**Glossary**

**Acid-Base Balance**
In medicine, the state of having the right amount of acid and base in the blood and other body fluids. Keeping a normal acid-base balance is important for the body to work the way it should. Also called acid-base equilibrium.

**Amino Acid**
A large organic molecule that is the basic building block of proteins. There are 20 different amino acids that link together in various order to form proteins. The order of amino acids is determined by the genetic sequence.

**Antioxidant**
A substance that protects cells from the damage caused by free radicals (unstable molecules made by the process of oxidation during normal metabolism). Free radicals may play a part in cancer, heart disease, stroke, and other diseases of aging. Antioxidants include beta-carotene, lycopene, vitamins A, C, and E, and other natural and manufactured substances.

**Calorie**
A unit commonly used to measure energy content of foods and beverages as well as energy use (expenditure) by the body. A calorie is equal to the amount of energy (heat) required to raise the temperature of 1 gram of water 1 degree centigrade. Energy is required to sustain the body’s various functions, including metabolic processes and physical activity. Carbohydrate, fat, protein, and alcohol provide all of the energy supplied by foods and beverages.

**Calorie Balance**
The balance between calories consumed through eating and drinking and calories expended through physical activity and metabolic processes.

**Carbohydrate, Total**
One of three macronutrients in food that provide calories, or “energy” for the body. There are several types of carbohydrate: sugars, sugar alcohols, starches, and dietary fiber.

**Cardiovascular Disease**
Heart disease as well as diseases of the blood vessel system (arteries, capillaries, veins) that can lead to heart attack, chest pain (angina), or stroke.

**Cell Membrane**
The membrane surrounding a cell that separates the cell from its external environment and regulates the transport of materials entering and exiting the cell. It consists of a phospholipid bilayer and associated proteins.

**Cholesterol**
A natural sterol present in all animal tissues. Free cholesterol is a component of cell membranes and serves as a precursor for steroid hormones (estrogen, testosterone, aldosterone), and for bile acids. Humans are able to synthesize sufficient cholesterol to meet biologic requirements, and there is no evidence for a dietary requirement for cholesterol.

**Cholesterol, Blood**
Cholesterol that travels in the serum of the blood as distinct particles containing both lipids and proteins (lipoproteins). Also referred to as serum cholesterol. There are two kinds of lipoproteins: high-density lipoprotein (HDL) cholesterol and low-density lipoprotein (LDL) cholesterol.

**Cholesterol, Dietary**
Cholesterol found in foods of animal origin, including meat, seafood, poultry, eggs, and dairy products. Plant foods (such as beans, fruits, grains, nuts, peas, seeds, vegetables, and vegetable oils) do not contain dietary cholesterol.

**Daily Value**
The amount of a nutrient (in grams, milligrams, or micrograms) recommended per day for Americans 4 years of age and older. The Nutrition Facts Label lists the Daily Values for some key nutrients. These are given for both a 2,000 and 2,500 calorie daily diet.

**Diabetes**
A disorder of metabolism—the way the body uses digested food (specifically carbohydrate) for growth and energy. In diabetes, the pancreas either produces little or no insulin (a hormone that helps glucose, the body’s main source of fuel, get into cells), or the cells do not respond appropriately to the insulin that is produced, which causes too much glucose to be released in the blood. The three main types of diabetes are type 1, type 2, and gestational diabetes. If not controlled, diabetes can lead to serious complications.
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Dietary Approaches to Stop Hypertension (DASH) Eating Plan

An eating plan designed to increase intake of foods expected to lower blood pressure while being heart healthy and meeting nutrient recommendations. It is available at specific calorie levels. It was adapted from the dietary pattern developed for the DASH research trials. In the trials, the DASH dietary pattern lowered blood pressure and low-density lipoprotein (LDL) cholesterol levels, resulting in reduced cardiovascular disease risk. The DASH Eating Plan is low in saturated fats and rich in potassium, calcium, and magnesium, as well as dietary fiber and protein. It also is lower in sodium than the typical American diet, and includes menus with two levels of sodium, 2,300 and 1,500 mg per day. It meets the Dietary Reference Intakes for all essential nutrients and stays within limits for overconsumed nutrients, while allowing adaptable food choices based on food preferences, cost, and availability.

Energy Drink

A beverage that contains caffeine as an ingredient, along with other ingredients, such as taurine, herbal supplements, vitamins, and added sugars. It is usually marketed as a product that can improve perceived energy, stamina, athletic performance, or concentration.

Enrichment

The addition of specific nutrients (i.e., iron, thiamin, riboflavin, and niacin) to refined grain products in order to replace losses of the nutrients that occur during processing. Enrichment of refined grains is not mandatory; however, those that are labeled as enriched (e.g., enriched flour) must meet the standard of identity for enrichment set by FDA. When cereal grains are labeled as enriched, it is mandatory that they be fortified with folic acid.

Enzyme

A protein that speeds up chemical reactions in the body.

Fast Food

Foods designed for ready availability, use, or consumption and sold at eating establishments for quick availability or take-out. Fast food restaurants also are known as quick-service restaurants.

Fat, Monounsaturated

Fatty acids that have one double bond and are usually liquid at room temperature. Plant sources rich in monounsaturated fats include vegetable oils (e.g., canola, olive, high oleic safflower and sunflower), as well as nuts.

Fat, Polyunsaturated

Fatty acids that have two or more double bonds and are usually liquid at room temperature. Primary sources are vegetable oils and some nuts and seeds. Polyunsaturated fats provide essential fats such as n-3 and n-6 fatty acids.

Fat, Saturated

Fatty acids that have no double bonds. Saturated fats are usually solid at room temperature. Major sources include animal products (e.g., meats and dairy products) and tropical oils (e.g., coconut and palm oils).

Fat, Solid

Fats that are usually not liquid at room temperature. Solid fats are found in animal foods, except for seafood, and can be made from vegetable oils through hydrogenation. Some tropical oil plants, such as coconut and palm, are considered as solid fats due to their fatty acid composition. Solid fats contain more saturated fats and/or trans fats than liquid oils (e.g., soybean, canola, and corn oils), with lower amounts of monounsaturated or polyunsaturated fatty acids. Common fats considered to be solid fats include: butter, beef fat (tallow), chicken fat, pork fat (lard), shortening, coconut oil, palm oil and palm kernel oil. Foods high in solid fats include: full-fat (regular) cheeses, creams, whole milk, ice cream, marbled cuts of meats, regular ground beef, bacon, sausages, poultry skin, and many baked goods made with solid fats (such as cookies, crackers, doughnuts, pastries, and croissants).

Fat, Total

One of three macronutrients in food that provide calories, or “energy,” for the body. There are two types of fat: saturated and unsaturated.

Fat, Trans

Unsaturated fatty acids that are structurally different from the unsaturated fatty acids that occur naturally in plant foods. Sources of trans fat include partially hydrogenated vegetable oils used in processed foods (e.g., desserts, microwave popcorn, frozen pizza, some margarines, and coffee creamer). Trans fats also are present naturally in foods that come from ruminant animals (e.g., cattle and sheep), such as dairy products, beef, and lamb.

Fiber, Dietary

Dietary fiber consists of non-digestible carbohydrates and lignin that are intrinsic and intact in plants (i.e., the fiber naturally occurring in foods).
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**Food Groups**
A method of grouping similar foods for descriptive and guidance purposes. Food groups are defined as vegetables, fruits, grains, dairy, and protein foods. Some of these groups are divided into subgroups, such as dark-green vegetables or whole grains, which may have intake goals or limits. Foods are grouped within food groups based on their similarity in nutritional composition and other dietary benefits. For assignment to food groups, mixed dishes are disaggregated into their major component parts.

**Fortification**
The deliberate addition of one or more essential nutrients to a food, whether or not it is normally contained in the food. Fortification may be used to prevent or correct a demonstrated deficiency in the population or specific population groups; restore naturally occurring nutrients lost during processing, storage, or handling; or to add a nutrient to a food at the level found in a comparable traditional food. When cereal grains are labeled as enriched, it is mandatory that they be fortified with folic acid.

**Fruit, Whole**
All fresh, frozen, canned, and dried fruit but not fruit juice.

**Glucose**
A simple form of sugar that acts as the body's fuel. It is produced when foods are metabolized in the digestive system and carried by the blood to cells for energy.

**Grain, Refined**
Grains and grain products with the bran and germ removed; any grain product that is not a whole-grain product. Many refined grains are low in fiber but enriched with thiamin, riboflavin, niacin, and iron, and fortified with folic acid.

**Grain, Whole**
Grains and grain products made from the entire grain seed, usually called the kernel, which consists of the bran, germ, and endosperm. If the kernel has been cracked, crushed, or flaked, it must retain the same relative proportions of bran, germ, and endosperm as the original grain in order to be called whole grain. Many, but not all, whole grains are also sources of dietary fiber.

**Health**
A state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

**Hormones**
Chemicals produced by glands in the body and circulated in the bloodstream. Hormones control the actions of certain cells or organs.

**Hypertension**
A condition, also known as high blood pressure, in which blood pressure remains elevated over time. Hypertension makes the heart work too hard, and the high force of the blood flow can harm arteries and organs, such as the heart, kidneys, brain, and eyes. Uncontrolled hypertension can lead to heart attacks, heart failure, kidney disease, stroke, and blindness. Prehypertension is defined as blood pressure that is higher than normal but not high enough to be defined as hypertension.

**Ingredient List**
The ingredient list on a food package is usually located near the name of the food's manufacturer and often below the Nutrition Facts Label. It shows each ingredient in a food by its common or usual name in descending order by weight. The ingredient with the greatest contribution to the product weight is listed first, and the ingredient contributing the least by weight is listed last.

**Macronutrient**
A dietary component that provides energy. Macronutrients include proteins, fats, carbohydrates, and alcohol.

**Meats and Poultry**
Foods that come from the flesh of land animals (e.g., all forms of beef, pork, veal, goat, and non-bird game) and birds (e.g., all forms of chicken, turkey, duck, geese, guineas, and game birds). Organs (such as liver) are also considered to be meat or poultry.

**Meats and Poultry, Lean**
Any meat or poultry that contains less than 10 g of fat, 4.5 g or less of saturated fat, and less than 95 mg of cholesterol per 100 g and per labeled serving size, based on USDA definitions for food label use. Examples include 95% lean cooked ground beef, beef top round steak or roast, beef tenderloin, pork top loin chop or roast, pork tenderloin, ham or turkey deli slices, skinless chicken breast, and skinless turkey breast.

**Meats and Poultry, Processed**
All meat or poultry products preserved by smoking, curing, salting, and/or the addition of chemical preservatives. Processed meats and poultry include all types of meat or poultry sausages (e.g., bologna, frankfurters, luncheon meats and loaves, sandwich spreads, chorizo, kielbasa, pepperoni, salami, and Vienna and summer sausages), bacon, smoked or cured ham or pork shoulder, corned beef, pastrami, pig's feet, beef jerky, marinated chicken breasts, and smoked turkey products.
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Metabolism
The set of chemical reactions that occur in living organisms in order to maintain life, and refers to the way cells chemically change food so that it can be used to store or use energy and make the proteins, fats, and sugars needed by the body.

Micronutrient
An essential nutrient, such as a trace mineral or vitamin that is required by an organism in smaller amounts. All nutrients other than proteins, carbohydrates, fats, and water (macronutrients) are micronutrients.

Minerals
Inorganic substances that are required by the body in relatively small amounts (also called micronutrients) for normal growth and activity.

Mixed Dishes
Savory food items eaten as a single entity that include foods from more than one food group. These foods often are mixtures of grains, protein foods, vegetables, and/or dairy. Examples of mixed dishes include burgers, sandwiches, tacos, burritos, pizzas, macaroni and cheese, stir-fries, spaghetti and meatballs, casseroles, soups, egg rolls, and Caesar salad.

Nutrient
A substance in food that contributes to growth and health; nutrients provide energy, cell building and structural materials, and agents that regulate body chemistry. Nutrients include proteins, fats, carbohydrates, vitamins, minerals, and water.

Nutrient-Dense
A characteristic of foods and beverages that provide vitamins, minerals, and other substances that contribute to adequate nutrient intakes or may have positive health effects, with little or no saturated fats, added sugars, refined starches, and sodium. Ideally, these foods and beverages also are in forms that retain naturally occurring components, such as dietary fiber. All vegetables, fruits, whole grains, seafood, eggs, beans and peas, unsalted nuts and seeds, fat-free and low-fat dairy products, and lean meats and poultry—when prepared with little or no added saturated fats, sugars, refined starches, and sodium—are nutrient-dense foods. These foods contribute to meeting food group recommendations within calorie and sodium limits. The term “nutrient dense” indicates the nutrients and other beneficial substances in a food have not been “diluted” by the addition of calories from added saturated fats, sugars, or refined starches, or by the solid fats naturally present in the food.

Nutrient, Essential
A vitamin, mineral, fatty acid, or amino acid required for normal body functioning that either cannot be synthesized by the body at all, or cannot be synthesized in amounts adequate for good health, and thus must be obtained from a dietary source. Other food components, such as dietary fiber, while not essential, also are considered to be nutrients.

Nutrient of Concern
Nutrients that are overconsumed or underconsumed and current intakes may pose a substantial public health concern. Data on nutrient intake, corroborated with biochemical markers of nutritional status where available, and association with health outcomes are all used to establish a nutrient as a nutrient of concern. Underconsumed nutrients, or “shortfall nutrients,” are those with a high prevalence of inadequate intake either across the U.S. population or in specific groups, relative to expert group standards. Overconsumed nutrients are those with a high prevalence of excess intake either across the population or in specific groups, relative to expert group standards.

Obesity
A condition marked by an abnormally high, unhealthy amount of body fat.

Oils
Fats that are liquid at room temperature. Oils come from many different plants and some fish. Some common oils include canola, corn, olive, peanut, safflower, soybean, and sunflower oils. A number of foods are naturally high in oils such as nuts, olives, some fish, and avocados. Foods that are mainly made up of oil include mayonnaise, certain salad dressings, and soft (tub or squeeze) margarine with no trans fats. Oils are higher in monounsaturated or polyunsaturated fats, and lower in saturated fats than solid fats. A few plant oils, termed tropical oils (including coconut oil, palm oil, and palm kernel oil), are high in saturated fats and for nutritional purposes should be considered as solid fats. Partially hydrogenated oils that contain trans fats should also be considered as solid fats for nutritional purposes.

Percent Daily Value
The Percent Daily Value (%DV) on the Nutrition Facts Label shows how much of a nutrient is in one serving of the food. The %DVs are based on the Daily Values for key nutrients, which are the amounts (in grams, milligrams, or micrograms) of nutrients recommended per day for Americans 4 years of age and older. The %DV is the percentage of the Daily Value for each nutrient in one serving of the food.

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Physical Activity
Any bodily movement produced by the contraction of skeletal muscle that increases energy expenditure above a basal level; generally refers to the subset of physical activity that enhances health.

Portion Size
The amount of a food served or consumed in one eating occasion. A portion is not a standardized amount, and the amount considered to be a portion is subjective and varies.

Protein
One of three macronutrients in food that provide calories, or "energy," for the body. Proteins are composed of amino acids and are a major functional and structural component of every animal cell.

Seafood
Marine animals that live in the sea and in freshwater lakes and rivers. Seafood includes fish (e.g., salmon, tuna, trout, and tilapia) and shellfish (e.g., shrimp, crab, and oysters).

Serving size
Serving Size on the Nutrition Facts Label is the amount of food that is customarily eaten at one time and is determined based on the Reference Amounts Customarily Consumed (RACC) for foods that have similar dietary usage, product characteristics, and customarily consumed amounts for consumers to make "like product" comparisons.

Sodium
A mineral and an essential nutrient needed by the human body in relatively small amounts (provided that substantial sweating does not occur). Sodium is important for many body processes, such as fluid balance, muscle contraction, and nervous system function. Sodium is primarily consumed as salt (sodium chloride).

Starch
Many glucose units linked together into long chains. Examples of foods containing starch include beans and peas (e.g., garbanzo beans, kidney beans, lentils, and split peas), grains (e.g., barley, brown rice, corn, oats, and wheat), and vegetables (e.g., carrots and potatoes).

Sugar Alcohols
A type of carbohydrate that chemically has characteristics of both sugars and alcohols. Sugar alcohols are found naturally in small amounts in a variety of fruits and vegetables and are also commercially produced from sugars and starch. Commercially produced sugar alcohols are added to foods as reduced-calorie sweeteners and are found in many sugar-free and reduced-sugar products.

Sugars
Composed of one unit (a monosaccharide, such as glucose or fructose) or two joined units (a disaccharide, such as lactose or sucrose). Sugars include those occurring naturally in foods and beverages and those added to foods and beverages during processing and preparation.

Sugars, Added
Syrups and other caloric sweeteners used as a sweetener in other food products. Naturally occurring sugars such as those in fruit or milk are not added sugars. Added sugars are included on the ingredient list on food and beverage packages. Specific examples of added sugars that can be listed as an ingredient include: brown sugar, corn sweetener, corn syrup, dextrose, fructose sweetener, fruit juice concentrates, glucose, high-fructose corn syrup, honey, invert sugar, lactose, maltose, malt syrup, maple syrup, molasses, pancake syrup, raw sugar, sucrose, trehalose, and turbinado sugar.

Sugar-Sweetened Beverages
Liquids that are sweetened with various forms of added sugars. These beverages include, but are not limited to, soda (regular, not sugar-free), fruitades, sports drinks, energy drinks, sweetened waters, and coffee and tea beverages with added sugars.

Variety
A diverse assortment of foods and beverages across and within all food groups and subgroups selected to fulfill the recommended amounts without exceeding the limits for calories and other dietary components. For example, in the vegetables food group, selecting a variety of foods could be accomplished over the course of a week by choosing from all subgroups, including dark green, red and orange, legumes (beans and peas), starchy, and other vegetables.

Vitamins
Organic substances that are required by the body in relatively small amounts (also called micronutrients) for normal growth and activity.