prebiotics in infant formula for full term infants: a systematic review.

(English); Abstract available. By: Mugambi MN; Musekiwa A; Lombard M; Young T; Blaauw R, Nutrition Journal [Nutr J], ISSN: 1475-2891, 2012 Oct 04; Vol. 11, pp. 81; Publisher: BioMed Central; PMID: 23035863

Synbiotics, probiotics or prebiotics are being added to infant formula to promote growth and development in infants. Previous reviews (2007 to 2011) on term infants given probiotics or prebiotics...

Subjects: Child Development; Infant Formula chemistry; Prebiotics; Probiotics administration & dosage; Infant: 1-23 months; Infant, Newborn: birth-1 month; All Infant: birth-23 months; All Child: 0-18 years

PDF Full Text (1.8MB)

3. Supplementation of infant formula with probiotics/prebiotics: lessons learned with regard to documenting outcomes.


In 2011, the Committee on Nutrition of the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition systematically reviewed published evidence on the safety and health effects...

Subjects: Dietary Supplements; Infant Formula chemistry; Oligosaccharides administration & dosage; Prebiotics; Probiotics administration & dosage; Infant: 1-23 months; All Infant: birth-23 months; All Child: 0-18 years

Full Text from OVID
## PubMed Basic Tips

<table>
<thead>
<tr>
<th>Try this…</th>
<th>Tell PubMed…</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Start with a keyword search</strong></td>
<td>Enter keywords (and synonyms for these terms) you would expect to find in an <em>article title</em> or <em>abstract</em> [PubMed does not search the full text of articles.]</td>
</tr>
<tr>
<td><strong>Search by phrase (“ ”)</strong></td>
<td>Add quotations around words to tell PubMed to find an <em>exact phrase</em></td>
</tr>
<tr>
<td><strong>Search for words in the title [ti]</strong></td>
<td>PubMed to search for words in article titles  [Do not use this for comprehensive searches.]  Ex:  “pressure ulcer”[ti] AND mattress[ti].</td>
</tr>
<tr>
<td><strong>Use Limits</strong></td>
<td>Limit your results by <em>type of article, date range, age group, journal sets,</em> and more.</td>
</tr>
<tr>
<td><strong>Search by Author [au]</strong></td>
<td>Search PubMed for a particular author  Ex:  Rivara FP[au]</td>
</tr>
<tr>
<td><strong>Find Related Citations</strong></td>
<td>In the <em>abstract view</em>, take a look at the <em>related citations</em> generated for a particular article (right hand side of page)</td>
</tr>
</tbody>
</table>
## PubMed Tips (cont.)

<table>
<thead>
<tr>
<th>Try This…</th>
<th>Tell PubMed…</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construct a search using MeSH terms</strong></td>
<td>Once you’ve identified an article that looks relevant, take a look at the article’s MeSH terms.</td>
</tr>
<tr>
<td>MeSH terms are Medical Subject Headings and are assigned to all indexed articles in PubMed</td>
<td>• In the abstract view, click on the + next to Publication Types, MeSH terms.</td>
</tr>
<tr>
<td>MeSH terms describe what the article is about and <em>are a key in constructing targeted searches.</em></td>
<td>• Click on a term to send it to the PubMed search box.</td>
</tr>
<tr>
<td></td>
<td>• You may combine terms, but you may receive better results by starting with two or three terms.</td>
</tr>
<tr>
<td></td>
<td>• You may add keywords to your search to narrow your results.</td>
</tr>
<tr>
<td>CINAHL</td>
<td>MEDLINE</td>
</tr>
<tr>
<td>--------</td>
<td>---------</td>
</tr>
</tbody>
</table>
| • Coverage: 1937+  
• Indexes 1700 journals  
• Focuses on nursing and allied health literature  
• CINAHL Thesaurus with more nursing terms  
• Has peer-reviewed limit  
• Includes cited references at end of many refs | • Coverage: early 1940’s+  
• Indexes 5000 journals  
• Focuses on biomedical literature  
• Uses MeSH as its controlled vocabulary  
• No peer-reviewed limit  
• No cited references |
Journals A-Z

• Finding full text articles:
  • Records in MEDLINE and CINAHL link out to those that are available
  • Or, go directly to eJournals tab in HEAL-WA and search by title
  • Fastest: go directly to eJournals tab when you’re searching for a specific known article
HEAL-WA Journals A-Z
5,000 full-text health-related journals

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

• Practice Guidelines
• eResources such as:
  • DynaMed
  • Nursing Reference Center
  • Rehabilitation Reference Center
  • Natural Standard
Practice Guideline Resources

- National Guideline Clearinghouse
- Rehabilitation Reference Center
- Nursing Reference Center
- MEDLINE
- CINAHL
- Association/Society guidelines
- Advanced Google or Google Scholar
1. **Guideline Synthesis**: Diagnosis and Management of Celiac Disease

   World Gastroenterology Organisation - Medical Specialty Society. View all guidelines by the developer(s)

   British Society of Gastroenterology - Medical Specialty Society. View all guidelines by the developer(s)

4. **AGA Institute medical position statement on the diagnosis and management of celiac disease.** 2006 Dec. NGC:005429
   American Gastroenterological Association Institute - Medical Specialty Society. View all guidelines by the developer(s)

5. **Celiac disease (CD). Evidence-based nutrition practice guideline.** 2009. NGC:007358
   American Dietetic Association - Professional Association. View all guidelines by the developer(s)
Celiac disease (CD). Evidence-based nutrition practice guideline.


Recommendations

Major Recommendations

CD: Assessment of Factors Affecting Quality of Life

CD: Assess Factors Affecting Quality of Life

The RD should assess the factors affecting the quality of life of individuals with CD when completing a comprehensive client history, which includes a medical history (e.g., gastrointestinal, immune, neurological and psychological) and social history (e.g., socioeconomic factors, religion, social and medical support and daily stress level). Individuals with CD may not attain the same level of quality of life as the general population, due to social inconveniences of following a gluten-free dietary pattern.

Strong, Imperative

Recommendation Strength Rationale

- Conclusion statements were Grades I and II

CD: Bone Density Screening

CD: Bone Density Screening

The RD should recommend bone density screening for adults with CD within the first year. Clinical trials and cross-sectional studies have reported reduced bone mineral content and bone mineral density in untreated adults with CD.

Strong, Conditional

Recommendation Strength Rationale

- Conclusion statement was Grade I
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Released</td>
<td>2005 Feb (republished 2007)</td>
<td>2009</td>
</tr>
<tr>
<td>Guideline Developer(s)</td>
<td>World Gastroenterology Organisation - Medical Specialty Society</td>
<td>American Gastroenterological Association Institute - Medical Specialty Society American Dietetic Association - Professional Association</td>
</tr>
<tr>
<td>Intended Users</td>
<td>Dietitians, Health Care Providers, Nurses, Physician Assistants, Physicians</td>
<td>Dietitians, Physicians</td>
</tr>
<tr>
<td>Methods Used to Collect/Select the Evidence</td>
<td>Hand-searches of Published Literature (Primary Sources) Searches of Electronic Databases</td>
<td>Searches of Electronic Databases</td>
</tr>
<tr>
<td>Methods Used to Analyze the Evidence</td>
<td>Review, Review of Published Meta-Analyses</td>
<td>Review</td>
</tr>
<tr>
<td>Major Recommendations</td>
<td>View Major Recommendations</td>
<td>View Major Recommendations</td>
</tr>
<tr>
<td>Availability of Original Guideline</td>
<td>View original (full-text) guideline</td>
<td>View original (full-text) guideline</td>
</tr>
</tbody>
</table>
Searching for *Practice Guidelines* in CINAHL and MEDLINE

- In CINAHL
  Limit to *Practice Guidelines* as a Publication Type

- In MEDLINE
  Limit to *Practice Guideline* as a Publication Type
Searching CINAHL for Celiac Disease

Limit: Practice Guidelines

Celiac Disease
Boettcher, Eric; Gandhi, Ramesh K.; Primary Care Reports, 2012 Dec; 18 (12): 153-67. (journal article - pictorial, practice guidelines, tables/charts) ISSN: 1040-2497
Subjects: Primary Health Care; Celiac Disease
Database: CINAHL Plus with Full Text

European Society for Pediatric Gastroenterology, Hepatology, and Nutrition guidelines for the diagnosis of celiac disease.
Husby S; Koletzko S; Korponay-Szabó I Jr; Mearin ML; Phillips A; Shamir R; Troncone R; Giersiepen K; Branski D; Catassi C; et al.; ESPGHAN Working Group on Coeliac Disease Diagnosis; Journal of Pediatric Gastroenterology & Nutrition, 2012 Jan; 54 (1): 136-60. (journal article - practice guidelines, research) ISSN: 0277-2116 PMID: 22197856
Subjects: Celiac Disease; Duodenum; HLA Antigens; Immunoglobulins; Transferases; Adolescent: 13-18 years; Child: 6-12 years
Database: CINAHL Plus with Full Text

Evidence-based practice guidelines for celiac disease.
Subjects: Celiac Disease; Comorbidity; Diet, Gluten-Free; Gluten; Prevalence
Database: CINAHL Plus with Full Text
Accessing DynaMed and Nursing Reference Center

**Diagnosis & Therapy**

- **DynaMed**
  
  With clinically-organized summaries for more than 3,000 topics, DynaMed is a clinical reference tool created for physicians and other health care professionals for use primarily at the 'point-of-care'.

- **Merck Manual of Diagnosis and Therapy**

- **Merck Manual of Geriatrics**

**Patient Care Management**

- **Nursing Reference Center**
  
  Nursing Reference Center includes information about conditions and diseases, patient education resources, drug information, continuing education, lab & diagnosis detail, best practice guidelines, and more.

- **CINAHL (Nursing Literature)**
  
  CINAHL with full text covers nursing, biomedicine, health sciences librarianship, alternative/complementary medicine, consumer health and 17 allied health disciplines and provides the full text for more than 600 journals.

- **Nursing Calculators**
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
Cystic fibrosis (CF)

Updated 2014 Apr 04 04:27:00 PM: no randomized trials found evaluating antibiotics for Stenotrophomonas maltophilia infection in patients with CF (Cochrane Database Syst Rev 2014)

Apr 2) view update | Show more updates

Diet:
- general nutrition recommendations
  - balanced high-calorie high-protein diet
  - special formulas for infants to enhance weight gain
  - oral nutrition supplements
  - supplemental feeding, often by gastrostomy tube, to increase caloric intake
- calorie supplements not shown to be effective but inadequately studied
  - oral calorie supplements may not improve growth in children with CF (level 2 [mid-level] evidence)
    - based on Cochrane review with limited evidence
    - systematic review of 3 randomized or quasi-randomized trials comparing oral caloric supplements vs. no treatment or additional nutritional advice in 131 children aged 2-15 years with cystic fibrosis (CF)
    - no significant differences in change in weight, height, body mass index, and other indices of growth
  - oral protein calorie supplements not shown to be effective in children with CF (level 2 [mid-level] evidence)
    - based on Cochrane review of limited evidence
    - systematic review of 3 randomized or quasi-randomized trials with 135 children with chronic disease
    - all trials identified involved children with CF
    - only significant difference demonstrated was change in total energy intake in 1 small trial
  - supplemental enteral tube feeding widely used to improve nutritional status, but no randomized trials identified to evaluate efficacy
    - based on Cochrane review
    - systematic review did not identify any randomized trials comparing supplemental enteral tube feeding for ≥ 1 month vs. no specific intervention in patients with CF
    - nasogastric or gastrostomy feeding is invasive, expensive, may have negative effect on self-esteem and body image
    - Reference - Cochrane Database Syst Rev 2012 Dec 12;(12):CD001198

- consensus report on nutrition for pediatric patients with CF can be found in J Pediatr Gastroenterol Nutr 2002 Sep;35(3):246
- American Society for Parenteral and Enteral Nutrition (ASPF) enteral nutrition practice recommendations can be found in JPEN J Parenter Enteral Nutr: 2009 Mar-Apr;33(2):122, summary can be found in Nursing 2011 Sep;41(9):32
- review of nutrition in CF can be found in Semin Respir Crit Care Med 2009 Oct;30(5):579

Level of evidence
# Levels of Evidence and Grades of Recommendations

<table>
<thead>
<tr>
<th>Grade of recommendation</th>
<th>Level of evidence</th>
<th>Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>1a</td>
<td>Systematic review of randomized controlled trials</td>
</tr>
<tr>
<td></td>
<td>1b</td>
<td>Individual randomized controlled trial</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>2a</td>
<td>Systematic review of cohort studies</td>
</tr>
<tr>
<td></td>
<td>2b</td>
<td>Individual cohort study</td>
</tr>
<tr>
<td></td>
<td>3a</td>
<td>Systematic review of case-control studies</td>
</tr>
<tr>
<td></td>
<td>3b</td>
<td>Individual case-control study</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>4</td>
<td>Case series</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td>5</td>
<td>Expert opinion without explicit critical appraisal or based on physiology or bench research</td>
</tr>
</tbody>
</table>
Cystic fibrosis (CF)

Guidelines:

Centers for Disease Control and Prevention (CDC) guidelines:
- Centers for Disease Control and Prevention (CDC) recommendations on state newborn screening programs for CF can be found in MMWR Recomm Rep 2004 Oct 15;53(RR-13):1
- EBSCOhost Full Text full-text, summary can be found in Am Fam Physician 2005 Apr 15;71(8):1605, editorial can be found in Am Fam Physician 2005 Apr 15;71(8):1482

United States guidelines:
- American Thoracic Society (ATS) report on optimal lung function tests for monitoring and recurrent wheezing in children less than 6 years of age can be found in Ann Am Thorac Soc 2013 Apr;10(2):S1 PDF
- National Society of Genetic Counselors (NSGC) guideline on molecular testing for cystic fibrosis carrier status can be found in J Genet Couns 2014 Feb;23(1):5 or at National Guideline Clearinghouse 2014 Mar 10:474000
- American Academy of Pediatrics (AAP) guideline on prenatal screening and diagnosis for pediatricians can be found in Pediatrics 2004 Sep;114(3):889

Cystic Fibrosis Foundation (CF) guidelines on:
- screening, diagnosis, management, and treatment of vitamin D deficiency in individuals with cystic fibrosis can be found in J Clin Endocrinol Metab 2012 Apr;97(4):1082 full-text
- implementation of CF newborn screening programs can be found in Pediatrics 2007 Feb;119(2):e495 full-text
- diagnosis can be found in J Pediatr 2008 Aug;153(2):S4 full-text
- pulmonary complications: hemoptysis and pneumothorax can be found in Am J Respir Crit Care Med 2010 Aug 1;182(3):298 PDF or at National Guideline Clearinghouse 2012 Jul 16:36775
- chronic medications for maintenance of lung health can be found in Am J Respir Crit Care Med 2013 Apr 1;187(7):680 or at National Guideline Clearinghouse 2013 Aug 12:45307
- management of infants can be found in J Pediatr 2009 Dec;155(6 Suppl):S73 or at National Guideline Clearinghouse 2013 Aug 12:43789
- management of infants with CF transmembrane conductance regulator-related metabolic syndrome during first two years of life and beyond can be found in J Pediatr 2009 Dec;155(6 Suppl):S106
- management of adults can be found in Chest 2004 Jan;125(1 Suppl):1S
- respiratory treatment can be found in Am J Respir Crit Care Med 2007 Nov 15;176(10):957 full-text
- treatment of pulmonary exacerbations can be found in Am J Respir Crit Care Med 2009 Nov 1;180(9):802 full-text
- airway clearance therapies can be found in Respir Care 2009 Apr;54(4):522 PDF
- allergic bronchopulmonary aspergillosis can be found in Clin Infect Dis 2003 Oct 1;37 Suppl 3:S225
- EBSCOhost Full Text, correction can be found in Clin Infect Dis 2004 Jan 1;38(1):158
- lung transplant can be found in Chest 1998 Jan;113(1):217
- infection control can be found in Infect Control Hosp Epidemiol 2003 May;24(5 Suppl):S6
- nutrition can be found in J Am Diet Assoc 2008 May;108(5):832, commentary can be found in J Am Diet Assoc 2008 Dec;108(12):1991
Nursing Reference Center

- **Point-of-care evidence-based practice resource**
- Evidence-based summaries on key topics incorporating the best available evidence through rigorous systematic surveillance
- Includes full-text journals and texts
- **Also includes:** Practice Guidelines; Skills and Procedures; Skill Competency Checklists; Drug Information; Patient Education materials; Continuing Education, and more
- **M:** Available on mobile devices
<table>
<thead>
<tr>
<th>Browse for:</th>
<th>irritable bowel syndrome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alphabetical</td>
<td>Relevancy Ranked</td>
</tr>
</tbody>
</table>

### Key Content

**Diseases & Conditions**

- **Quick Lessons**
  - Clinically-organized nursing overviews that are designed to map the nursing workflow

- **Evidence-Based Care Sheets**
  - Evidence-based summaries on key topics incorporating the best available evidence through rigorous systematic surveillance

---

<table>
<thead>
<tr>
<th>Topic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irritable Bowel Syndrome</td>
<td></td>
</tr>
<tr>
<td>Irritable bowel syndrome, British Dietetic Association, dietary management guidelines</td>
<td></td>
</tr>
<tr>
<td>Irritable bowel syndrome, dietary management guidelines, British Dietetic Association</td>
<td></td>
</tr>
<tr>
<td>Irritable Bowel Syndrome: Complementary and Alternative Medicine (CAM) Therapy</td>
<td></td>
</tr>
<tr>
<td>Irritable Bowel Syndrome: Dietary Management</td>
<td></td>
</tr>
<tr>
<td>Irritable Bowel Syndrome: Dietary Management -- British Dietetic Association Guidelines</td>
<td></td>
</tr>
<tr>
<td>Irritable Bowel Syndrome: Drug Therapy</td>
<td></td>
</tr>
<tr>
<td>Irritable Colon</td>
<td></td>
</tr>
<tr>
<td>Irritable Colon: Complementary and Alternative Medicine (CAM) Therapy</td>
<td></td>
</tr>
<tr>
<td>Irritable Colon: Dietary Management</td>
<td></td>
</tr>
</tbody>
</table>
Irritable Bowel Syndrome: Dietary Management

What We Know

- Irritable bowel syndrome (IBS) is a chronic gastrointestinal disorder characterized by recurrent episodes of abdominal pain and changes in bowel habits (e.g., constipation or diarrhea).
- The exact cause of IBS is unclear. It is often associated with certain behaviors such as menstruation, psychological stress, and consuming a diet high in fiber. Diagnostic criteria for IBS include three factors: onset of symptoms, frequency of defecation, and improvement or symptoms with defecation. IBS is usually recognized by the presence of abdominal pain or discomfort that is associated with changes in stool frequency or consistency.
- Signs and symptoms can vary in severity and duration.
- The primary symptom is changes in bowel habits. IBS is usually identified as constipation-predominant, diarrhea-predominant, or alternating constipation and diarrhea.
- Women are more likely to develop IBS.
- Risk factors for IBS include:
  - Family history of IBS
  - History of sexual abuse in childhood
  - Psychological stress
  - Women under 50 years of age
  - Recent infection
  - Having a condition that is complicated by IBS, including the following:
    - Diverticulitis
    - Other gastrointestinal diseases
    - Celiac disease
    - Crohn’s disease
    - Ulcerative colitis
    - Inflammatory bowel disease
    - Diarrhea-predominant IBS

What We Can Do

- Educate yourself about dietary management of IBS so you can accurately assess your patients’ personal characteristics and health education needs; share this information with your colleagues.
- Emphasize the importance of reporting any health-related changes to the treating clinician as soon as possible to prevent complications.
- Assess your patients and their family members for knowledge deficits about the prescribed treatment regimen, and emphasize the importance of strict adherence to the prescribed treatment regimen and continued medical surveillance to monitor health status.

Note

- Recent review of the literature has found no updated research evidence on this topic since previous publication on September 21, 2012.

References

Prader-Willi Syndrome

Description/Etiology
Prader-Willi syndrome (PWS) is a multisystem genetic disorder characterized by infantile hypotonia, feeding difficulties, mild mental retardation, and dysmorphic facial features. Childhood features of PWS include an uncontrollable appetite, short stature, hypogonadism, and severe behavior problems, including obsessive-compulsive disorder (OCD) and oppositional behaviors. Morbid obesity is common in patients with PWS due to extreme food craving and is seriously detrimental to health, causing respiratory compromise, obstructive sleep apnea (OSA), cardiovascular disease (CVD), hyperactivity, and high blood pressure, as well as death. Hypothyroidism and obesity are the result of this unregulated appetite. PWS is a result of the mutation of one of the two genes located on chromosome 15, and is inherited by the males of the paternal chromosome 15. It is inherited as a recessive disorder, meaning that both parents must have the condition for it to be passed on to their children. The offspring of two affected parents will have a 50% chance of inheriting the disorder. All cases of PWS are the result of inherited abnormalities from the father (affecting the 15q11-13 region on the long arm of chromosome 15), and in which an inherited abnormality or deletion (DN) accounts for 60% of cases involving deletion of the 15q11-13 region on chromosome 15 that is inherited from the father. Maternal uniparental disomy (UPD) accounts for 25-30% of cases and occurs when the father's chromosome is not passed along to the child, resulting in both chromosomes being inherited from the mother; this results in less of the functional gene because the maternally inherited chromosome is normally inactive. An imprinting defect that accounts for 5-10% of cases leads to PWS when the paternally inherited chromosome is activated during embryonic development.

The criteria for diagnosis of PWS include failure to thrive and inconsistent feeding patterns during infancy and rapid weight gain between the ages of 1-6 years. Diagnosis is confirmed with genetic testing that shows abnormal results consistent with PWS. No specific medical treatment exists for PWS and there is no cure. Lifelong management of patients with PWS focuses on symptom control and prevention. A strict fat-restricted and carbohydrate-modified diet followed for 4-6 years is effective in reducing weight among obese adolescents with PWS. Therapy to aid in the development of motor and language skills should be initiated during childhood, and an individualized education plan should be established by the time the child reaches school age. Consultation with a pediatric endocrinologist is required for appropriate pharmacotherapy, which usually includes recombinant human growth hormone (rGH) to increase height and lean body mass and sex hormone replacement to prevent osteoporosis and to treat hypothyroidism. In some cases, surgery is required to treat complications of obesity (e.g., tonsillectomy, adenoidectomy, or tracheostomy placement to treat OSA).

Facts and Figures
PWS is the leading known genetic cause of obesity. PWS occurs in about 1/16,000-25,000 births in the United States, 1/8,000 in rural Sweden, 1/16,000 in western Japan, and 1/45,000 in the United Kingdom. IQ in patients with PWS is 40-105, and average is about 70. Because patients with PWS have very low metabolic rates, following a strict diet (e.g., <1,200 kcal/day) is necessary to prevent morbid obesity. Patients of a child with PWS have a 1% chance of having another child with the condition.

Risk Factors
The occurrence of PWS is almost always sporadic. PWS affects persons of all races, and females and males are affected in about equal numbers. Older maternal age may be a risk factor.

Signs and Symptoms/Clinical Presentation
Prenatal onset of hypothyroidism results in decreased fetal movement, abnormal fetal heart rhythm, abnormal fetal position at delivery, and increased incidence of cesarean section. Affected babies are usually born full term and of normal birth size, but may have low birth scores. Newborns with PWS may demonstrate profound hypothyroidism, which results in asphyxia and poor sucking and swallowing ability. Neonates are often of below average weight. Characteristic facial features include strabismus (i.e., crossed eyes), almond-shaped eyes, thin upper lip with downward slant of the mouth, narrow teeth with narrow nasal bridge, and hypopigmentation of the hair and ears compared to other family members. Diagnosis is often made at an early age due to the signs of PWS are often subtle in infancy.

Between the ages of 1-6 years, hypothyroidism (i.e., abnormal large appetite) resulting in morbid obesity usually becomes evident in children with excess water consumption. OSA can result from morbid obesity. Behavioral and learning disabilities are commonly observed. Characteristic behaviors include temper tantrums, stubbornness, inability to control appetite, and difficulties in controlling emotions.

Food for Thought
Patients with PWS experience both therapeutic and adverse effects of medications more acutely than patients without PWS. Patients with PWS often require only one-fourth to one-half of the usual recommended doses of medication to achieve the intended therapeutic response.

Red Flags
- Patients with PWS have a high pain threshold and decreased ability to vomit.
- Patients with PWS who demonstrate excessive water consumption should be monitored for hypothyroidism (i.e., low sodium serum concentration)
- Many patients with PWS experience both therapeutic and adverse effects of medications more acutely than patients without PWS.
- Patients with PWS often require only one-fourth to one-half of the usual recommended doses of medication to achieve the intended therapeutic response.

What Do You Need to Tell the Patient/Patient's Family?
- It is important to inform the patient and family about the genetic basis of the condition, but also that PWS is often a lifelong condition that requires ongoing management.
- Educate family members about the importance of monitoring growth and development, and ensure that they are aware of the potential complications associated with the condition.
- Emphasize the importance of regular follow-up appointments with healthcare providers and the need for ongoing monitoring of symptoms and treatment.
- Encourage open communication between the patient and their family members, and between the patient and their healthcare providers, to ensure that all questions and concerns are addressed.

References
Results: 1-10 of 238 for dysphagia AND Full Text AND Apply related wor...

1. **Dysphagia: Guillain-Barré Syndrome**
   Cable A; Richman S; CINAHL Rehabilitation Guide, EBSCO Publishing, 2013 Nov 08 (Clinical Review)
   - HTML Full Text  - PDF Full Text

2. **Dysphagia: Rett Syndrome**
   Cable A; Richman S; CINAHL Rehabilitation Guide, EBSCO Publishing, 2013 Aug 23 (Clinical Review)
   - HTML Full Text  - PDF Full Text
Natural Standard

- 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 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'-hydroxy-5'-methoxyisoflavone, abish (Amharic), alholva (Spanish), alkaloids, amber, beta-carotene, betaines, beta-sitosteryl glucopyranoside, biochanin A, bird's foot, bokchorsknlver (Swedish), Bockshornsamen (German), Bockshornklee (German), calycosin, Canadian fenugreek seed, Canadian-grown fenugreek, carotenoids, çemen (Turkish), childe, CN 19062, CN 19067, CN 19070, CN 19071, coumarin, D-3-O-methyl-chirinositol, daidzein, dioscin, diosgenin, ethyl-alpha-D-glucopyranoside, Fabaceae, fatty acids, fenugreek, feniguerek, fenugreco, fenugrec (Galician, Spanish), fenogrego, fenugree, fenugreek flour, fenugreek gums, fenugreek leaves, fenugreek saponin I, fenugreek seed, fenugreek spouts, FenuLife®, fenu-thyme, fieno greco (Italian), flavonoids, Foenugraei semen, formononetin, furostanol glycosides, galactomannan, gamma-schizandrin, gigogenin 3-O-alpha-L-rhamnopyranosyl-(1->2)-beta-D-glucopyranoside, gigogenin 3-O-beta-D-xylopyranosyl(1->6)-beta-D-glucopyranoside, görögszéná (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), leclins, 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-protoelenonin, methyl-protopodocin, 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, sapoines, sarsasapogenin, sarsasapogenin 3-O-beta-D-xylopyranosyl-(1->6)-beta-D-glucopyranoside, sarviapila (Finnish), scopoletin, shabaliidag (Pahlavi), shanbelle (Farsi), smilagenin, sotolone, star fenugreek, syndrex, tricin, tricin-7-O-beta-D-glucopyranoside, trigonella, Trigonella, Trigonella balansae, Trigonella caerulea, Trigonella foenum-graecum, Trigonella foenumgraecum L., Trigonella semen, Trigonella stellata, trigonelline, trigonoside Xa, trigonoside Xb, trigonoside Xlb, trigonoside Xla, trigonoside Xllb, trigonoside Xllla, uluhal (Sinhala), uwatu (Gurkhi), vanadium (English), vaniloyl-(alpha-D-glucopyranosyl) (German), vanilloid, vanillyl, vanillylglycoside, vanillylglycosides
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:

<table>
<thead>
<tr>
<th>Indication</th>
<th>Evidence Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes mellitus type 2</td>
<td>B</td>
</tr>
<tr>
<td>Diabetes mellitus type 1</td>
<td>C</td>
</tr>
<tr>
<td>Exercise performance enhancement</td>
<td>C</td>
</tr>
<tr>
<td>Galactagogue</td>
<td>C</td>
</tr>
<tr>
<td>Head lice</td>
<td>C</td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td>C</td>
</tr>
<tr>
<td>Obesity</td>
<td>C</td>
</tr>
</tbody>
</table>
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).

- **Antiarhythmics**: 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 Tfd1 from fenugreek had antifungal activity (4).
# Diabetes mellitus and related conditions

Levels of scientific evidence for specific therapies

<table>
<thead>
<tr>
<th>Grade: A (Strong Scientific Evidence)</th>
<th>Therapy</th>
<th>Specific therapeutic Use(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha-lipoic acid</td>
<td>Type 2 diabetes</td>
<td></td>
</tr>
<tr>
<td>Konjac glucomannan</td>
<td>Diabetes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade: B (Good Scientific Evidence)</th>
<th>Therapy</th>
<th>Specific therapeutic Use(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta-glucan</td>
<td>Diabetes</td>
<td></td>
</tr>
<tr>
<td>Chromium</td>
<td>Hypoglycemia</td>
<td></td>
</tr>
<tr>
<td>Fenugreek</td>
<td>Diabetes mellitus type 2</td>
<td></td>
</tr>
<tr>
<td>Guar gum</td>
<td>Diabetes mellitus</td>
<td></td>
</tr>
<tr>
<td>Gymnema</td>
<td>Type 1 diabetes mellitus</td>
<td></td>
</tr>
<tr>
<td>Gymnema</td>
<td>Type 2 diabetes mellitus</td>
<td></td>
</tr>
<tr>
<td>Ivy gourd</td>
<td>Diabetes</td>
<td></td>
</tr>
<tr>
<td>Magnesium</td>
<td>Diabetes (type 2)</td>
<td></td>
</tr>
<tr>
<td>Nicotinamide</td>
<td>Type 1 Diabetes mellitus: preservation of beta-islet cell function</td>
<td></td>
</tr>
<tr>
<td>Vanadium</td>
<td>Diabetes</td>
<td></td>
</tr>
<tr>
<td>Whey protein</td>
<td>Diabetes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade: C (Unclear or Conflicting Scientific Evidence)</th>
<th>Therapy</th>
<th>Specific therapeutic Use(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acidophilus</td>
<td>Diabetes (type 2)</td>
<td></td>
</tr>
<tr>
<td>Active hexose correlated compound</td>
<td>Diabetes</td>
<td></td>
</tr>
<tr>
<td>Acupuncture</td>
<td>Diabetes</td>
<td></td>
</tr>
<tr>
<td>Agar</td>
<td>Diabetes</td>
<td></td>
</tr>
<tr>
<td>Alfalfa</td>
<td>Diabetes</td>
<td></td>
</tr>
<tr>
<td>Aloe</td>
<td>Diabetes</td>
<td></td>
</tr>
</tbody>
</table>
Search for Systematic Review and Meta-Analyses Resources

- Cochrane Database of Systematic Reviews (CDSR)
- MEDLINE Systematic Reviews
- CINAHL
Systematic review vs. Meta-analysis

Systematic review

- Literature review of RCTs focused on a single question which tries to identify, appraise, select and synthesize all high quality research evidence relevant to that question.
- Uses explicit methods to identify, select and critically evaluate relevant research.

Meta-analysis

- Systematic review combining results of several studies using quantitative statistics.
Cochrane Database of Systematic Reviews

Search Results: 1 - 4 of 4

1. Dietary interventions for phenylketonuria

   (Cochrane Review). Reviewers: Pousille, Vanessa J; Wildgoose, Joanne. Review Group: Cochrane Cystic Fibrosis and Genetic Disorders Group; Cochrane Database of Systematic Reviews; Edited/Substantially amended: 02 November 2009; New search for studies and content updated (no change to conclusions) this issue.

   BACKGROUND: Phenylketonuria is an inherited disease treated with dietary restriction of the amino acid phenylalanine. The diet is initiated in the neonatal period to prevent mental handicap; however...

   Subjects: Humans; Phenylalanine blood; Phenylketonuriæ blood; Randomized Controlled Trials as Topic; Treatment Outcome; Phenylalanine administration & dosage; Phenylketonuriæ diet therapy

   HTML Full Text  PDF Full Text (378K)

2. Protein substitute for children and adults with phenylketonuria

   (Cochrane Review). Reviewers: Yi, Sarah HL; Singh, Rani H. Review Group: Cochrane Cystic Fibrosis and Genetic Disorders Group; Cochrane Database of Systematic Reviews; Edited/Substantially amended: 11 April 2011; New search for studies and content updated (no change to conclusions) this issue.

   BACKGROUND: Phenylketonuria is an inherited metabolic disorder characterised by an absence or deficiency of the enzyme phenylalanine hydroxylase. The aim of treatment is to lower blood phenylalanine...

   Subjects: Adult; Child; Humans; Phenylalanine hydroxylase deficiency; Phenylketonuriæ diet therapy; Randomized Controlled Trials as Topic; Food, Formulated; Dietary Proteins administration & dosage; Phenylalanine blood; Phenylketonuriæ therapy

   HTML Full Text  PDF Full Text (296K)
Authors' conclusions
The results of non-randomised studies have concluded that a low-phenylalanine diet is effective in reducing blood phenylalanine levels and improving intelligence quotient and neuropsychological outcomes. We were unable to find any randomised controlled studies that have assessed the effect of a low-phenylalanine diet versus no diet from diagnosis. In view of evidence from non-randomised studies, such a study would be unethical and it is recommended that low-phenylalanine diet should be commenced at the time of diagnosis. There is uncertainty about the precise level of phenylalanine restriction and when, if ever, the diet should be relaxed. This should be addressed by randomised controlled studies.
Finding Systematic Reviews and Meta-Analyses in MEDLINE and CINAHL

CINAHL
- Refine search to Publication Type:
  - Systematic Review
  - Meta Analysis
  - Meta Synthesis

MEDLINE
- Select Systematic Reviews in Subject Subset
- Limit to Meta-Analysis as Publication Type
Search for Evidence in Drug and Natural Medicines Databases

Drugs, Labs, Diagnostic Tests

- **AHFS Drug Information® (2008)** Stat!Ref
- **Drug Information Portal**
  From the US National Library of Medicine. Searches more than a dozen sources for information about more than 12,000 drugs.
- **LactMed**
  A peer-reviewed and fully referenced database of drugs to which breastfeeding mothers may be exposed. Among the data included are maternal and infant levels of drugs, possible effects on breastfed infants and on lactation, and alternate drugs to consider.
- **Natural Standard**
  Natural Standard provides high-quality, evidence-based information on dietary supplements (including herbs, vitamins, and minerals), functional foods, diets, complementary practices (modalities), exercises, and medical conditions.
- **Lexi-Comp Online - NEW!**

Complementary & Alt Med

- **AMED (Alternative & Natural Medicine Database)**
  Includes complementary medicine, physiotherapy, occupational therapy, rehabilitation, podiatry, palliative care, and more.
- **Alt-HealthWatch**
  Full-text articles, pamphlets, booklets, special reports, original research and book excerpts on the many perspectives of complementary, holistic and integrated approaches to health care and wellness.
- **Natural Standard**
  Natural Standard provides high-quality, evidence-based information on dietary supplements (including herbs, vitamins, and minerals), functional foods, diets, complementary practices (modalities), exercises, and medical conditions.
Escitalopram Oxalate

Introduction

C<sub>20</sub>H<sub>21</sub>FN<sub>2</sub>O•C<sub>2</sub>H<sub>2</sub>O<sub>4</sub>

- Escitalopram, the S-enantiomer of citalopram, is a selective serotonin-reuptake inhibitor (SSRI) and an antidepressant.

Uses

• Major Depressive Disorder

Escitalopram oxalate is used in the treatment of major depressive disorder. Efficacy for the management of major depression was established in 3 placebo-controlled studies of 8 weeks' duration in adult outpatients who met DSM-IV criteria for major depressive disorder. In these studies, 10- and 20-mg daily dosages of escitalopram were more effective than placebo in improving scores on the Montgomery Asberg Depression Rating Scale (MADRS), the Hamilton Rating Scale for Depression (HAM-D), and the Clinical Global Impression Improvement and Severity of Illness Scale. Escitalopram also was more effective than placebo in improving other aspects of depressive disorder, including anxiety, social functioning, and overall quality of life. Substantial improvement in MADRS scores was noted in patients receiving either dosage of escitalopram compared with those receiving placebo after 1-2 weeks of therapy. In addition, escitalopram dosages of 10-20 mg daily appeared to be at least as effective as racemic citalopram of 20-40 mg daily. There is some evidence that escitalopram may offer some clinical advantages compared with citalopram or other selective serotonin-reuptake inhibitors (e.g., increased efficacy, more rapid onset of therapeutic effect, fewer adverse effects); however, additional studies are needed to confirm these initial findings. Efficacy of escitalopram in hospital settings has not been established to date. For further information on use of SSRIs in the treatment of major depressive disorder and considerations for choosing the most appropriate antidepressant agent for a particular patient, see Uses: Major Depressive Disorder, in Citalopram Hydrobromide 28:16.04.20.

References

1. Forest Pharmaceuticals, Inc. Lexapro® (escitalopram oxalate) tablets/oral solution prescribing information.
LexiComp

• 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
**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 (Clcr <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 (e.g., 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: Clcr <30 mL/minute or creatinine >3 mg/dL: Initial: 2.5 mg/day

Hypertension:
Clinical Practice Guidelines

Coronary Artery Bypass Graft Surgery:


Diabetes Mellitus:

American Diabetes Association, “Standards of Medical Care in Diabetes - 2013,” January 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:


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

Patient Education Resources

- **Patient Education Reference Center (PERC)**
  - Evidence-based patient education information for clinicians to print and distribute at point-of-care

- **MedlinePlus** medlineplus.gov
  - #1 for basic quality consumer/patient information
  - 900 health topics
  - Drug and herbal information
  - Medical Encyclopedia – full-text with illustrations
  - Spanish version
  - Interactive tutorials
  - Current health news
Patient Education Reference Center (PERC)

Key Features:
- **Diseases & Conditions**: Evidence-based patient education handouts on diseases, health conditions and injuries
- **Discharge Instructions**: Patient discharge handouts and how-to instructions with images
- **Procedures and Lab Tests**: Evidence-based patient education handouts for hundreds of procedures and lab tests
- **Patient Education Discharge Instructions**: Latest New and Revised
- **Meaningful Use**: Learn how PERC can help!
Prader-Willi Syndrome

(Prader-Labhart-Willi Syndrome)

**Definition**
Prader-Willi syndrome (PWS) is a group of symptoms caused by a rare genetic disorder. It can cause a variety of problems with growth and development.

**Causes**
PWS is caused by a random genetic defect. The defect is most often caused by a gene from the father.

**Genetic Material**
MedlinePlus
medlineplus.gov
Cystic fibrosis (CF) is an inherited disease of the mucus and sweat glands. It affects mostly your lungs, pancreas, liver, intestines, sinuses and sex organs. CF causes your mucus to be thick and sticky. The mucus clogs the lungs, causing breathing problems and making it easy for bacteria to grow. This can lead to problems such as repeated lung infections and lung damage.

The symptoms and severity of CF vary widely. Some people have serious problems from birth. Others have a milder version of the disease that doesn't show up until they are teens or young adults.

Although there is no cure for CF, treatments have improved greatly in recent years. Until the 1980s, most deaths from CF occurred in children and teenagers. Today, with improved treatments, some people who have CF are living into their forties, fifties, or older.

NIH: National Heart, Lung, and Blood Institute
Authoritytive, Quality Links for Consumers

Overviews
- Cystic Fibrosis (American Lung Association)
- Cystic Fibrosis (Mayo Foundation for Medical Education and Research)
- Cystic Fibrosis: Frequently Asked Questions (Cystic Fibrosis Foundation)

Latest News
- Drug-Resistant 'Superbug' May Spread Among Patients, Study Finds (03/29/2013, HealthDay)

Diagnosis/Symptoms
- CF Mutation Panel (American Association for Clinical Chemistry)
- Cystic Fibrosis (CF) Respiratory Screen_Sputum (Nemours Foundation)
  Also available in Spanish
- Signs and Symptoms of Cystic Fibrosis NIH (National Heart, Lung, and Blood Institute)
- Sweat Test (American Association for Clinical Chemistry)
- Trypsin and Chymotrypsin Test (American Association for Clinical Chemistry)
- Trypsinogen Test (American Association for Clinical Chemistry)

Treatment
- How Is Cystic Fibrosis Treated? (National Heart, Lung, and Blood Institute)
- Therapies for Cystic Fibrosis (Cystic Fibrosis Foundation)
  Return to too

Prevention/Screening
- Carrier Screening for Cystic Fibrosis (CF) (March of Dimes Birth Defects Foundation)
  Also available in Spanish
- Cystic Fibrosis: Prenatal Screening and Diagnosis (American College of Obstetricians and Gynecologists) - PDF
- Newborn Screening for Cystic Fibrosis (Cystic Fibrosis Foundation)
  Return to too

Nutrition
- Nutrition and Cystic Fibrosis: Changes through Life (Cystic Fibrosis Foundation) - PDF
  Also available in Spanish
- Nutrition for Your Child with Cystic Fibrosis (Four to Seven Years) (Cystic Fibrosis Foundation) - PDF
- Nutrition for Your Infant with Cystic Fibrosis (Birth to One Year) (Cystic Fibrosis Foundation) - PDF
  Also available in Spanish
- Nutrition for Your Toddler with Cystic Fibrosis (One to Three Years) (Cystic Fibrosis Foundation) - PDF
  Also available in Spanish
- Nutrition: Pancreatic Enzyme Replacement in People with Cystic Fibrosis (Cystic Fibrosis Foundation) - PDF
  Also available in Spanish
- Supporting Nutrition: Understanding Tubefeeding (Cystic Fibrosis Foundation) - PDF
Mucus in patients with cystic fibrosis is very thick and collects in the intestines and lungs. The result is malnutrition, poor growth, numerous respiratory infections, breathing difficulties, and eventually, permanent lung damage. Lung disease is usually the cause of death in most patients.
Cystic fibrosis is a hereditary disorder characterized by lung congestion and infection and malabsorption of nutrients by the pancreas.

Cystic fibrosis is the most common cause of chronic lung disease in children and young adults, and the most common fatal hereditary disorder affecting Caucasians in the US.
**How effective is it?**

Natural Medicines Comprehensive Database rates effectiveness based on scientific evidence according to the following scale: Effective, Likely Effective, Possibly Effective, Possibly Ineffective, Likely Ineffective, Ineffective, and Insufficient Evidence to Rate.

The effectiveness ratings for POMEGRANATE are as follows:

**Possibly ineffective for:**

- Chronic lung disease (chronic obstructive pulmonary disease, COPD). Drinking pomegranate juice does not seem to improve symptoms or breathing in people with COPD.

**Insufficient evidence to rate effectiveness for:**

- High cholesterol (hyperlipidemia). Some studies show pomegranate seems to lower total cholesterol and “bad” (LDL) cholesterol. But other studies find no benefit.
- High blood pressure (hypertension). One research study suggests that drinking 50 mL of pomegranate juice daily for up to 1 year can lower systolic blood pressure (the top number) by 5% to 21%. But drinking pomegranate juice doesn’t seem to affect diastolic pressure (the lower number). However, other research shows no effect on blood pressure when study subjects drink 240 mL of pomegranate juice daily for 3 months. Additional research is needed to sort this out.
- "Hardening of the arteries" (atherosclerosis). Preliminary evidence suggests drinking pomegranate juice might help to keep the arteries in the neck (carotid arteries) clear of the build-up of fatty deposits.
- Gum disease. There is some evidence that painting the gum with pomegranate fruit peel extract in combination with gold kola extract might improve gum disease.
- Prostate cancer. Early research findings suggest that drinking pomegranate juice might slow the progress of prostate cancer.
- Heart disease. Some preliminary research shows that drinking pomegranate juice might improve blood flow to the heart. But drinking pomegranate juice does not seem to prevent narrowing of blood vessels in the heart (stenosis). Also, there isn’t enough information to know if drinking pomegranate juice helps to prevent heart disease-related events such as heart attack.
- Intestinal worm infestations.
- Obesity and weight loss.
- Fungal mouth infections.
- Diarrhea.
- Dysentery.
- Sore throat.
- Hemorrhoids.

**References**

2. FDA. Center for Food Safety and Applied Nutrition, Office of Premarket Approval, ENUS. A food additive database. Available at: wv.cfsan.fda.gov/~dms/leaus.html.
Multicultural Information

- **EthnoMed**  ethnomed.org
  Cultural beliefs and medical issues pertinent to healthcare of ethnic groups in the Seattle area

- **RHIN**  rhin.org
  For refugees and health providers

- **SPIRAL**  spiral.tufts.edu
  Patient information resources in Asian languages

- **MedlinePlus Health Information in Multiple Languages**
  www.nlm.nih.gov/medlineplus/languages/languages.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
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...
Infant Feeding, Care (Including weaning)

Most Vietnamese women breastfeed their infants for the first 6-12 months (both in the US and in Vietnam). This can be difficult when the women work outside the home and such women may stop breastfeeding sooner than they would in Vietnam. Children are often delayed in weaning from the nursing bottle to the cup until 2 years of age. This may result in an iron deficient diet.

Child Rearing Practices

"Children sit where their parent’s place them." This traditional Vietnamese expression characterizes the Confucian based parent-child relationship. Though parents in Seattle have adopted various degrees of western parenting styles, they take their responsibility to teach their children very seriously. The first priority is to teach filial obedience and respect, the second is to provide as much educational success as possible. In many homes, homework must be completed when arriving home from school, and television is only allowed on the weekend. If the parents don't feel the teacher is providing enough homework, they may make homework assignments themselves, or write questions for the child to answer.

In Vietnam, corporal punishment was the norm. In the US, parents are aware that this is not commonly accepted and they have had to change methods of discipline. Some parents state their children are harder to control here than they would have been in Vietnam and are frustrated that their children seem to lack respect for their elders.

ADOLESCENCE, ADULTHOOD, AND OLD AGE

Refugee families have had to deal with many issues in adapting to their new home. In Vietnam, elders were the strongest influence in decision making, and were respected and sought after for advice. Younger family members were expected to be respectful. Also, elders held property rights of the family, and could retire once their children could support them.

When these elders were transported to the US, they lost their property and much of their material goods. Many are unable to work outside the home because of their lack of training for available work, their age, and lack of English. They are very socially and culturally isolated while their younger family members become more Americanized. This can create a cultural reversal: the elders no longer have power, money or land, and become financially dependent on their children. Because they are culturally isolated, they are no longer sought after for advice. This creates much tension in families where elders feel ignored and disrespected, while their children feel overburdened with care for the elders.
Nutrition Clinical Topics

Articles and information related to nutrition and diet.

Related content

Diabetes Patient Education Materials

Food and fasting in Somali Culture
Information about typical Somali foods and fasting traditions, influenced by Sunni Muslim practice.

Nutrition and Fasting in Cambodian Culture
Information about traditional nutrition and commonly consumed foods in the Cambodian community in Seattle.

The Traditional Foods of the Central Ethiopian Highlands (research report no. 7)
Information about traditional Ethiopian food and food preparation based on studies carried out as part of an applied nutrition program within the framework of the Children's Nutrition Unit (now transformed into the Ethiopian Nutrition Institute (1). The studies were carried out in widely different parts of Ethiopia, and included the major ethnic groups and also took account of seasonal variations.

More About Ethiopian Food: Teff
Information about Teff, a staple in the Ehiopian and Eritrean diet, and some of the nutritional benefits, and health implications.

Report on Somali Diet
Information about common dietary beliefs and practices of Somali participants in WIC nutrition education.

Chinese Food Cultural Profile
A general article about common foods and the role of food in Chinese culture.

Nutrition and Fasting in Vietnamese Culture
Information about nutrition and commonly consumed foods in the Vietnamese community in Seattle.

Group Nutrition Education Poster
A 1 page poster PDF summarizing a WIC group nutrition project for Spanish and Somali families.

Clinical Pearl: Report on Somali Diet
A clinical pearl abstract about information collected from Somali nutrition education groups about the Somali diet.

Cambodian Shop Around Program
Description of a pilot project to promote healthy eating and dietary management of diabetes in Seattle's Cambodian community; includes curriculum, recipes, photos and information about the prevalence of diabetes and other health conditions affecting Cambodian Americans, along with considerations of some historical and environmental factors that may influence Cambodian American diet.

Muslim Religious Observances and Diabetes
Information about fasting practices, and recommendations for providers caring for diabetic patients during times of fasting. Includes recommendations related to medication management.
REPORT ON SOMALI DIET

Author(s): Aliya S. Haq, MS, RD, CD, WIC
Reviewer(s): Christine Wilson Owens, Editor; Salma Musa, CCM; J. Carey Jackson, MD
Date Authored: August 01, 2003

Also available as PDF

METHODS

The following information was collected during more than 70 nutrition education groups for Somali patients taught by dietitian Aliya Haq at the WIC clinic at Harborview Medical Center (HMC), between 1999 and 2002. WIC is a supplemental nutrition education program for pregnant and postpartum women, infants, and children up to age five. Nutrition education is an integral part of the WIC program, which also provides healthy food vouchers to low income families. More than 400 Somali patients have attended the nutrition education groups at Harborview since they began in September 1999.

Providers are encouraged to assess the needs and behavior of all patients individually, and to consider that the information presented here is not intended to be a full account of the dietary practices and beliefs of all Somali immigrants. As Westernization appears to have influenced some aspects of Somali immigrants' diet already, it will be important to observe if and how further acculturation impacts diet in the future.

THE SOMALI DIET

Limited or no published data is available regarding the dietary beliefs and practices of Somali people residing in the United States. For this reason, the following information has been compiled to convey the lessons learned during nutrition education groups with hundreds of Somali patients. The information is organized into four sections:

1. Religious Proscriptions discusses the influence the dominant Muslim religion has on Somali immigrants' diet; includes descriptions of halal and haram foods, and fasting and breastfeeding practices.

2. Foods Commonly Consumed and Methods of Cooking lists foods that are commonly eaten in Somali immigrant households, including common ingredients and cooking methods for these foods, with indication of which foods are considered high in fat, high in carbohydrates and fat, high in salt, and high in protein. This section also discusses consumption of fast foods and elements of an acculturating diet.

3. Common Dietary Beliefs describes some of the commonly held beliefs regarding diet and nutrition that have been expressed by Somalis participating in the group education.
<table>
<thead>
<tr>
<th>Title</th>
<th>Format</th>
<th>Language(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Diabetes Handout</td>
<td>Document</td>
<td>English; Arabic; Bosnian; Chinese; Farsi; French; German; Greek; Gujarati;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Haitian Creole (Kreyol); Hebrew; Hindi; Hmong; Igbo; Japanese; Khmer;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Korean; Kurdish; Polish; Portuguese; Romanian; Russian; Somali; Spanish;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Swahili; Thai; Turkish; Urdu; Vietnamese; Yoruba</td>
</tr>
<tr>
<td>2. Diabetes and Your Feet</td>
<td>Document</td>
<td>English; Haitian Creole (Kreyol); Portuguese; Spanish</td>
</tr>
<tr>
<td>3. If You Have Diabetes, a Flu Shot Could Save Your Life</td>
<td>Document</td>
<td>English; Portuguese; Spanish</td>
</tr>
<tr>
<td>4. Diabetes Info Sheet</td>
<td>Document</td>
<td>English; Chinese; Haitian Creole (Kreyol); Spanish; Vietnamese</td>
</tr>
<tr>
<td>5. Diabetes: Are You at Risk?</td>
<td>Document</td>
<td>English; Haitian Creole (Kreyol); Khmer; Mandarin; Portuguese; Spanish;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vietnamese</td>
</tr>
<tr>
<td>6. Are you at risk for the worlds fastest growing disease?</td>
<td>Audio; Document; Video</td>
<td>English; Arabic; Bosnian; Russian; Somali; Spanish</td>
</tr>
<tr>
<td>7. Control Your Diabetes, It's Worth Your Time (Diet and Exercise)</td>
<td>Document; Video</td>
<td>English; Amharic; Bosnian; Somali; Spanish</td>
</tr>
<tr>
<td>8. Control Your Diabetes, It's Worth Your Time - (The Basics)</td>
<td>Audio; Document; Video</td>
<td>English; Amharic; Bosnian; Karen; Somali; Spanish</td>
</tr>
<tr>
<td>9. Control Your Diabetes; It's worth your time (Medication &amp; Glucose)</td>
<td>Audio; Document; Video</td>
<td>English; Amharic; Bosnian; Karen; Somali; Spanish</td>
</tr>
<tr>
<td>10. Control Your Diabetes; It's worth your time Pt.2, Diet and Exercise</td>
<td>Audio</td>
<td>English; Amharic; Bosnian; Somali; Spanish</td>
</tr>
</tbody>
</table>
### Food Pyramid Languages

<table>
<thead>
<tr>
<th>Language</th>
<th>Split Screen</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
</tr>
<tr>
<td>Arabic</td>
<td></td>
</tr>
<tr>
<td>Bengali</td>
<td></td>
</tr>
<tr>
<td>Russian</td>
<td></td>
</tr>
<tr>
<td>Chinese</td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td></td>
</tr>
<tr>
<td>Vietnamese</td>
<td></td>
</tr>
<tr>
<td>French</td>
<td></td>
</tr>
<tr>
<td>German</td>
<td></td>
</tr>
<tr>
<td>Greek</td>
<td></td>
</tr>
<tr>
<td>Guarirolo</td>
<td></td>
</tr>
<tr>
<td>Haitian Creole (Kreyol)</td>
<td></td>
</tr>
<tr>
<td>Hebrew</td>
<td></td>
</tr>
<tr>
<td>Hindi</td>
<td></td>
</tr>
<tr>
<td>Hmong</td>
<td></td>
</tr>
<tr>
<td>Indonesian</td>
<td></td>
</tr>
<tr>
<td>Italian</td>
<td></td>
</tr>
<tr>
<td>Japanese</td>
<td></td>
</tr>
<tr>
<td>Korean</td>
<td></td>
</tr>
<tr>
<td>Kurdish</td>
<td></td>
</tr>
<tr>
<td>Lao</td>
<td></td>
</tr>
<tr>
<td>Orange</td>
<td></td>
</tr>
<tr>
<td>Polish</td>
<td></td>
</tr>
<tr>
<td>Portuguese</td>
<td></td>
</tr>
<tr>
<td>Romanian</td>
<td></td>
</tr>
<tr>
<td>Russian</td>
<td></td>
</tr>
<tr>
<td>Somali</td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td></td>
</tr>
<tr>
<td>Swedish</td>
<td></td>
</tr>
<tr>
<td>Thai</td>
<td></td>
</tr>
<tr>
<td>Tigrai</td>
<td></td>
</tr>
<tr>
<td>Turkish</td>
<td></td>
</tr>
<tr>
<td>Ukrainian</td>
<td></td>
</tr>
<tr>
<td>Urdu</td>
<td></td>
</tr>
<tr>
<td>Vietnamese</td>
<td></td>
</tr>
</tbody>
</table>

---

### Food Pyramid: Romanian

#### The Food Pyramid

*Piramida alimentației*

The Food Guide Pyramid is a general guide that tells you how to choose a healthy diet that is right for you. The Pyramid calls for eating a variety of foods to get the nutrients you need and eating the right amount of calories to maintain a healthy weight. Make sure to eat foods in the three lower sections of the Pyramid:

**Produce:**
- Fruits
- Vegetables

**Milk, Yogurt, and Cheese:**
- 2 - 3 Servings
- Lapte, iaurt și brânză

**Grains:**
- 3 - 5 Servings
- Legume

**Protein:**
- Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts
- 2 - 3 Servings
- Carna, carne de pui, pui, pui, fasole, ouă și nuci, alune, neghii, etc.

**Fats, Oils, and Sweets:**
- Use Sparingly
- Grăsimi, uleiuri, dulciuri și băuturi ricicloriște

Each of these groups provides some, but not all, of the nutrients you need. Foods in one group can not replace those in another. No one food group is more important than another. For good health, you need them all.

Făcătoare din aceste grupuri susțină, dar nu în totalitate, necesarul de substanțe nutritive.

Alimentele din grupul acesta nu îl înlocuiește alimentele din celelalte grupuri. Nici un grup de alimente nu este mai important decât celalalt. Pentru o dietă sănătoasă veți avea nevoie de toate.
## Infant and Newborn Nutrition - Multiple Languages

<table>
<thead>
<tr>
<th>Language</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>العربية (العربية)</td>
</tr>
<tr>
<td>Bosnian</td>
<td>Bosanski (Bosanski)</td>
</tr>
<tr>
<td>Chinese - Simplified</td>
<td>简体中文 (简体中文)</td>
</tr>
<tr>
<td>Chinese - Traditional</td>
<td>繁體中文 (繁體中文)</td>
</tr>
<tr>
<td>French</td>
<td>francés (français)</td>
</tr>
<tr>
<td>Hindi</td>
<td>हिंदी (हिंदी)</td>
</tr>
<tr>
<td>Japanese</td>
<td>日本語 (日本語)</td>
</tr>
<tr>
<td>Korean</td>
<td>한국어 (한국어)</td>
</tr>
<tr>
<td>Marshallese</td>
<td>kajin Majol (Marshallese)</td>
</tr>
<tr>
<td>Portuguese</td>
<td>português (Portuguese)</td>
</tr>
<tr>
<td>Russian</td>
<td>Русский (Русский)</td>
</tr>
<tr>
<td>Somali</td>
<td>af Soomaali (Somali)</td>
</tr>
<tr>
<td>Spanish</td>
<td>español (Spanish)</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>Tiếng Việt (Vietnamese)</td>
</tr>
</tbody>
</table>

### Arabic
- Bottle Feeding Your Baby
  - Arabic العربية PDF Bilingual
  - Health Information Translations

### Bosnian (Bosanski)
- Bottle Feeding Your Baby
  - Bosanski Hranjenje bebe flašicom PDF Bilingual
  - Health Information Translations

### Chinese - Simplified (简体中文)
- Bottle Feeding Your Baby
  - Chinese - Simplified 用奶瓶喂宝宝 PDF Bilingual
  - Health Information Translations
How do HEAL-WA resources stack up as evidence?

- Systematic Reviews, Meta-Analyses
  - ex. Cochrane
- Evidence Summaries, Evidence Guidelines
  - ex. DynaMed, Nursing Reference Center, Natural Standard, NGC
- Research Articles
  - Randomized Controlled Trials (RCTs), Cohort Studies, Qualitative Studies
  - ex. MEDLINE, CINAHL
- Background Information, Expert Opinion
  - ex. Textbooks
HEAL-WA
Online Access for Health Professionals in Washington State

Handout:  

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

Questions?

Janet G Schnall, MS, AHIP  
HEAL-WA Librarian  
schnall@uw.edu