

PART G: APPENDICES

Appendix G-1: Glossary of Terms

Acceptable Macronutrient Distribution Ranges (AMDR)—Range of intake for a particular energy source that is associated with reduced risk of chronic disease while providing intakes of essential nutrients. If an individual consumes in excess of the AMDR, there is a potential of increasing the risk of chronic diseases and/or insufficient intakes of essential nutrients. (IOM, 2003)

Added Sugars—Sugars and syrups that are added to foods during processing or preparation. Added sugars do not include naturally occurring sugars such as lactose in milk or fructose in fruits.

Adequate Intakes (AI)—A recommended average daily nutrient intake level based on observed or experimentally determined approximations or estimates of mean nutrient intake by a group (or groups) of apparently healthy people. This is used when the Recommended Dietary Allowance cannot be determined. (IOM, 2003)

Atherogenic Dyslipidemia—Three lipid abnormalities: elevated triglycerides, small low-density lipoprotein particles, and reduced high-density lipoprotein cholesterol.

Calorie Compensation (or Energy Compensation)—The ability to regulate energy intake with minimal conscious effort, such as reducing the amount of food consumed on some occasions to compensate for increased consumption at other times.

Complex Carbohydrates—Large chains of sugar units arranged to form starches and fiber. Complex carbohydrates include vegetables, whole fruits, rice, pasta, potatoes, grains (brown rice, oats, wheat, barley, corn), and legumes (chick peas, black-eyed peas, lentils, as well as beans such as lima, kidney, pinto, soy, and black beans).

Daily Food Intake Pattern—Identifies the types and amounts of foods that are recommended to be eaten each day and that meet specific nutritional goals. (*Federal Register* Notice, vol. 68, no. 176, p. 53536, Thursday, September 11, 2003)

Danger Zone—The temperature that allows bacteria to multiply rapidly and produce toxins, between 40°F and 140°F. To keep food out of this “danger zone,” keep cold food cold and hot food hot. Keep food cold in the refrigerator, in coolers, or on ice in the service line. Keep hot food in the oven, in heated chafing dishes, or in preheated steam tables, warming trays, and/or slow cookers. Never leave perishable foods, such as meat, poultry, eggs, and casseroles, in the “danger zone” over 2 hours; 1 hour in temperatures above 90°F.

Deodorization—A process that uses high vacuum and superheated steam in the washing of fats and oils. Deodorization removes from fats and oils materials originally present or

introduced during previous processing that would contribute objectionable flavors and odors to the finished products. (United Soybean Board, The Soy Glossary)

Dietary Fiber—Nondigestible carbohydrates and lignin that are intrinsic and intact in plants.

Dietary Reference Intakes (DRIs)—A set of nutrient-based reference values that expand upon and replace the former Recommended Dietary Allowances (RDAs) in the United States and the Recommended Nutrient Intakes (RNIs) in Canada. They are actually a set of four reference values: Estimated Average Requirements (EARs), RDAs, AIs, and Tolerable Upper Intake Levels (ULs). (IOM, 2003)

Discretionary Calories—The balance of calories remaining in a person’s “energy allowance” after consuming sufficient nutrient-dense forms of foods to meet all nutrient needs for a day. Discretionary calories may be used in selecting forms of foods that are not the most nutrient dense (e.g., whole milk rather than fat-free milk) or may be additions to foods (e.g., salad dressing, sugar, butter). A person’s energy allowance is the calorie intake at which weight maintenance occurs.

Energy Density—The calories contained in 100 grams of a particular food defines that food’s energy density.

Estimated Average Requirements—EAR is the average daily nutrient intake level estimated to meet the requirement of half the healthy individuals in a particular life stage and gender group. (IOM, 2003)

FightBAC!—A national public education campaign to promote food safety to consumers and educate them on how to handle and prepare food safely. In this campaign, pathogens are represented by a cartoon-like bacteria character named “BAC.”

Foodborne Disease—Caused by consuming contaminated foods or beverages. Many different disease-causing microbes, or pathogens, can contaminate foods, so there are many different foodborne infections. In addition, poisonous chemicals, or other harmful substances, can cause foodborne diseases if they are present in food. The most commonly recognized foodborne infections are those caused by the bacteria [*Campylobacter*](#), [*Salmonella*](#), and [*E. coli O157:H7*](#), and by a group of viruses called calicivirus, also known as the [*Norwalk*](#) and Norwalk-like viruses.

Food Pattern Modeling—The process of developing and adjusting daily intake amounts from each food group and subgroup to meet specific criteria. The criteria may be meeting nutrient intake goals, limitations by food component (such as limiting saturated fats), or limiting or eliminating certain types of foods (such as no meats or no legumes). (Foote JA et al. Dietary variety increases the probability of nutrient adequacy among adults. *Journal of Nutrition* 134, 2004)

Functional Fiber—Isolated, nondigestible carbohydrates that have beneficial physiological effects in humans.

Glycemic Index—A classification proposed to quantify the relative blood glucose response to carbohydrate-containing foods. Operationally, it is the area under the curve for the increase in blood glucose after the ingestion of a set amount of carbohydrate in a food (e.g., 50 grams) during the 2-hour postprandial period relative to the same amount of carbohydrate from a reference food (white bread or glucose) tested in the same individual under the same conditions using the initial blood glucose concentration as a baseline.

Glycemic Load—An indicator of glucose response or insulin demand that is induced by total carbohydrate intake. It is calculated by multiplying the weighted mean of the dietary glycemic index by the percentage of total energy from carbohydrate.

Glycemic Response—The effects that carbohydrate-containing foods have on blood glucose concentration during the digestion process.

Glycerol—A three-carbon substance that forms the backbone of fatty acids in fats.

High Fructose Corn Syrup (HFCS)—A corn sweetener derived from the wet milling of corn. Cornstarch is converted to a syrup that is nearly all dextrose. Enzymes isomerize the dextrose to produce a 42 percent fructose syrup called HFCS-42. By passing HFCS-42 through an ion-exchange column that retains fructose, corn refiners draw off 90 percent HFCS and blend it with HFCS-42 to make a third syrup, HFCS-55. HFCS is found in numerous foods and beverages on the grocery store shelves. HFCS-90 is used in natural and “light” foods in which very little is needed to provide sweetness. (ERS, USDA). Total fiber is the sum of dietary fiber and functional fiber.

Hydrogenation—A chemical reaction that adds hydrogen atoms to an unsaturated fat, thus saturating it and making it solid at room temperature.

Leisure-Time Physical Activity—Physical activity that is performed during exercise, recreation, or any additional time other than that associated with one’s regular job duties, occupation, or transportation. (CDC)

Lifestyle Physical Activity—Muscle-powered movement performed as a part of day-to-day activities, such as transportation (e.g., walking to work), household chores (e.g., yard work), or childcare (e.g., playing actively with children).

Listeriosis—A serious infection caused by eating food contaminated with the bacterium *Listeria monocytogenes*, which has recently been recognized as an important public health problem in the United States. The disease affects primarily pregnant women, their fetuses, newborns, and adults with weakened immune systems. *Listeria* is killed by pasteurization and cooking; however, in certain ready-to-eat foods, such as hot dogs and

deli meats, contamination may occur after cooking/manufacture but before packaging. *Listeria monocytogenes* can survive at refrigerated temperatures.

Macronutrient—The three macronutrient groups are carbohydrates, protein, and fat.

Metabolic Equivalent (MET)—A way of measuring physical activity intensity. This unit is used to estimate the amount of oxygen used by the body during physical activity. (Ainsworth, 1993). 1 MET = the energy (oxygen) used by the body as you sit quietly, perhaps while talking on the phone or reading a book. The harder your body works during the activity, the higher the MET.

Metabolic Syndrome—A collection of metabolic risk factors in one individual. The root causes of metabolic syndrome are overweight/obesity, physical activity, and genetic factors. Various risk factors have been included in metabolic syndrome. Factors generally accepted as being characteristic of this syndrome include abdominal obesity, atherogenic dyslipidemia, raised blood pressure, insulin resistance with or without glucose intolerance, prothrombotic state, and proinflammatory state.

Micronutrient—An essential nutrient, as a trace mineral or vitamin, that is required by an organism in minute amounts.

Moderate Physical Activity—Any activity that burns 3.5 to 7 kcal/min or the equivalent of 3 to 6 metabolic equivalents (METs) (CDC) and results in achieving 60 to 73 percent of peak heart rate (ASCM). An estimate of a person's peak heart rate can be obtained by subtracting the person's age from 220. Examples of moderate physical activity include walking briskly, mowing the lawn, dancing, swimming, or bicycling on level terrain. A person should feel some exertion but should be able to carry on a conversation comfortably during the activity. (CDC)

Nutrient Adequacy—A goal based on the RDA or AI set by the IOM in recent Dietary Reference Intake reports. Goals include targets for vitamins, minerals, and macronutrients and acceptable intake ranges for macronutrients for various age/gender groups. Adequacy of intake relates to meeting the individual's requirement for that nutrient. (Modified from the Dietary Reference Intakes—Applications in Dietary Assessment, Institute of Medicine of the National Academies, p. 254, 2000)

Nutrient Density—Nutrient dense foods are those that provide substantial amounts of vitamins and minerals and relatively fewer calories. Foods that are low in nutrient density are foods that supply calories but relatively small amounts of micronutrients (sometimes not at all). (Modified from the International Food Information Council (IFIC) Glossary of Food-Related Terms at www.ific.org/glossary/glossarynz.cfm.)

Pathogen—Any microorganism that can cause or is capable of causing disease.

Phytochemicals—Substances found in edible fruits and vegetables that may be ingested by humans daily in gram quantities and that exhibit a potential for modulating the human

metabolism in a manner favorable for reducing the risk of cancer. (Modified from the IFIC Glossary of Food-Related Terms at www.ific.org/glossary/glossarynz.cfm.)

Portion Size—The amount of a food served in one eating occasion.

Probability of Adequacy—The probability that a given nutrient intake is adequate for an individual can be calculated if the requirement distribution is known. If this distribution is approximately normal, it is defined by the Estimated Average Requirement (EAR) and its standard deviation.

Prothrombotic State—Any condition that predisposes to venous or arterial thrombosis (formation or presence of a clot within a blood vessel).

Recommended Dietary Allowance (RDA)—The dietary intake level that is sufficient to meet the nutrient requirement of nearly all (97 to 98 percent) healthy individuals in a particular life stage and gender group. (IOM, 2003)

Resistance Training—Anaerobic training, including weight training, weight machine use, and resistance band workouts. Resistance training will increase your strength, muscular endurance, and muscle size; running and jogging will not do that.

Salmonellosis—An infection caused by bacteria called *Salmonella*. Most persons infected with *Salmonella* develop diarrhea, fever, and abdominal cramps 12 to 72 hours after infection. The illness usually lasts 4 to 7 days, and most people recover without treatment. Salmonellosis is prevented by cooking poultry, ground beef, and eggs thoroughly before eating and not eating or drinking foods containing raw eggs or raw unpasteurized milk.

Sedentary Behaviors—In scientific literature, sedentary is often defined in terms of little or no physical activity during leisure time. A sedentary lifestyle is a lifestyle characterized by little or no physical activity. (CDC)

Sensory-Specific Satiety—The difference between the palatability change score for the food that is eaten versus the score for the food that is uneaten.

Serving Size—A standardized amount of a food, such as a cup or an ounce, used in providing dietary guidance or in making comparisons among similar foods.

Simple Carbohydrates—Sugars composed of a single sugar molecule (monosaccharide) or two joined sugar molecules (a disaccharide), such as glucose, fructose, lactose, and sucrose. Simple carbohydrates include white and brown sugar, fruit sugar, corn syrup, molasses, honey, and candy.

Structured Exercise—Physical activity performed in a planned manner for enhancing health and/or fitness.

Tolerable Upper Intake Level (UL)—The highest average daily nutrient intake level likely to pose no risk of adverse health effects for nearly all individuals in a particular life stage and gender group. As intake increases above the UL, the potential risk of adverse health effects increases. (IOM, 2003)

Vigorous Physical Activity—Any activity that burns more than 7 kcal/ min or the equivalent of 6 or more metabolic equivalents (METs) (CDC) and results in achieving 74 to 88 percent of peak heart rate (ASCM). An estimate of a person's peak heart rate can be obtained by subtracting the person's age from 220. Examples of vigorous physical activity include jogging, mowing the lawn with a nonmotorized push mower, chopping wood, participating in high-impact aerobic dancing, swimming continuous laps, or bicycling uphill. Vigorous-intensity physical activity may be intense enough to represent a substantial challenge to an individual and results in a significant increase in heart and breathing rate. (CDC)

Weight-Bearing Exercise—Any activity one performs that works bones and muscles against gravity, including walking, running, hiking, dancing, gymnastics, and soccer.

Whole-Grain Foods—Foods 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 nearly the same relative proportions of bran, germ, and endosperm as the original grain in order to be called whole grain. (ACCC, 2004)