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PB1647-Do You need to Take a Vitamin Supplement?

The University of Tennessee Agricultural Extension Service

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Do you need to take a vitamin Supplement? Betty Greer, Associate Professor

hat you eat is important to your health. Almost every day new research confirms the benefits of healthful eating. The Food Guide Pyramid offers a reliable and easy-to-follow plan for healthful eating. If you eat the recommended number of servings from each of the pyramid food groups and eat a variety of foods from within each of the food groups, you should get all the vitamins, minerals and other nutrients you need. People who consume a well-balanced diet usually do not need a vitamin/mineral supplement.

Supplements may benefit some people.

For some people a complete multivitamin/ mineral supplement may offer benefits that are safe and effective. A supplement may help in the following situations:

- You do not eat the recommended number of servings from the Food Guide Pyramid, because of your busy lifestyle.
- You are on a very low-calorie weight loss diet.
- You are elderly and eating less.
- You are a strict vegetarian who does not use eggs or dairy products.
- You cannot drink milk or eat cheese or yogurt.
- You are a woman of child-bearing age who does not eat number of servings of fruits, vegetables and beans recommended by the Food Guide Pyramid.
- You have certain medical conditions that make it difficult to eat.

For those who choose to take a supplement, it is best to select a product that provides no more than 100 percent of the Daily Value for vitamins and minerals. Check the Nutrition Facts food label for information about the nutrients included..

If you take a supplement, a multivitamin/mineral supplement is generally the best choice. Supplements of a single nutrient or a few nutrients may cause poor absorption of other nutrients and could lead to nutritional deficiencies. However, if you are at risk for osteoporosis, your doctor may recommend a calcium supplement. Some calcium pills contain a coating which can result in poor absorption.



Test your calcium supplement's digestibility: Drop a calcium supplement in a glass containing 6 ounces of vinegar and stir every few minutes. If it has not dissolved in 30 minutes, it probably will not dissolve in your stomach. Calcium cannot be absorbed if the pill does not dissolve.

A little is essential: too much is harmful

While vitamins, minerals and other food components are healthful and may even prevent certain chronic diseases, **too much can be harmful**. The Food and Nutrition Board has recommended the highest level you should get of certain nutrients. If you con-

sume amounts above this level, you may put yourself at risk for health problems or adverse reactions.

How much is too much?

Listed below is the recommended *upper intake level* for certain nutrients.* These upper levels were established by the Food and Nutrition Board.

Calcium

- Birth to one year upper levels not established
- One year and older = 2.5 grams/day

Phosphorus

- Birth to one year upper levels not established
- One to three years = 3 g/day
- Pregnant women = 3.5g/day
- Nine years and older, including breastfeeding women = 4 g/day.

Magnesium

- Birth to one year upper levels not established
- One to three years = 65 mg/day
- Four to eight years = 110 mg/day
- Nine years and older, including pregnancy and breastfeeding = 350 mg/day

Vitamin D

- Birth to one year = 25 micrograms/day
- One year and older, including pregnancy and breastfeeding = 50 micrograms/day

Fluoride

- Birth to six months = 0.7 mg/day
- Seven to 12 months = 0.9 mg/day
- One to three years = 1.3 mg/day
- Four to eight years = 2.2 mg/day
- Nine and older, including pregnancy and breastfeeding = 10 mg/day

Niacin

- Birth to one year upper levels not established
- One to three years = 10 mg/day
- Four to eight years = 15 mg/day

- Nine to 13 = 20 mg/day
- 14 to 18 and pregnant and breastfeeding women younger than age 18 = 30mg/day
- 19 and older, including pregnant and breastfeeding ages 19 to 50 year = 35 mg/day

Vitamin B-6

- Birth to one year upper levels not established
- One to three years = 30 mg/day
- Four to eight years = 40 mg/day
- Nine to 13 years = 60 mg/day
- 14 to 18 years, including pregnant and breastfeeding younger than 18 = 80 mg/day
- 19 and older, including pregnant and breastfeeding ages 19 to 50 year = 100 mg/day

Synthetic folic acid

- Birth to one year upper levels not established
- One to three years = 300 micrograms/day
- Four to eight years = 400 micrograms/day
- Nine to 13 years = 600 micrograms/day
- 14 to 18 years, including pregnant and breastfeeding younger than 18 = 800 micrograms/day
- 19 and older, including pregnant and breastfeeding ages 19 to 50 year =1000 micrograms/day

Choline

- Birth to one year upper levels not established
- One to eight years = 1 g/day
- Nine to 13 years = 2g/day; 14 to 18 years, including pregnant and breastfeeding younger than 18 = 3g/day
- 19 and older, including pregnant and breastfeeding ages 19 to 50 year = 3.5g/day

*The safe Upper Intake Levels have not been established for other nutrients as this time.

Supplement Health and Education Act of 1994

The Dietary Supplement Health and Education Act of 1994 allows manufacturers to sell dietary supplements without experts or scientists evaluating them first. The law requires that any statements about the supplement be "truthful and not misleading." Unfortunately, there is no standard for the quality of the science used to support the claims. The burden of proof is on the Food and Drug Administration (FDA) to prove harm, not on the manufacturer to prove they are safe. Food additive and drug manufacturers are governed by a different law. Food additive and drug manufacturers must prove safety using carefully designed research studies. These research studies are reviewed by a panel of experts before approval is granted for a food additive or drug.

Herbal Supplements

The law does not require that herbal preparations be evaluated for purity and consistency of active components. In spite of this, many people consider herbals harmless because they come from "natural" sources. Herbals may contain substances that are harmful by themselves or in combination with other compounds.

Many herbal preparations have not been tested scientifically because it is too costly. When you take herbal preparations, you cannot be sure you are getting the active ingredients* needed to achieve the desired effect. The active ingredients can vary dramatically from one batch to another.

Infants and growing children are at greater risk for any harmful effects of herbals. Pregnant and breast-feeding women should avoid herbals.

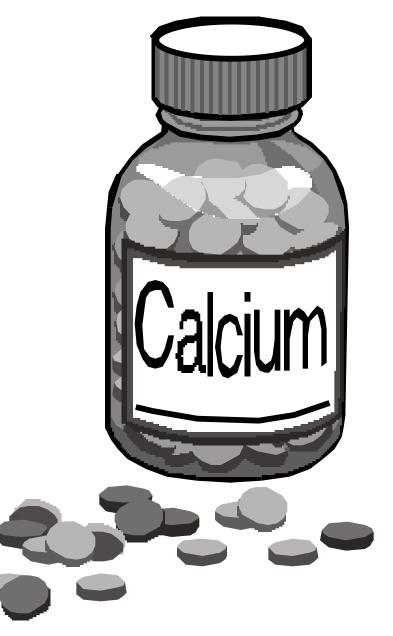
Before using herbal supplements, it is best to consult a medical doctor, a pharmacist or a registered dietitian, especially if you are taking other medications. Active ingredients in some herbal supplements can interact with some medications and may cause serious health problems. Be cautious of people claiming to be a "herbalist." Anyone can claim to be a herbalist because no licensing or educational standards are required for this title.

If you are interested in herbal remedies remember these tips:

- Use common sense.
- Be wary of anything that promises a "quick fix."
- Ignore dramatic statements that go contrary to what most health groups are saying.
- Discuss with your doctor any plans you have about taking herbals. He/she can help you find information about specific remedies and help you avoid potentially harmful interactions.

REMEMBER IF IT SOUNDS TOO GOOD TO BE TRUE, IT PROBABLY IS!

There is no substitute for a healthy lifestyle that includes a well-balanced diet, exercise, stress management, rest and giving up unhealthy, high-risk behaviors.



^{*} an active ingredient is the compound in the herbal which is to suppose to be beneficial.

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