Herbal Supplements

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Objectives

- Definition of Herbs, Neutraceuticals, and Functional Foods
- Reputable Resources
- Guidelines for taking herbs safely
- Top 5 Dangerous Herbs
- Ginko
- Ginsing
- Echinacea

Herbs

- Herb:
  - Medicinal plants
  - Regulated as Dietary Supplements under the Dietary Supplement Health and Education Act of 1994 (DSHEA).
    - **Structure and function claims**

      "good for circulation"
    - **No specific health claims**

      "prevents atherosclerosis"
    - **Does not regulate quality or purity of supplement**

Herbs

- Quality Assurance Standardization
  - Current Good Manufacturing Procedures
  - As of March 1999
    - name of plant
    - part of plant used

Nutraceuticals

- Any substance that may be considered a food or part of a food and provides medical or health benefits, including prevention and treatment of disease.
  - Soybeans: (fiber can lower LDL)
  - Celery: (fiber can reduce risk of colon cancer)
  - Cranberry juice: (limits the adherence of bacteria to urinary wall)

Functional Foods

- Any modified food or food ingredient that may provide a health benefit beyond the traditional nutrients it contains.
  - Orange Juice with added Calcium
  - Hi C candy enriched with Vitamin C

Safe Use of Herbs

- Discuss with a professional prior to taking
- Start with small doses
- Stick to a single herb product
- Be alert to side effects
- Avoid taking herbal supplements if pregnant or nursing
- **Stop taking herbs two weeks prior to undergoing surgery.**

Hazards of Herbal Use

- Self (mis) diagnosis and treatment
- People may neglect conditions
- Symptoms of serious illness may be masked
- Treatment may be delayed in serious cases
- Allergy
- Toxicity

Reputable Resources

- Germany's Commission E
  - Similar to our FDA.
  - Has conducted a lot of research on safe use of herbs.
- Recommendations in this class are based on
  - Translated German Research.
  - *PDR for Herbal Medicines*
  - Other clinical studies/trials.

Reputable Resources

- Books
  - *Herbs of Choice* by Varro E. Tyler
  - *American Pharmaceutical Association's Practical Guide to Natural Medicines* by Andrea Pierce
  - *PDR for Herbal Medicines*
- Magazines
  - *Consumer Reports & Consumer Magazine*
  - *Herbal Gram*

Reputable Resources

- Internet Web Sites
  - American Botanical Counsel
    - http://www.herbalgram.org
    - phone number 1(800) 373-7105
  - Office of Alternative Medicine
    - http://www.altmed.od.nih.gov/oam
  - Quack Watch
    - http://www.quackwatch.com

Top 5 Dangerous Herbs

Ephedra/Ma Huang

Chaparal

Comfrey

Lobelia

Yohimbe

Ephedra/Ma Huang

- Used in Germany as a decongestant
- Used in USA in many diet products
  - not a safe and effective weight loss aid.
  - tolerance is built up after 7 days.
  - most weight loss products contain 24 mg Ephedra.

Ephedra/Ma Huang

- Minimum Dose (8mg/day):
  - heart palpitations, dry mouth, insomnia, nausea, vomiting, motor restlessness, irritability, headaches, and tachycardia.
- Higher Dose:
  - drastic increase in blood pressure, cardiac arrhythmia, dependency, coma, death.
- Do not use if you have/are taking:
  - high blood pressure, glaucoma, enlarged prostate
  - MAO Inhibitors, guanethidine, or cardiac glycosides.

Chaparal

- Believed to be an anti-cancer agent.
- Ineffective and totally unsafe for human consumption.
- Causes irreversible liver damage.

Comfrey

- External Use: treat bruises and sprains
  - Only use if skin is intact.
  - Do not use more then 100 micrograms/day.

- Internal Use: gastritis and gastrointestinal ulcers
  - Not recommended for internal use.
  - Causes liver damage and causes cancer.

Lobelia

- "The natural way to stop smoking"
- Risk of overdose is very high
  - Not recommended.
  - Respiratory failure, sweating, rapid heartbeat, decreased blood pressure, coma, convulsions and death.
  - **Should never be used in combination with nicotine patches or by those who smoke.**
    - Drastically raises heart rate and blood pressure.

Yohimbe

- Natural Aphrodisiac
- Low Dose Side effects:
  - Anxiety, elevated blood pressure, nausea, sleeplessness, tachycardia, tremor, vomiting.
- Large Dose Side effects:
  - Salivation, lowered blood pressure, kidney failure, cardiac failure (death).
- Not recommended for use.

Ginko Biloba

- Claim: Improved Memory
- Research:
  - JAMA study found improved cognitive performance and social functioning.
- Dose:
  - 40 mg 3x/day taken consistently for 12 weeks.

Ginko Biloba

- Possible side effects:
  - headache, dizziness, heart palpitations, allergic reaction.
- Do not take with aspirin, Vitamin E, garlic, ginger, coumadin, or heparin.
  - Inhibits blood clotting
- May increase blood sugar in people with Diabetes.

Ginsing

- Claims: Improve stamina

- Research: Studied extensively in animals but not in humans.
  - In animals Ginsing improved immune function and prevented stress induced ulcers.
  - Not proven to work in humans based on available research, more long term human studies are needed.

Ginsing

- Side Effects:
  - Not usually associated with serious side effects.
  - Most common are: nervousness, excitation, insomnia, and loose stools.
- May have hypoglycemic effect especially with insulin dependent diabetics, but is also seen with Type II Diabetes.

Echinacea

- Claims: Treatment of the colds and chronic infections of the respiratory tract.

- Research: appears to shorten the duration and frequency of the common cold.
  - Effectiveness of oral capsules and teas questionable.

Echinacea

- Side Effects:
  - May cause allergic reaction
- People with the following medical conditions should not use Echinacea:
  - TB, leucosis, Multiple Sclerosis , collagen disorders, HIV, or other auto immune diseases.
- Dose:
  - 15-20 drops of root extract daily.
  - 6-9 mg/day expresses juice.
  - do not use for longer then 8 weeks.

Review

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Questions?

To schedule an appointment with a dietitian please call
916-5525