

METABOLIC NETWORK

Structure

17.1	Introduction	Fatty acid β -oxidation
	Objectives	
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	Glycolysis - Glucose Oxidation in Order To Obtain ATP	17.3 Linkage of Metabolic Pathways.
	Citric Acid Cycle (Krebs' Cycle)	17.4 Metabolic Flux
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17.1 INTRODUCTION

Metabolic network is integrated and well-connected pathways with various biochemical reactions occur in living cells. These pathways are crucial in the formation of energy and building basic components of bio-molecules which are necessary for cells. The process of metabolism is in the form of chains or shuttles or cycles that interconnect each other to balance the energy requirement or thermodynamic gradients few in both the directions and others are in single directions. The metabolic pathways are highly regulated.

Objectives

After studying this unit, you should be able to:

- ❖ discuss general metabolic pathways,
- ❖ explain how metabolic pathways connect to one another,
- ❖ define metabolic flux and its regulatory mechanisms, and
- ❖ discuss the steady state model.