Nutrition, Food, and Fitness
Chapter 6  Fats: A Concentrated Energy Source—Terms and Definitions

adipose tissue. Tissue in which the body stores lipids.

atherosclerosis. Hardened and narrowed arteries caused by plaque deposits.

blood lipid profile. A medical test that measures the amounts of cholesterol, triglycerides, HDL, and LDL in the blood.

cancer. A disease in which abnormal cells grow out of control.

cholesterol. A white, waxy lipid made by the body that is part of every cell. Cholesterol is also found in foods of animal origin.

chylomicron. A ball of triglycerides thinly coated with cholesterol, phospholipids, and proteins formed to carry absorbed dietary fat to body cells.

coronary heart disease (CHD). Disease of the heart and blood vessels. Atherosclerosis and hypertension are the two most common forms of CHD.

emulsifier. A substance, such as a phospholipid, that can mix with water and fat.

essential fatty acid. A fatty acid needed by the body for normal growth and development that cannot be made by the body and, therefore, must be supplied by the diet.

fat replacer. An ingredient used in food products to replace some or all of the fat typically found in those products.

fatty acid. An organic compound made up of a chain of carbon atoms to which hydrogen atoms are attached and having an acid group at one end.

heart attack. The death of heart tissue caused by blockage of an artery carrying nutrients and oxygen to that tissue.

high-density lipoprotein (HDL). A lipoprotein that picks up cholesterol from around the body and transfers it to other lipoproteins for transport back to the liver for removal from the body.

hydrogenation. The process of breaking the double carbon bonds in unsaturated fatty acids and adding hydrogen to make the fatty acid more saturated.

hypertension. Abnormally high blood pressure; an excess force on the walls of the arteries as blood is pumped from the heart.

lecithin. A phospholipid made by the liver and found in many foods.

lipid. A group of compounds that includes triglycerides (fats and oils), phospholipids (lecithin), and sterols (cholesterol).

lipoprotein. Fat droplets coated by proteins so they can be transported in the bloodstream.

low-density lipoprotein (LDL). A lipoprotein that carries cholesterol made by the liver through the bloodstream to body cells.

monounsaturated fatty acid. A fatty acid that has only one double bond between carbon atoms in a carbon atom chain.
**omega-3 fatty acids.** A certain type of polyunsaturated fatty acids found in fish oils and shown to have a positive effect on heart health.

**phospholipids.** A class of lipids that have a phosphorus-containing compound in their chemical structures, which allows them to combine with both fat and water to form emulsions.

**plaque.** A buildup of fatty compounds made up largely of cholesterol that form on the inside walls of arteries.

**polyunsaturated fatty acid.** A fatty acid that has two or more double bonds between carbon atoms in a carbon atom chain.

**rancid.** Describes a fat in which the fatty acid molecules have combined with oxygen, causing them to break down, which makes the fat spoil and gives it an unpleasant smell and taste.

**saturated fatty acid.** A fatty acid that has no double bonds in its chemical structure and, therefore, carries a full load of hydrogen atoms.

**sterols.** A class of lipids, including some hormones, vitamin D, and cholesterol, that have complex molecules made up of rings of carbon atoms with attached chains of carbon, hydrogen, and oxygen.

**stroke.** The death of brain tissue caused by blockage of an artery carrying nutrients and oxygen to that tissue.

**trans-fatty acid.** A fatty acid with an odd molecular shape that forms when oils are partially hydrogenated.

**triglycerides.** The major type of fat found in foods and in the body. Triglycerides consist of three fatty acids attached to glycerol.

**unsaturated fatty acid.** A fatty acid that has at least one double bond between two carbon atoms in a carbon atom chain and, therefore, is missing at least two hydrogen atoms.

**very low-density lipoprotein (VLDL).** A lipoprotein that carries triglycerides and cholesterol made by the liver through the bloodstream to body cells.