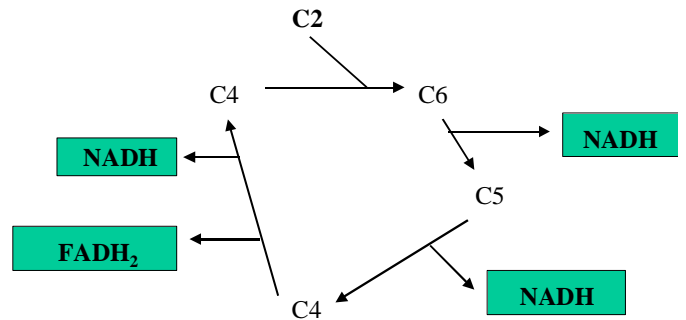
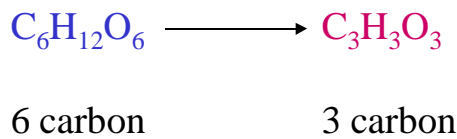


Glucose metabolism

Glycolysis

The sequence of reactions that converts glucose to pyruvate



NADH and **FADH₂** are energy rich molecules with electrons that are used in oxidative phosphorylation

Glycolysis

10 steps - 10 enzymes

First 5 reactions

Add 2 phosphate groups and cleave in half to form glyceraldehyde-3-PO₄

Next 5 reactions

Generate 2 molecules of ATP from glyceraldehyde-3-PO₄ making pyruvate

Oxidative Phosphorylation

The process in which **ATP is formed** as electrons are transferred from NADH or FADH₂ to O₂ by a series of **5 multisubunit complexes** located on the inner mitochondrial membrane

Citric acid cycle / Krebs cycle

The final common pathway for the oxidation of fuel molecules

Pyruvate (C₃) → Acetyl CoA (C₂)

Acetyl CoA → Citric acid cycle

Oxidative Phosphorylation

