

# Coupling and Counting ATP

## Eukaryotes

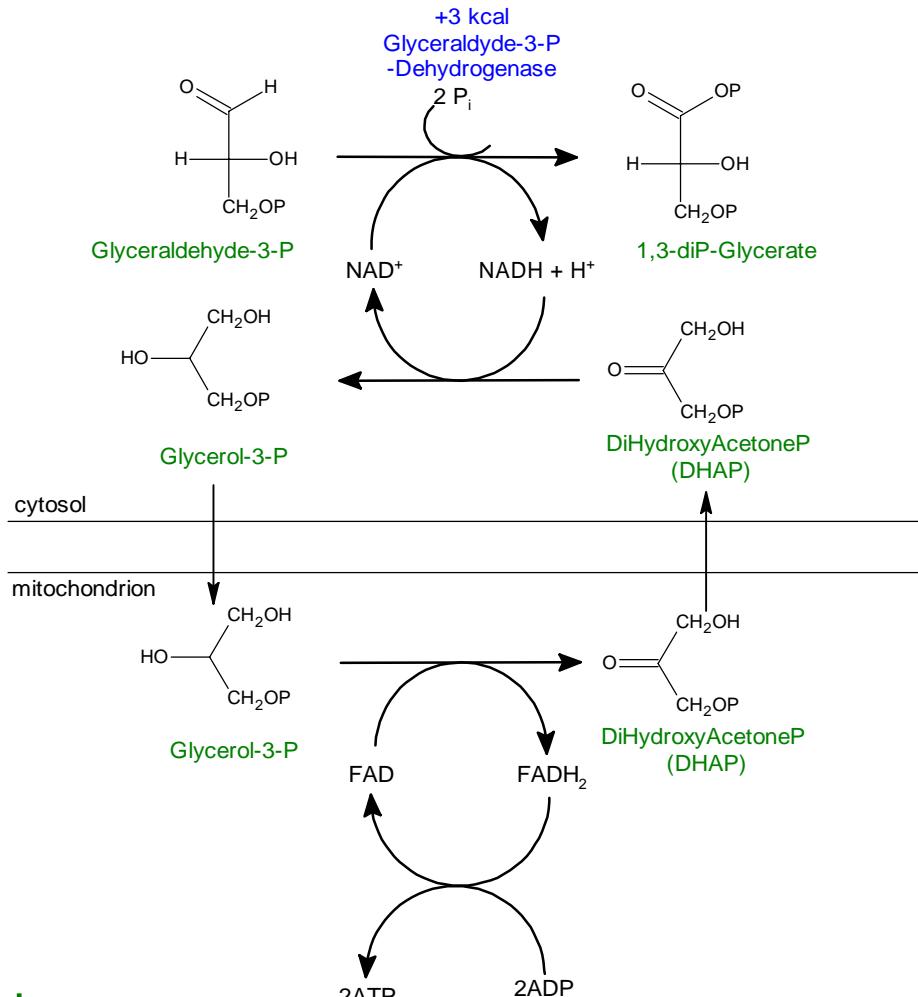
<u>Pathway/Enzyme</u>	<u>Location</u>
Glycolysis/Gluconeogenesis (liver)	Cytoplasm
Krebs/TCA	Mitochondrion
Glyoxalate	Mitochondrion
Pyruvate Carboxylase	Mitochondrion
PEP Carboxy Kinase	Cytoplasm / LIVER ONLY
Oxidative Phosphorlation	Mitochondrion

$$\text{NADH in mitochondrion} = 3 \text{ ATP}$$

$$\text{FADH}_2 \text{ in mitochondrion} = 2 \text{ ATP}$$

LINKED

$$\text{NADH in cytoplasm} = 2 \text{ ATP}$$



## Bacteria

$$\begin{array}{lll} \text{NADH} & = & 3 \text{ ATP} \\ \text{FADH}_2 & = & 2 \text{ ATP} \end{array}$$