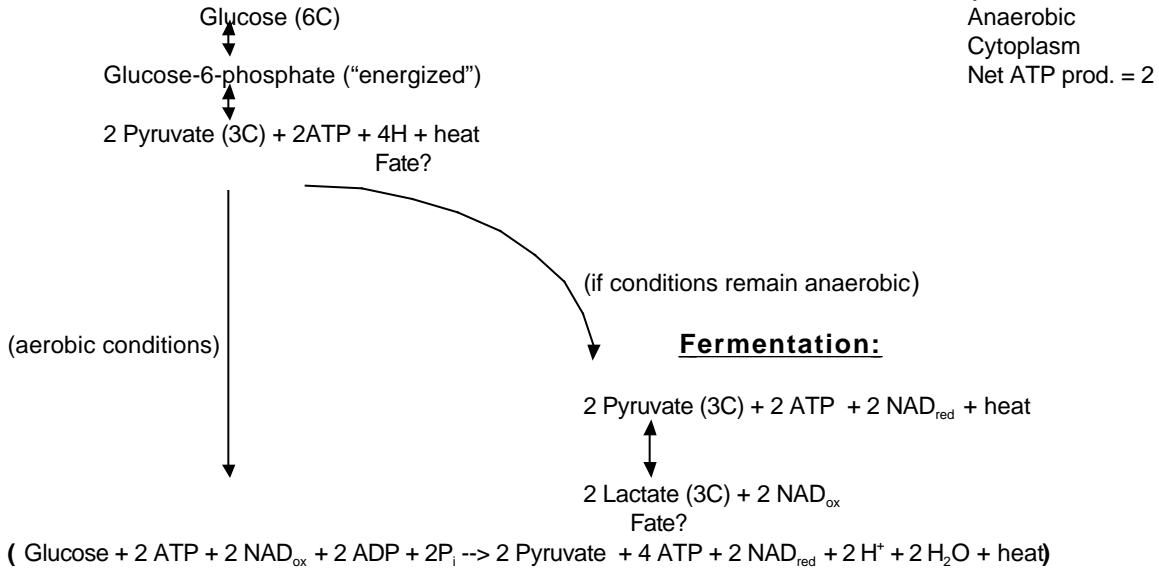


THE RESPIRATORY PATHWAY

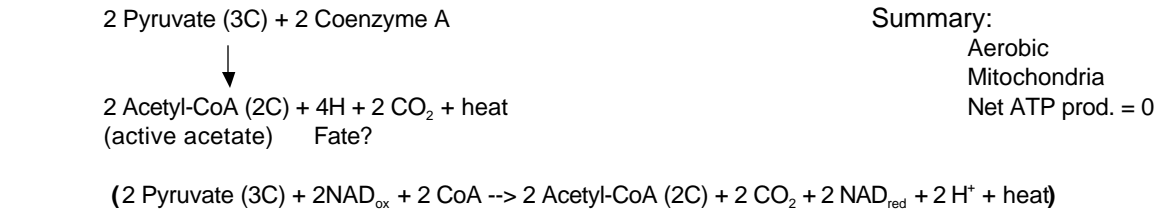
(How cells harvest energy) JML 2001

Glycolysis:



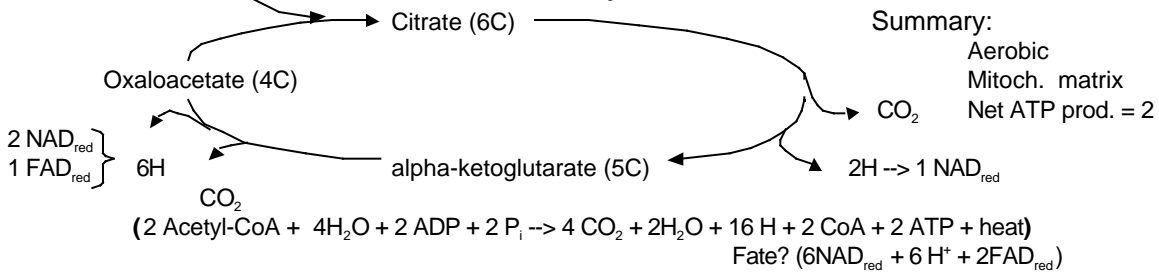
Summary:
 Anaerobic
 Cytoplasm
 Net ATP prod. = 2

Transition Reactions:



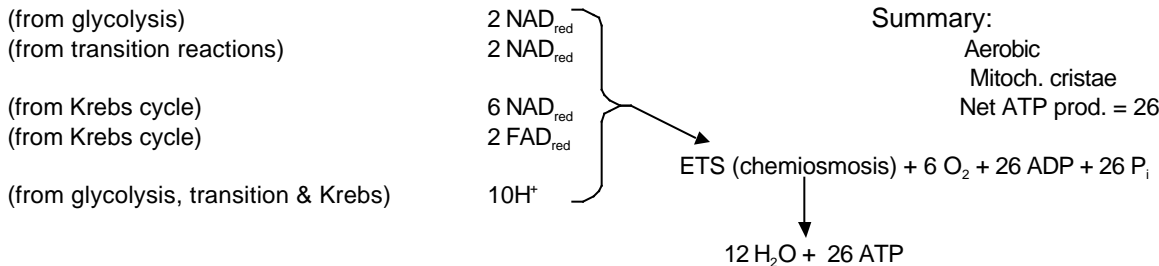
Summary:
 Aerobic
 Mitochondria
 Net ATP prod. = 0

Krebs Cycle:



Summary:
 Aerobic
 Mitoch. matrix
 Net ATP prod. = 2

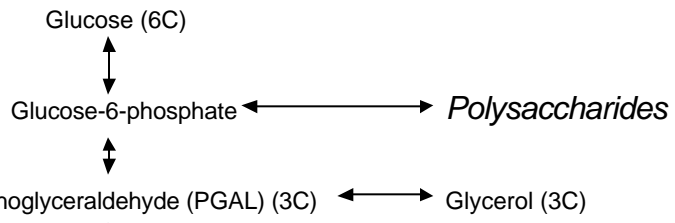
Oxidative Phosphorylation:



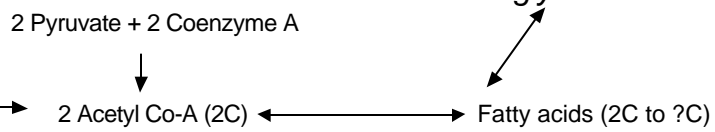
----- Net Product Summary: 30 ATP, 6CO₂, 12 H₂O, heat -----

Biosynthesis and the Entrance of Other Metabolites into Aerobic Cellular Respiration

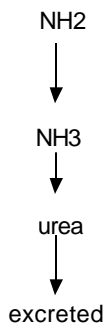
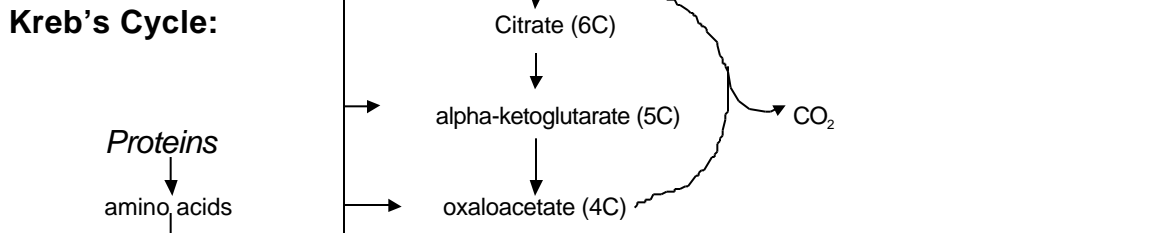
Glycolysis:



Transition Reactions:



Kreb's Cycle:



* entrance depends on the number of Carbon atoms in the R group of each amino acid (i.e. what remains after deamination)

Oxidative Phosphorylation:

