

CHAPTER OVERVIEW

15: Metabolic Cycles

Metabolic pathways linked series of chemical reactions occurring within a cell. The reactants, products, and intermediates of an enzymatic reaction are known as metabolites, which are modified by a sequence of chemical reactions catalyzed by enzymes. In a metabolic pathway, the product of one enzyme acts as the substrate for the next. These enzymes often require dietary minerals, vitamins, and other cofactors to function. There are two types of metabolic pathways that are characterized by their ability to either synthesize molecules with the utilization of energy (anabolic pathway) or break down of complex molecules by releasing energy in the process (catabolic pathway). The two pathways complement each other in that the energy released from one is used up by the other.

[15.1: Glycolysis](#)

[15.2: The Citric Acid Cycle](#)

[15.3: Lactic Acid Fermentation](#)

[15.4: The Electron Transport Chain](#)

[15.5: Metabolic Cycles \(Exercises\)](#)

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