

Concept Development 1E: ACETYL CO-A FORMATION AND THE KREBS CYCLE

For an animation of the electron transport chain, see the essential study partner's video of the Krebs's Cycle – external links on Bb (cells→chemistry→respiration→Krebs's Cycle). Also, the following link may be helpful: <http://www.science.smith.edu/departments/Biology/Bio231/krebs.html>

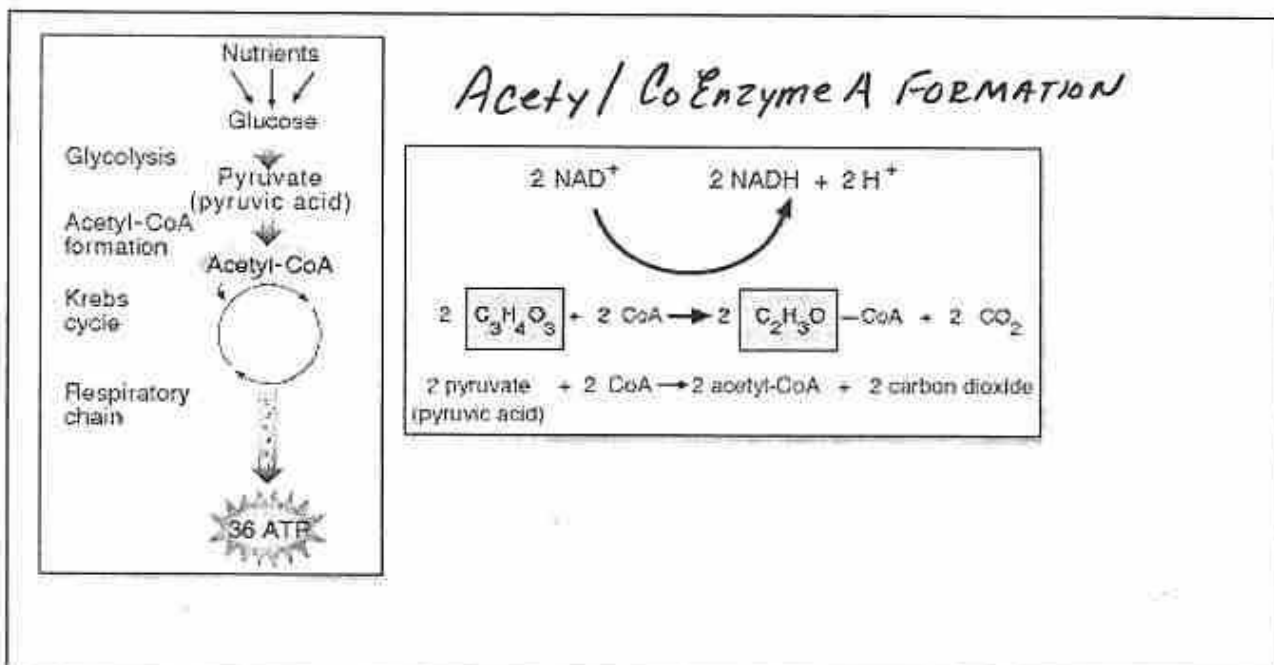
For the tutorial of the pathway: http://www2.nl.edu/jste/aerobic_respiration.htm

(This has a great step by step animation and explanation of the major steps – as well as a summary of the “ins and outs”)

What you need to know about the Krebs cycle:

- What is the major purpose of the Krebs cycle?
- What is the reactant that transforms into acetyl Co-A and begins the Krebs cycle?
- What are the 4 major products of the Krebs cycle?
- How much carbon from the original glucose is left after two turns of the Krebs cycle?
- What will happen to the NADH and FADH₂ produced in Glycolysis and the Krebs cycle?
- Where in the cell **specifically** (organelle) does the Krebs cycle take place?

Before pyruvate (pyruvic acid) can enter the Krebs cycle some preliminary reactions occur. For each pyruvate, a carbon is lost as CO₂ and a molecule of NADH is produced. The remaining 2-carbon molecule is acetyl-CoA.



Krebs Cycle

