Vitamins and Minerals

Diets rich in vitamins and minerals promote growth, development, and normal body functioning.

What They Are

- **Vitamins** are organic substances that are naturally present in many plant and animal products. People obtain vitamins from both the plant and animal products they eat. The human body also makes vitamins D and K.

  There are **14 vitamins** that may be listed on the Nutrition Facts label: biotin, choline, folate, niacin, pantothenic acid, riboflavin, thiamin, and vitamins A, B6, B12, C, D, E, and K.

- **Minerals** are inorganic substances that are found naturally in soil and water. They are absorbed by plants, which are then eaten by people and other animals. People obtain minerals from both the plant and animal products they eat.

  There are **14 minerals** that may be listed on the Nutrition Facts label: calcium, chloride, chromium, copper, iodine, iron, magnesium, manganese, molybdenum, phosphorus, potassium, selenium, sodium, and zinc.

Where Are They Found

Vitamins and minerals are found in a variety of foods, including:

- Beans, peas, and lentils
- Dairy products
- Eggs
- Fortified foods (such as ready-to-eat cereals, orange juice, and plant-based beverages)
- Fruits
- Grains (especially whole grains and foods made with whole grain ingredients)
- Meats and poultry
- Nuts and seeds
- Seafood
- Soy products
- Vegetables

What They Do

The human body needs the right “mix” of nutrients for good health. Consuming the recommended daily amounts of vitamins and minerals in addition to carbohydrate, protein, fat, and dietary fiber helps support many important body processes.

See the **Vitamins and Minerals Chart** for functions that each vitamin and mineral perform in the body.
Health Facts

- The majority of Americans get the recommended amounts of most vitamins and minerals to meet their needs. However, many people do not get the recommended amounts of vitamin D, calcium, and potassium. These nutrients are considered “nutrients of public health concern” because low intakes are associated with potential health risks. In addition, iron is a nutrient of concern for people who are pregnant.

- Diets higher in vitamin D and calcium, iron, and potassium can reduce the risk of developing osteoporosis, anemia, and high blood pressure, respectively.

- The Dietary Guidelines for Americans recommend choosing a variety of foods that are good sources of vitamins and minerals, especially vitamin D, calcium, iron, and potassium.

See the Vitamins and Minerals Chart for good sources of each vitamin and mineral.

Action Steps

For Consuming a Diet Rich in Vitamins and Minerals

Use the Nutrition Facts label as a tool for consuming a diet rich in vitamins and minerals. The Nutrition Facts label on food and beverage packages shows the amount in milligrams (mg) or micrograms (mcg) and the % Daily Value (%DV) for vitamin D, calcium, iron, and potassium per serving of the food.

Food manufacturers may voluntarily list the amount and %DV of other vitamins and minerals per serving on the Nutrition Facts label, but they are required to list any vitamins and minerals that are added to the food or if a statement is made on the package labeling about their health effects or the amount contained in the food (for example, “high” or “low”).

The Daily Values are:  
- Vitamin D – 20 mcg per day  
- Calcium – 1,300 mg per day  
- Iron – 18 mg per day  
- Potassium – 4,700 mg per day

☐ Compare and choose foods to get 100% DV of vitamin D, calcium, iron, and potassium on most days. And remember:
  - 5% DV or less of a vitamin or mineral per serving is considered low
  - 20% DV or more of a vitamin or mineral per serving is considered high

☐ Eat a variety of colorful vegetables (such as fresh, frozen, canned, and dried) and 100% vegetable juices. Buy frozen (without butter or sauce) and low sodium or no-salt-added canned vegetables. Try vegetables as snacks, salads, side dishes, and as part of main dishes.

☐ Focus on whole fruits (such as fresh, frozen, dried, and canned in 100% fruit juice). Try fruits as snacks and desserts and add fruits to salads, side dishes, and to top foods like cereal, pancakes, and yogurt.

☐ Make at least half your grains whole grains. Look for foods with a whole grain listed as the first or second grain ingredient after water. Try whole grains (such as brown rice, couscous, and quinoa) as side dishes and switch from refined to whole grain versions of commonly consumed foods (such as breads, cereals, pasta, and rice).

☐ Vary your protein routine. Try beans, peas, lentils, fat-free or 1% low-fat dairy products, eggs, lean meats and poultry, seafood, soy products, nuts, and seeds. Choose seafood and plant sources of protein (such as beans and soy products) in place of some meats and poultry. Add beans, peas and lentils to salads, soups, and side dishes and try unsalted nuts or seeds as snacks.

☐ Substitute fat-free or 1% low-fat dairy products and/or lactose-free versions and fortified soy beverages for whole and 2% reduced-fat dairy products.