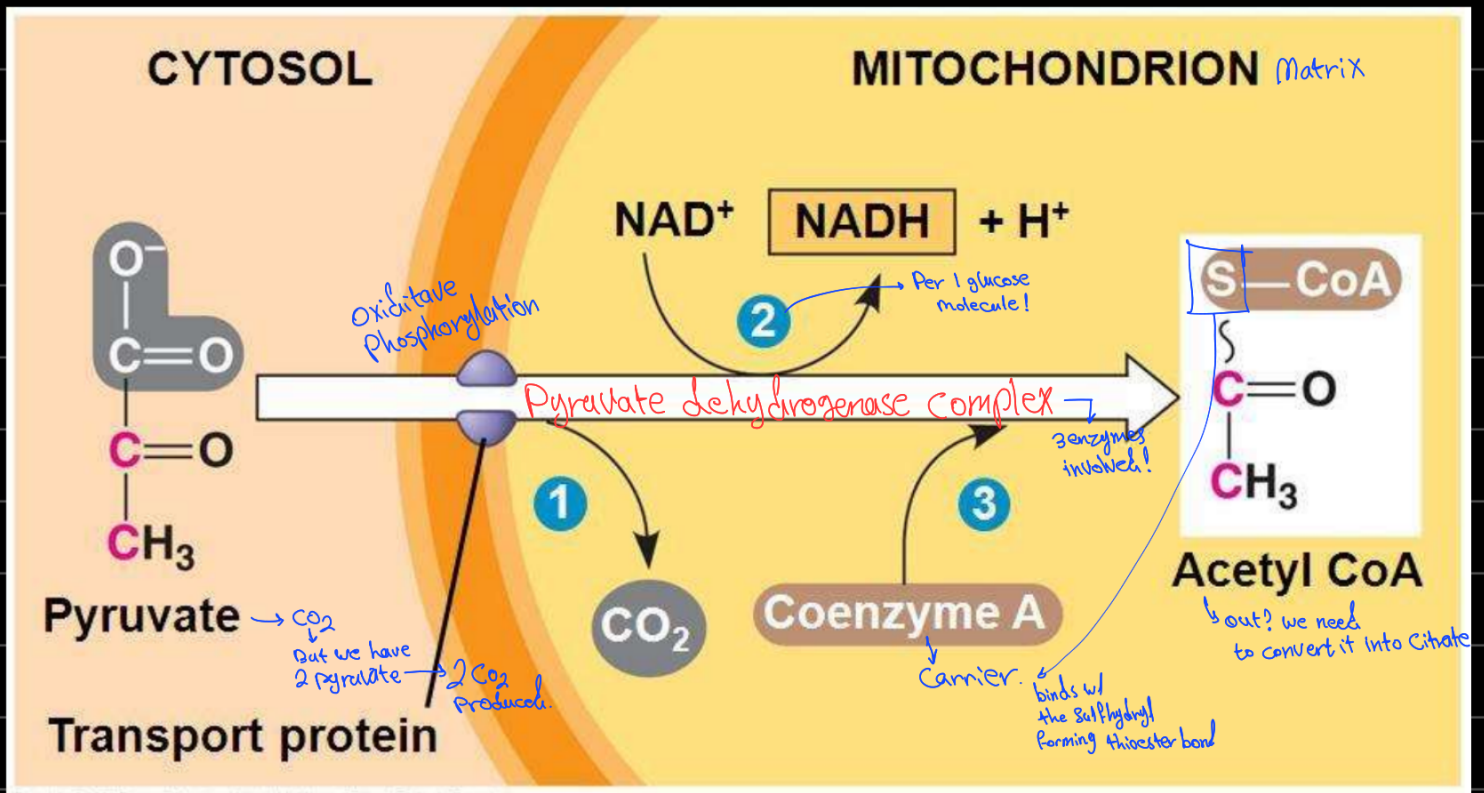


⊗ Milk → Yogurt → Lactic acid

• Fermentation reaction, the lactic acid makes the milk curdle → which bacteria turns it into Yogurt!

Acetyl CoA Formation \Rightarrow in aerobic conditions!

- Occurs in the Mitochondrial matrix.
- Pyruvate (3C) \rightarrow acetyl CoA (2C)
- Shuttling of pyruvate from the cytosol is facilitated by Pyruvate translocase, exists in the inner mitochondrial membrane!



Pyruvate Dehydrogenase Complex:

E1 E2 E3

CoEnzymes:

- Thiamine pyrophosphate (TPP) a prosthetic group of E1
- Lipoic acid (lipoamide) a prosthetic group of E2
- Flavin adenine dinucleotide (FAD) a prosthetic group of E3
- Coenzyme A (CoA or CoA-SH)
- Nicotinamide adenine dinucleotide (NAD⁺)