



## GLOSSARY

**Amphipathic:** of a molecule, especially a protein) having both hydrophilic and hydrophobic parts.

**Archaea:** microorganisms which are similar to bacteria in size and simplicity of structure but radically different in molecular organization. They are now believed to constitute an ancient group which is intermediate between the bacteria and eukaryotes.

**Biotin:** is a water-soluble B-vitamin, also called vitamin B7 and formerly known as vitamin H or coenzyme R.

**Cytosol:** the aqueous component of the cytoplasm of a cell, within which various organelles and particles are suspended.

**Dehydration:** is, the process of removal of water to make a **trans-double bond**

**Enzyme:** are macromolecular biological catalysts. **Enzymes** accelerate, or catalyze, chemical reactions.

**Ester bond:** a class of chemical compounds formed by the **bonding** of an alcohol and one or more organic acids, with the loss of a water molecule for each **ester** group formed

**Exergonic reaction:** is a chemical **reaction** where the change in the free energy is negative (there is a net release of free energy), indicating a spontaneous **reaction**.

**FAD:** flavin adenine dinucleotide

**Glycagon:** Glucagon is a peptide hormone, produced by alpha cells of the pancreas. It works to raise the concentration of glucose in the bloodstream.

**Hormones:** are special chemical messengers in the body that are created in the endocrine glands.

**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. They include many natural oils, waxes, and steroids.

**NADPH:** Nicotinamide adenine dinucleotide phosphate

**Phospholipids:** Phospholipids consist of a glycerol molecule, two fatty acids, and a phosphate group that is modified by an alcohol.

**Phosphorylation:** A biochemical process that involves the addition of phosphate to an organic compound.



**Reduction:** a chemical reaction in which hydrogen is added to, or oxygen is removed from, a compound. It is opposite of oxidation.

**Saturated fat:** a type of fat in which the fatty acids all have single bonds between the carbon atoms constituting its hydrocarbon chain.

