

### Carbohydrates metabolism-1

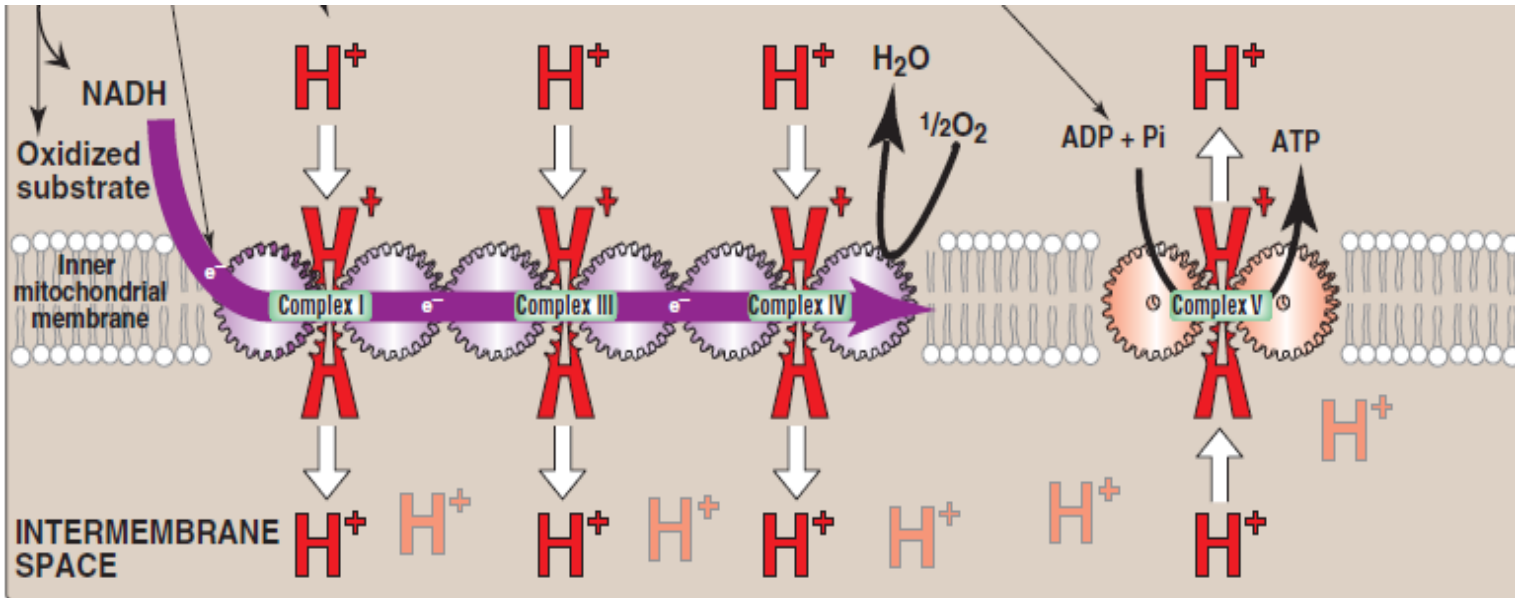
#### 1. What are the main metabolic processes of the carbohydrates?

- a. Glycogenolysis
- b. Glycogenesis
- c. HMP shunt
- d. Gluconeogenesis
- e. Glucose catabolism/cellular respiration
  - i. Glycolysis
  - ii. Krebs cycle
  - iii. Electron transport chain

#### 2. What are the major steps of Glycolysis

#### 3. Draw the Krebs cycle

4. Make the schematic diagram of ETC



5. Write down the functions of following enzymes in glycolysis

- i. Hexokinase
- ii. Glucokinase
- iii. Phosphofructokinase
- iv. Aldolase
- v. Pyruvate kinase
- vi. Triose phosphate isomerase
- vii. Phosphoglycerate mutase
- viii. Enolase

6. What is substrate level phosphorylation and its significance?

7. What are the different inhibitors of glycolysis?