Nature’s ABCs: Vitamins & Minerals in Food

What are Vitamins?

Vitamins are chemical compounds that the body uses in many ways. It is important to eat a variety of foods from each of the food groups that contain vitamins because our body cannot make them. Vitamins are either water soluble (vitamin C and B vitamins) or fat soluble (vitamins A, D, E, K), which affects how they are absorbed and carried in the body. Most vitamins have a letter and a chemical name. There are thirteen different vitamins that have been identified as important for humans. The following list reviews some of the most common.

Sources of Vitamin A - Retinol
- Orange vegetables (carrots, sweet potatoes, pumpkin)
- Dark green, leafy vegetables (spinach, collards, turnip greens)
- Orange fruits (mango, cantaloupe, apricots)
- Tomatoes
- Liver and egg yolks
- Dairy products (fortified with vitamin A)

Sources of B Vitamins - Thiamin (B₁), Riboflavin (B₂), Niacin (B₃)
- Enriched grain products (bread, cereals, pasta)
- Whole grains, pork, beans, lentils, orange juice, sunflower seeds (B₉)
- Meat, eggs, mushrooms (B₁₂)

Sources of Vitamin C - Ascorbic Acid
- Citrus fruits and juices, kiwi, strawberries, cantaloupe
- Broccoli, peppers, tomatoes, cabbage, potatoes
- Leafy greens (romaine lettuce, turnip greens, spinach)

Sources of Vitamin D - Calciferol
- Milk fortified with vitamin D
- Eggs, sardines, salmon
- Fortified breakfast cereals and orange juice
- Sunlight makes a compound that is converted to vitamin D in the body

Sources of Vitamin E - Tocopherol
- Vegetable oils, salad dressings, margarines
- Green leafy vegetables
- Fortified cereals
- Nuts

Sources of Folate - (another very important B vitamin)
- Cooked dry beans and peas, peanuts
- Oranges and juice
- Dark green, leafy vegetables (spinach, mustard greens, romaine lettuce)

Sources of Vitamin K - Phylloquinone
- Collard greens, spinach, broccoli, Brussels sprouts, cabbage

What are Minerals?

Minerals are substances that are found in the soil and in foods. They are needed for good nutrition. There are sixteen different minerals (macrominerals such as calcium, phosphorus, etc.) that are considered important in our diet. There are other minerals that may be needed in very small amounts (trace minerals such as iron, zinc, etc.). Minerals are much more stable than vitamins and generally remain in the food after cooking, canning, and

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This material was funded by USDA's Supplemental Nutrition Assistance Program (SNAP). SNAP provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more, call toll-free 1-866-762-2237 or visit www.dcf.state.fl.us/ess.
Holiday Recipe: Grandma’s Stuffing
Serving Size = 1/8 of recipe; Yield: 8 servings

Ingredients:
10 cups whole wheat bread cubes, dry
1/3 cup water
½ cup chopped onion
½ cup chopped celery
1 teaspoon parsley, dried (or 1 tablespoon fresh, chopped)
1/8 teaspoon salt
1/4 teaspoon black pepper
1 ½ cups low-fat/fat-free milk
1/4 cup egg substitute (or 1 lightly beaten egg)
2 medium pared, cored, chopped cooking apples
1/4 cup raisins (optional)

Instructions:
1. Preheat oven to 350 degrees F.
2. Place bread cubes into large bowl. Set aside.
3. Add water to medium saucepan. Add onion, celery, parsley, salt and pepper. Cook for 5 minutes. Pour over bread cubes.
4. Stir in milk and egg. Gently stir in apples, and raisins, if desired.
5. Spoon into a greased 2-quart baking dish. Bake for 1 hour.

Sources of Calcium
- Dairy products
- Dark green, leafy vegetables (kale, collards, broccoli)
- Some types of tofu

Sources of Iron
- Meat, poultry, fish, eggs, milk
- Whole grains, enriched cereals
- Apricots, prunes, raisins (Bodies better absorb iron from meat—to increase absorbency, eat iron-rich foods with foods that are high in vitamin C.)

Sources of Magnesium
- Wheat bran
- Green vegetables
- Nuts
- Chocolate

Sources of Potassium
- Baked white or sweet potatoes, cooked greens (spinach, turnip, mustard), winter (orange) squash
- Bananas, plantains, dried fruit (apricots, prunes), orange juice
- Cooked dried beans (baked beans), lentils

Sources of Sodium
- Table salt
- Processed foods

Sources of Zinc
- Seafood (oyster, shrimp, crab)
- Beef, lamb, poultry, beans
- Some fortified cereals
- Mushrooms
- Nuts

FOOD SAFETY TIP: Always remember to wash hands, utensils, sink (and anything else that comes in contact with raw poultry and its juices) with soap and water.

Have a food safety question? Call the Meat and Poultry Hotline at 1-888-674-6854 from 10:00 a.m. to 4:00 p.m., Monday - Friday.

For more information, contact:
Betsy Crisp, MS, LD, FNP Coordinator 352-521-4288
Pasco Cooperative Extension 727-847-8177
813-996-7341, Ext 4288

Family Favorite Recipe
Make-Over Suggestions

<table>
<thead>
<tr>
<th>Recipe calls for...</th>
<th>Substitute...</th>
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<tbody>
<tr>
<td>Bacon</td>
<td>Canadian bacon or lean ham</td>
</tr>
<tr>
<td>Sausage</td>
<td>Lean ground turkey or 95% fat-free sausage</td>
</tr>
<tr>
<td>Sour cream</td>
<td>Plain low-fat or non-fat yogurt</td>
</tr>
<tr>
<td>Whipped cream</td>
<td>Chilled, whipped evaporated skim milk</td>
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<tr>
<td>Oil or butter (in baking)</td>
<td>Use half fat plus half applesauce</td>
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<tr>
<td>Baking chocolate (1 ounce)</td>
<td>3 tablespoons cocoa powder plus 1 tablespoon oil</td>
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<tr>
<td>Nuts</td>
<td>Dried, chopped raisins or cranberries</td>
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</tbody>
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Adapted from back issues of Family Nutrition in Action newsletters (November/December 2001, June 2003, December 2006) and various UF/IFAS publications by Dr. Elaine Turner and Dr. Linda Bobroff on vitamins and minerals.