Glossary

Aldehydes: Any of a class of organic compounds containing the group –CHO, which yields acids when oxidized and alcohols when reduced.

Biomolecules: A biomolecule is any organic molecule that is produced by a living organism, including large polymeric molecules such as proteins.

Carbohydrates: a group of organic compounds that includes sugars, starches, celluloses, and gums and serves as a major energy source in the diet of animals. These compounds are produced by photosynthetic plants and contain only carbon, hydrogen, and oxygen, usually in the ratio 1:2:1.

Covalent linkage: A **covalent bond** is the chemical bond that involves the sharing of pairs of electrons between atoms

Cyanobacteria: Cyanobacteria, also known as blue-green bacteria, blue-green algae, and Cyanophyta, is a phylum of bacteria that obtain their energy through photosynthesis. The name "cyanobacteria" comes from the color of the bacteria.

Emulsion: A fine dispersion of minute droplets of one liquid in another in which it is not soluble or miscible.

H**eterotrophs**: An organism that cannot synthesize its own food and is dependent on complex organic substances

Hydrogenase: An enzyme in certain microorganisms that catalyzes the hydrolysis or reduction of a substrate by molecular hydrogen.

Hydrolysis: The chemical breakdown of a compound due to reaction with water.

Lipids: Any of a class of organic compounds that are fatty acids

or their derivatives and are insoluble in water but soluble in organic solvents.

Metabolites: **Metabolites** are the intermediates and products of metabolism. The term **metabolite** is usually restricted to small molecules

Photosynthesis: The process by which green plants and some other organisms use sunlight to synthesize foods from carbon dioxide and water.

Proteins: a group of complex organic macromolecules that contain carbon, hydrogen, oxygen, nitrogen, and usually sulfur and is composed of one or more chains of amino acids.

Prototype: A first or preliminary model of something, esp. a machine, from which other forms are developed or copied.

Polar molecule: A molecule having a permanent electric dipole moment.

Homeostasis: The tendency toward a relatively stable equilibrium between interdependent elements, esp. as maintained by physiological processes