

Network for a Healthy California

Nutrition Glossary

October 2009



Purpose

This glossary provides nutrition information about the nutrients commonly found in fruits, vegetables, and other plant foods to help state and regional staff develop materials with consistent nutrition information, and aid in training staff on how to educate consumers about the health benefits of fruits, vegetables, and other plant foods. For example, one contractor might mention how vitamin A supports healthy vision while another might focus on healthy skin, and another may spend an inordinate amount of time trying to decide if they should mention other benefits of vitamin A. With the *Network for a Healthy California (Network)* Nutrition Glossary, contractors can save time by using the definitions that follow with the knowledge that state *Network* staff have reviewed and agreed that each term gives an accurate description of some of the most important benefits of each nutrient.

Each glossary definition has a long and a short version. Each version can stand alone as an accurate description of a nutrient. When using the glossary for training purposes, the long version should be used to give staff the most detail possible. When using the glossary for educational materials that have limited space, the short version should be used. The Nutrition Glossary is available as an educational tool on the *Network's* Communications Resource Library at www.networkforahealthycalifornia.net/Library.

Glossary Overview

Organization of the Definitions: An alphabetized Index of Contents is available below to show readers what the glossary includes. The glossary terms are then organized into three categories – general nutrient information, vitamins, and minerals – as a way to further educate readers about the classifications of each term.

Literacy Level: The glossary is written for low literacy audiences so that any term can be directly inserted into consumer educational materials. It is also written in this manner to help train staff on how to answer questions about the benefits of fruits and vegetables in non-technical terms.

Champion Foods: The champion foods section is an alphabetical list of foods that are good or excellent natural sources of the nutrient being described.

A food that is a good source of a nutrient has 10-19 percent of the recommended daily value of the nutrient per half cup portion.

A food that is an excellent source of a nutrient has 20 or more percent of the recommended daily value of the nutrient per half cup portion.

Exceptions to this rule are the champion foods for folate and thiamin, as plant sources for these nutrients are often fortified. The champion foods list is not all-inclusive but meant to give a quick example of the variety of common foods that provide various health benefits as part of a balanced diet. The champion foods list for water is not alphabetical as the obvious best source for water is water.

FUTURE TERMS:

While the Nutrition Glossary began as a way to highlight the benefits of fruits, vegetables, and other plant foods, if it is deemed necessary to expand the list, additional terms may include: sodium, phosphorus, organic, metabolism, whole grain, and other terms that cover broader nutrition concepts.

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General Nutrient Information

Nutrients

Nutrients are needed for life. They are carbohydrates, proteins, fats, water, vitamins, and minerals. The body uses nutrients to grow, work, and fix itself. Everyone needs nutrients from food, but different amounts are needed depending on a person's age, gender, and physical activity level. There are two types of nutrients:

- **Macronutrients** are needed in larger amounts and include carbohydrates, protein, fats, and water.
- **Micronutrients** are needed in smaller amounts than macronutrients and include vitamins and minerals.

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Calories

Calories measure the energy found in food. Just as minutes measure time and inches measure length, calories measure the amount of energy found in a food. The body needs energy to function, which is why food is needed for life. Calories are found in carbohydrates, proteins, fats, and alcohol.

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CHAMPION FOODS INCLUDE: Vegetables, fruits, beans, whole grains, lean meats, and lowfat dairy foods.

Carbohydrates

Carbohydrates are the body's main source of energy. Carbohydrates are found in most foods and come in two forms:

- **Simple carbohydrates** (also known as simple sugars) give you quick energy and are found naturally in foods like fruits, vegetables, and milk. Some simple carbohydrates, such as white or brown sugar, high fructose corn syrup, molasses, or honey, are often added to foods.
- **Complex carbohydrates** (also known as starches) give you longer lasting energy and can be found in foods such as fruits, vegetables, whole grains, and beans.

One gram of carbohydrate has 4 calories.

Carbohydrates are the body's main source of energy. One gram of carbohydrate has 4 calories.

CHAMPION FOODS INCLUDE: Beans, fruits, lowfat dairy foods, vegetables, whole grains (such as whole wheat bread or crackers, brown rice, oatmeal), and nuts.

Fiber

Fiber is found only in plant foods like fruits, vegetables, grains, nuts, and seeds. Fiber comes in two forms:

- **Insoluble Fiber** is known as “roughage” and helps move food through the body to prevent constipation. It also helps control blood sugar levels.
- **Soluble Fiber** helps pull cholesterol out of the body. It also helps control blood sugar levels and keep food in the stomach longer so that you feel full.

Fiber may also help lower the risk of high blood pressure, heart disease, stroke, and some types of cancer.

Fiber helps you feel full, keep normal blood sugar levels, and avoid constipation. It is found only in plant foods.

CHAMPION FOODS INCLUDE: Beans, blackberries, dates, peas, pears, pumpkin, raspberries, whole wheat cereal, and whole wheat bread or crackers.

Fats

Fats are nutrients that make cells, protect the body's organs, and help absorb certain vitamins. Fats come in many forms and some are healthier than others:

- **Monounsaturated and polyunsaturated** fats are oils that help to lower “bad” cholesterol (LDL) levels and may raise the “good” cholesterol (HDL) levels. Both monounsaturated and polyunsaturated fats are found in plants, nuts, and fish.
- **Saturated and trans fats** are solid fats that raise the “bad” (LDL) cholesterol. Trans fats also lower the “good” (HDL) cholesterol levels. Saturated fats are normally found in animal products (butter, whole milk, beef, and pork), while trans fats come from hydrogenated vegetable oils (shortening, and margarine) used in pre-cooked foods (fried foods, cakes, crackers).

One gram of fat has 9 calories.

Fats are nutrients that make cells, protect the body's organs, and help absorb certain vitamins. One gram of fat has 9 calories.

CHAMPION FOODS INCLUDE: Avocado, canola oil, some fish, nuts, olives, and olive oil are all good sources of healthy monounsaturated and polyunsaturated fats.

Proteins

Proteins are nutrients found in both plant and animal sources. Proteins are made of amino acids, which the body uses to build and fix itself. There are two types of protein:

- **Complete proteins** are made of all of the amino acids the body needs to survive. Proteins from animal products (like meat, milk, and poultry) and soy beans are complete proteins.
- **Incomplete proteins** are missing one or more of the amino acids that the body needs to survive. Proteins from plant sources (like grains, fruits, and vegetables) are examples of incomplete proteins. Eating a variety of fruits, vegetables, and whole grains will help the body get all of the amino acids it needs.

One gram of protein has 4 calories.

Proteins are nutrients that build and fix the cells that make up the body. One gram of protein has 4 calories.

CHAMPION FOODS INCLUDE: Beans, eggs, fish, lean meats, lowfat dairy foods, poultry, and soy foods.

Water

The body needs water to live. Water helps control the body's temperature, use nutrients found in food, and carry oxygen from the lungs and food from the stomach to the rest of the body. Water helps avoid constipation and helps keep the eyes, nose, and mouth moist. The water found in fruits and vegetables helps people reach the total amount of fluids they need to drink each day.

The body needs water to live. Water helps control the body's temperature, use nutrients found in food, and carry oxygen from the lungs and food from the stomach to the rest of the body.

CHAMPION FOODS INCLUDE: Plain water, water flavored with tea or coffee, and fruits and vegetables with large amounts of water (such as grapefruit, lettuce, and watermelon).

Vitamins and Minerals

Vitamins and minerals are nutrients that are needed for the body to grow, work, and fix itself. People who eat a healthy, balanced diet with healthy choices from each food group will most likely get all the vitamins and minerals they need without taking pills or supplements.

Vitamins and minerals are nutrients that are needed for the body to grow, work, and fix itself.

CHAMPION FOODS INCLUDE: Beans, lowfat dairy products, fruits, lean meats, vegetables, and whole grains.

Phytochemicals

Phytochemicals (also known as phytonutrients) help boost the immune system and help lower the risk of heart disease and some types of cancer. They are found only in plant foods. Different kinds of phytochemicals give fruits and vegetables their bright colors. Eating a variety of colorful fruits and vegetables is an easy way to get a combination of phytochemicals that can improve health.

Phytochemicals (also known as phytonutrients) help boost the immune system and help lower the risk of heart disease and some types of cancer. They are found only in plant foods.

CHAMPION FOODS INCLUDE: Blueberries, broccoli, citrus fruits, soy foods, and tomatoes.

Antioxidants

Antioxidants are a group of vitamins, minerals, and phytochemicals that may lower the risk for some diseases by keeping the body safe from free radicals. Free radicals are a type of waste the body makes when it uses oxygen to make energy. Removing free radicals from the body may lower the risk of some types of cancer and help keep the immune system healthy.

Antioxidants are a group of vitamins, minerals, and phytochemicals that may lower the risk for some diseases by keeping the body safe from free radicals. Free radicals can hurt the body's cells.

CHAMPION FOODS INCLUDE: Artichokes, blackberries, blueberries, cranberries, pecans, raspberries, strawberries, and walnuts.

Vitamins

Vitamin A

Vitamin A helps maintain good vision, fight infection, support cell growth, and keep skin healthy. Vitamin A is also an antioxidant that helps to keep the body safe from free radicals.

Vitamin A helps maintain good vision, fight infection, and keep skin healthy.

CHAMPION FOODS INCLUDE: Dark orange vegetables (such as carrots, pumpkin, sweet potatoes) and dark leafy greens (such as kale, spinach, and turnip greens).

Thiamin

Thiamin is also called vitamin B₁. Thiamin helps keep the body's nerves healthy. It also helps the body use the energy found in food.

Thiamin is also called vitamin B₁. Thiamin helps keep the body's nerves healthy.

CHAMPION FOODS INCLUDE: Fortified whole grain cereal, lean pork, lentils, peas, and pecans.

Riboflavin

Riboflavin is also called vitamin B₂. It helps turn food into energy and is important for healthy eyes and skin.

Riboflavin is also called vitamin B₂. It helps turn food into energy.

CHAMPION FOODS INCLUDE: Lowfat milk, mushrooms, spinach, whole grain cereals, and zucchini.

Vitamin B₆

Vitamin B₆ helps the body build healthy blood cells. Vitamin B₆ is needed to help build proteins and release energy. It also helps build substances that fight infection, send signals to the brain, and control blood sugar levels.

Vitamin B₆ helps the body build healthy blood cells. Vitamin B₆ is also needed to help build proteins and release energy.

CHAMPION FOODS INCLUDE: Avocados, bell peppers, butternut squash, cauliflower, collard greens, and zucchini.

Folate

Folate is a vitamin that helps make healthy red blood cells and lower a woman's risk of having a child with certain birth defects. It is also being studied for its ability to help protect against heart disease.

Folate is a vitamin that helps make healthy red blood cells and lower a woman's risk of having a child with certain birth defects.

CHAMPION FOODS INCLUDE: Avocados, blackeye peas, broccoli, fortified breakfast cereals and breads, okra, oranges, pinto beans, asparagus, and spinach.

Vitamin C

Vitamin C helps the body heal cuts and wounds and helps lower the risk of infection. Vitamin C also keeps the body from bruising and helps build the tissue that holds muscles and bones together. It also helps the body absorb the iron found in foods. Vitamin C is found only in plants.

Vitamin C helps the body heal cuts and wounds and helps lower the risk of infection.

CHAMPION FOODS INCLUDE: Bell peppers, broccoli, citrus fruits (such as oranges and grapefruit), cantaloupe, cauliflower, kiwifruit, mustard greens, and strawberries.

Vitamin E

Vitamin E is an antioxidant that protects the body's cells. Vitamin E also helps the body use vitamin K and keep the immune system, skin, and hair healthy.

Vitamin E is an antioxidant that protects the body's cells.

CHAMPION FOODS INCLUDE: Nuts, oils (such as corn oil, cottonseed oil, safflower oil, and soybean oil), seeds, and wheat germ.

Vitamin K

Vitamin K helps stop cuts and scrapes from bleeding too much and starts the healing process. Together with calcium, vitamin K helps build strong bones. Vitamin K may also help keep blood vessels healthy.

Vitamin K helps stop cuts and scrapes from bleeding too much and starts the healing process.

CHAMPION FOODS INCLUDE: Asparagus, broccoli, collard greens, kale, and spinach.

Minerals

Calcium

Calcium is a mineral that works with vitamin D and phosphorous to build strong bones and teeth. Calcium also helps keep a healthy blood pressure, helps keep nerves healthy, and helps muscles move.

Calcium is a mineral that works with vitamin D and phosphorous to build strong bones and teeth.

CHAMPION FOODS INCLUDE: Almonds, calcium fortified orange juice and tofu, canned salmon, dark green leafy vegetables, dried beans, lowfat dairy foods, and cactus leaves (nopales).

Iron

Iron is a mineral that helps move oxygen from the lungs to the rest of the body. Iron also helps the body make new red blood cells and fight infections.

Iron is a mineral that helps move oxygen from the lungs to the rest of the body.

CHAMPION FOODS INCLUDE: Beans, lean beef, lentils, fortified cereal, prune juice, pumpkin seeds, and soy foods.

Magnesium

Magnesium is a mineral that helps the body use the energy found in food. Magnesium also tells muscles to move. Together with calcium, magnesium works to build strong bones and helps vitamin C prevent infection. It may also help lower high blood pressure and high blood sugar levels.

Magnesium is a mineral that helps the body use the energy found in food. Magnesium also tells muscles to move.

CHAMPION FOODS INCLUDE: Almonds, bran cereal, brown rice, peanuts, and spinach.

Potassium

Potassium is a mineral that helps your brain tell muscles when to move. Potassium also helps keep a healthy blood pressure and helps the body use the energy found in carbohydrates.

Potassium is a mineral that helps your brain tell muscles when to move. Potassium also helps keep a healthy blood pressure.

CHAMPION FOODS INCLUDE: Bananas, beans, oranges, prune juice, peas, raisins, spinach, and tomatoes.

This material was produced by the California Department of Public Health, *Network for a Healthy California*, with funding from the USDA Supplemental Nutrition Assistance Program (formerly the Food Stamp Program). These institutions are equal opportunity providers and employers. In California, food stamps provide assistance to low-income households, and can help buy nutritious foods for better health. For food stamp information, call 877-847-3663. For important nutrition information, visit www.cachampionsforchange.net.

