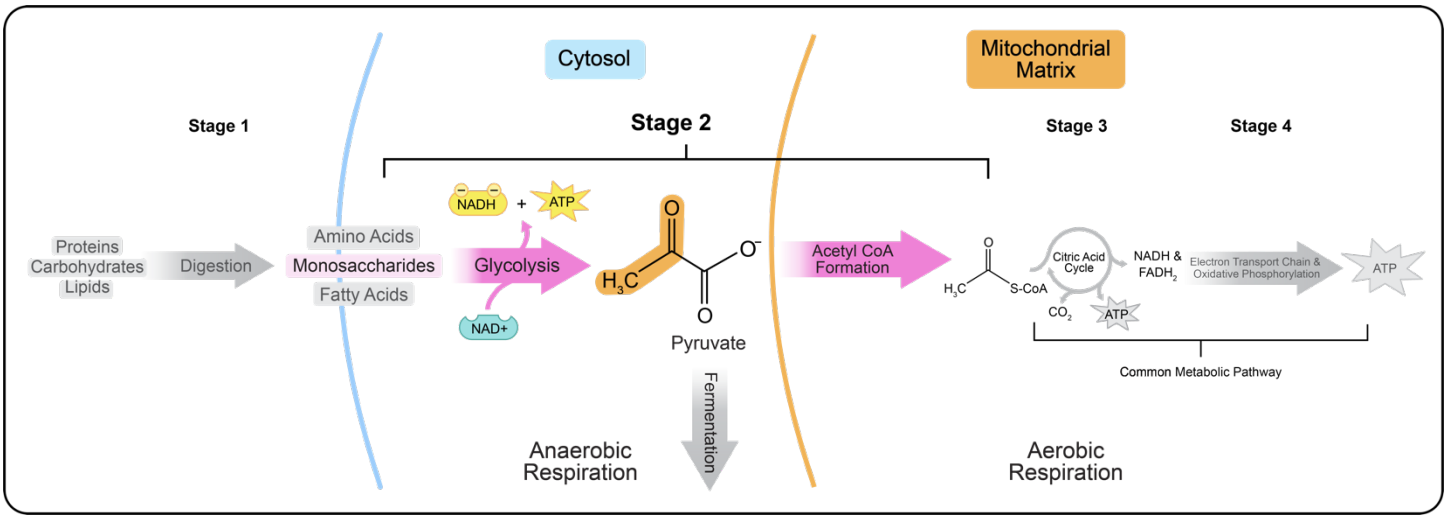
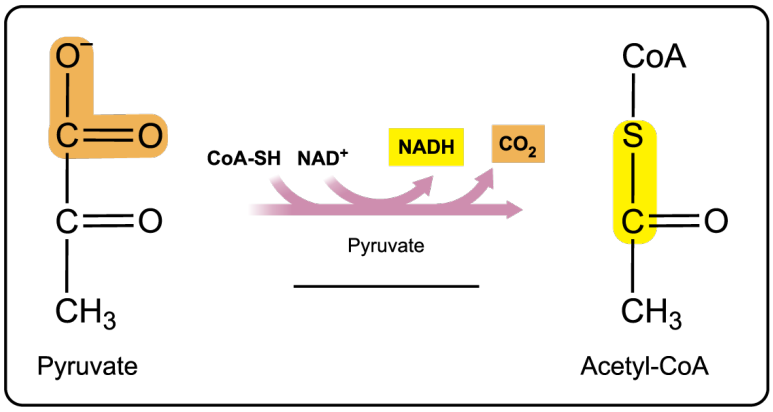
CONCEPT: PYRUVATE OXIDATION

- **Recall:** 1 glucose is converted to 2 _____ molecules through glycolysis pathway.
  - □ Fate of pyruvate depends on the availability of _____ in the cells.



Aerobic Respiration

- In presence of _____, pyruvate is transported from cytosol to the mitochondrial _____.
- Pyruvate is _____ by pyruvate dehydrogenase to _____.
  - □ 1 NAD^+ is reduced to 1 _____.
  - □ 1 C atom is lost as _____.



EXAMPLE: Which of the following statements is/are correct about pyruvate oxidation?

a) Pyruvate oxidation takes place outside of the mitochondria.

b) NADH is oxidized to NAD^+.

c) Requires oxygen as a reactant.

d) Pyruvate loses 1 C atom in a form of CO_2.