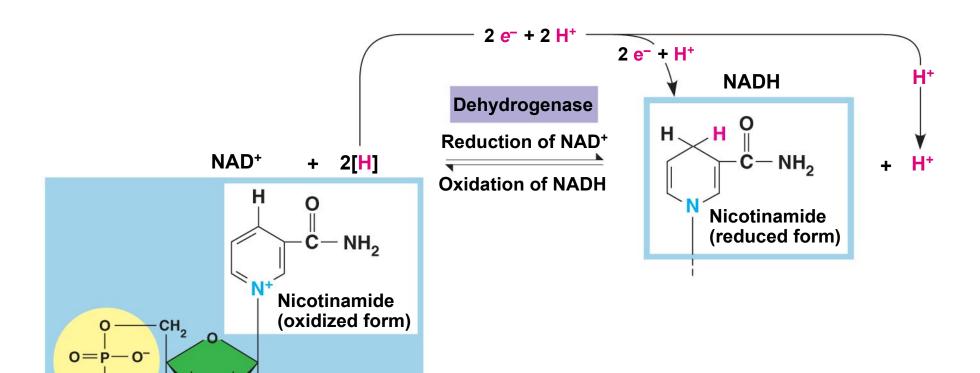


$$H-C-OH + NAD^+ \xrightarrow{Dehydrogenase} C=O + NADH + H^+$$



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HO

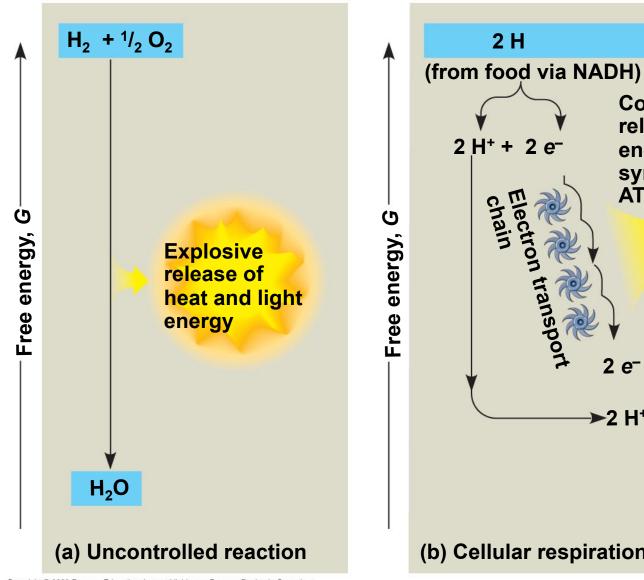
HO

CH2

OH

OH

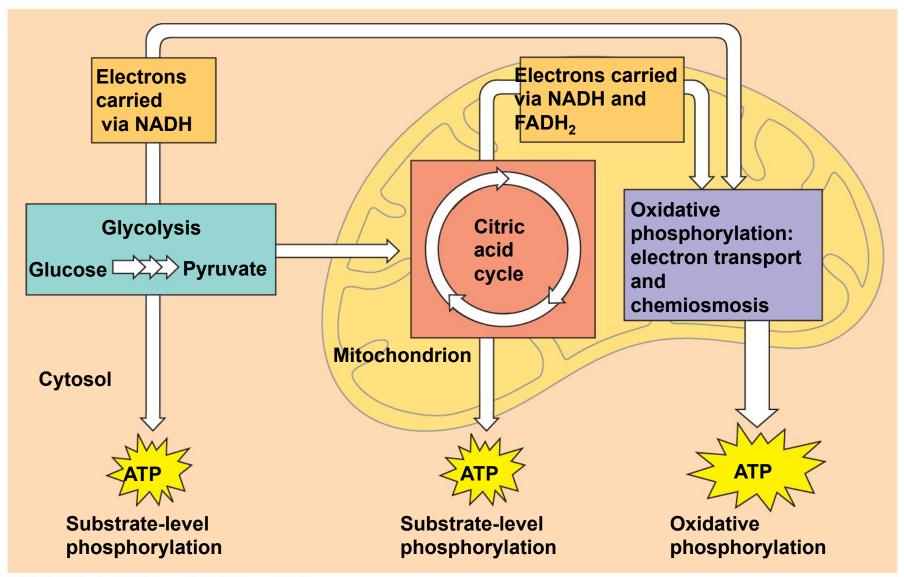
 NH_2

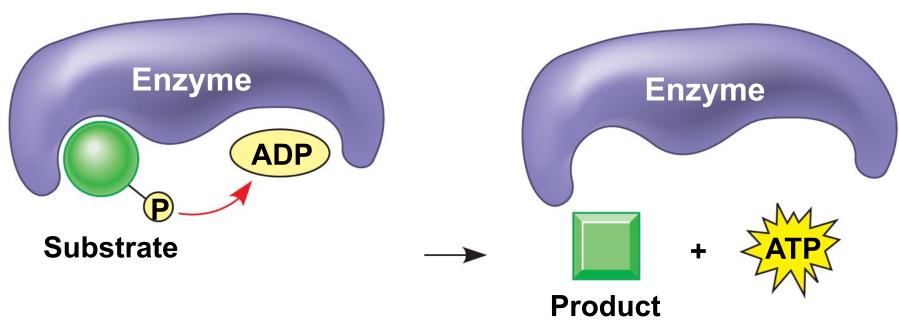


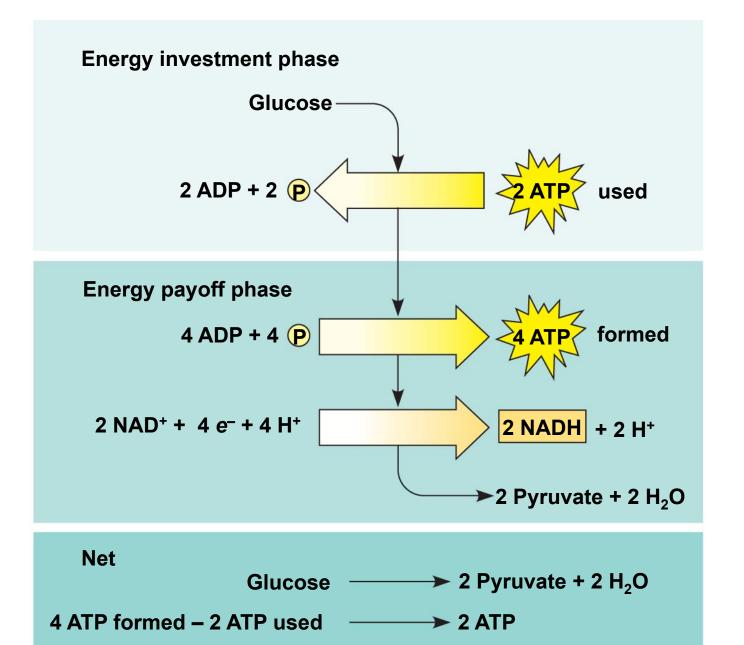
Controlled release of energy for synthesis of **ATP →2** H⁺ H₂O (b) Cellular respiration

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 $^{1}I_{2}O_{2}$

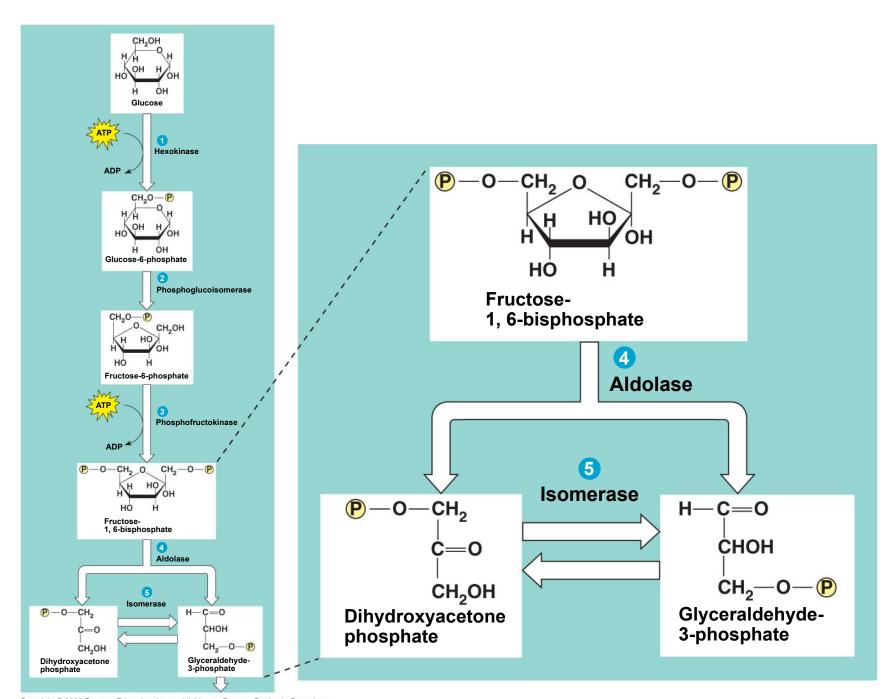


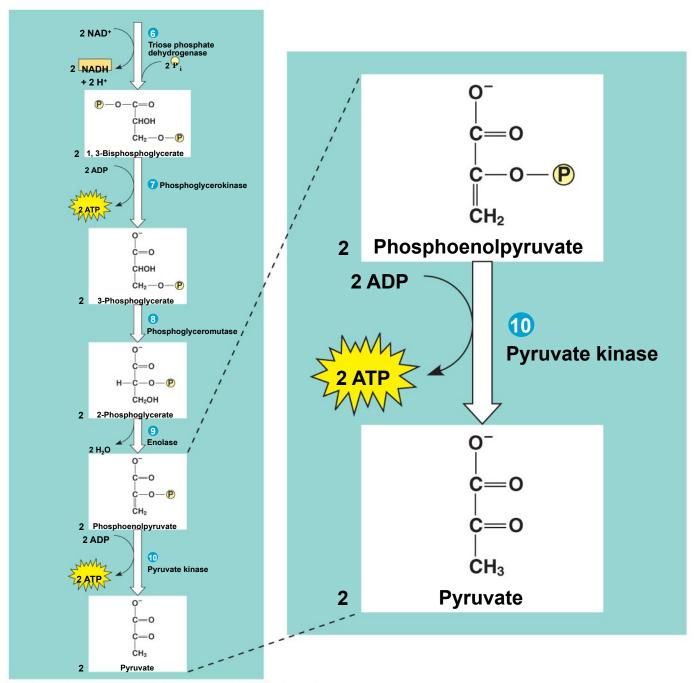




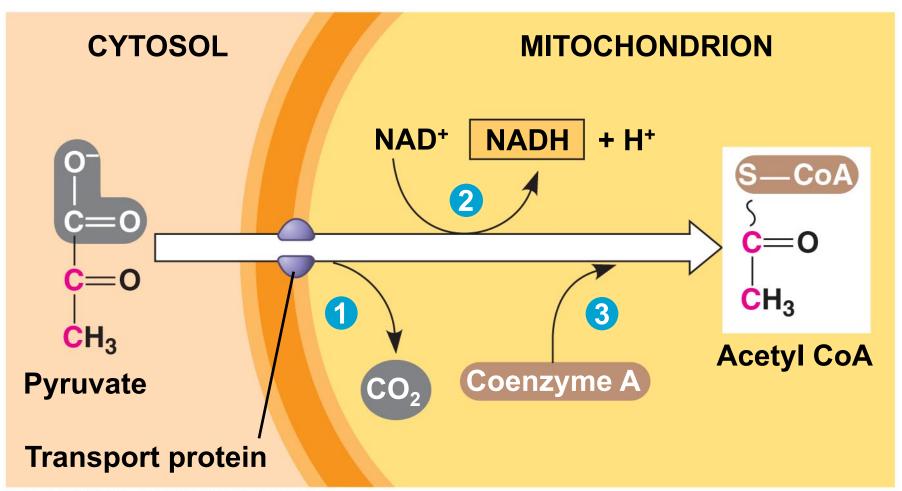
→ 2 NADH + 2 H⁺

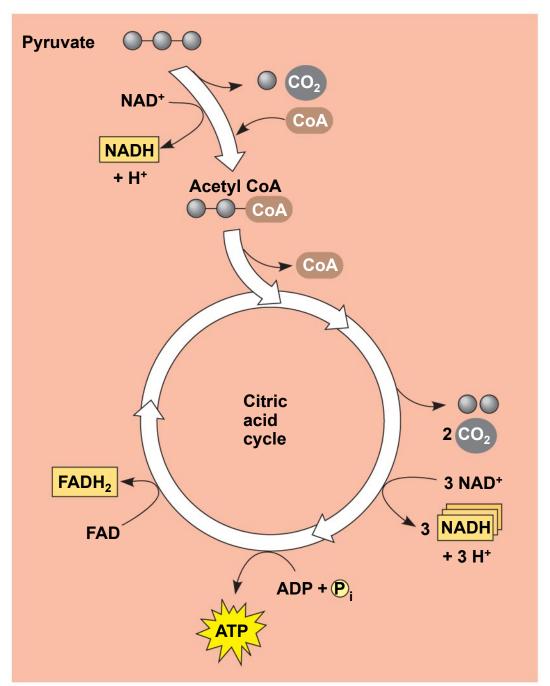
2 NAD+ 4 e- + 4 H+



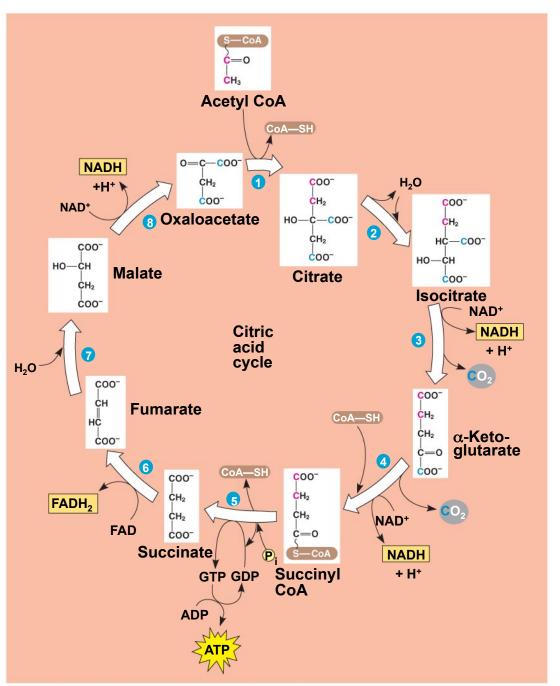


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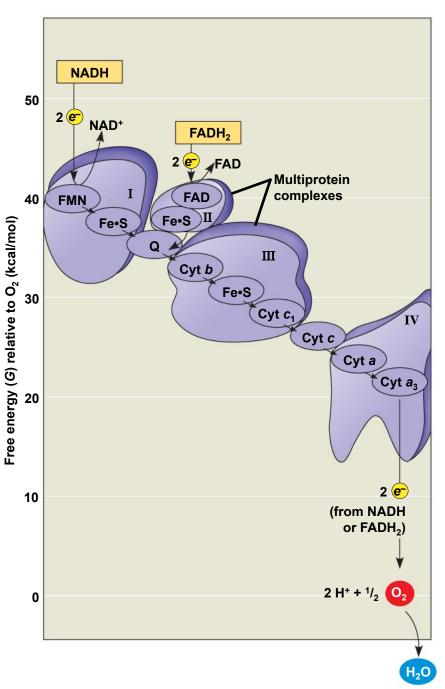


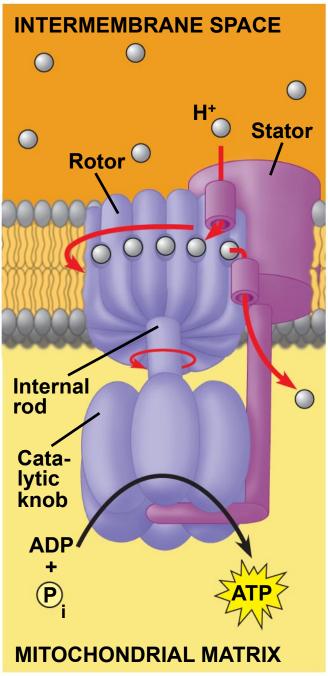


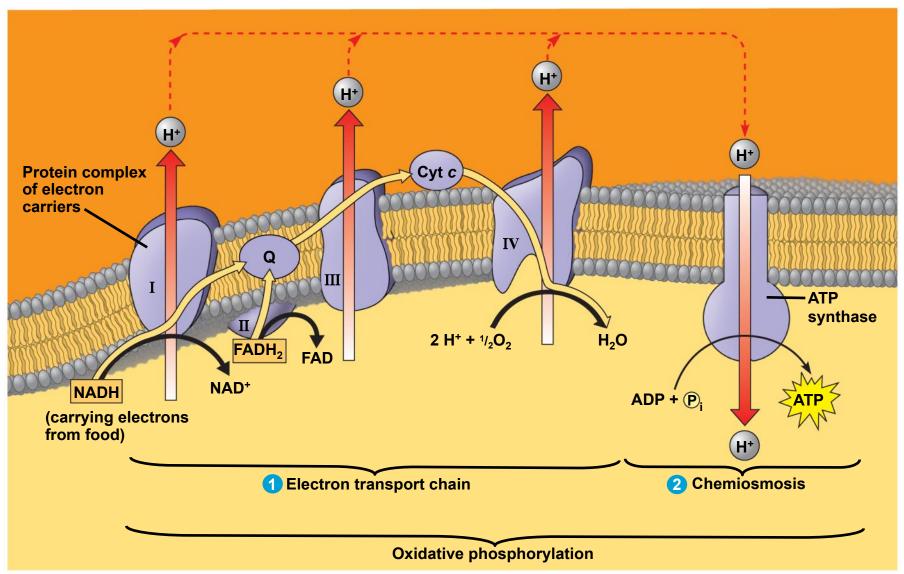
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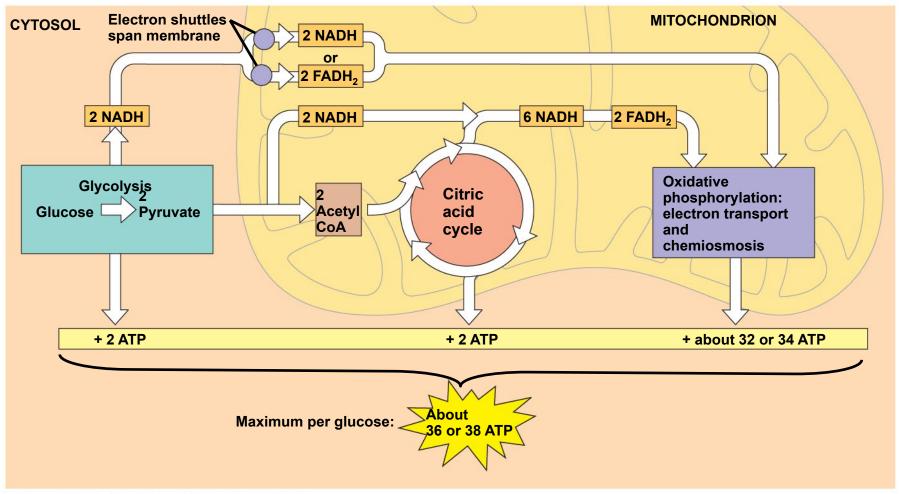
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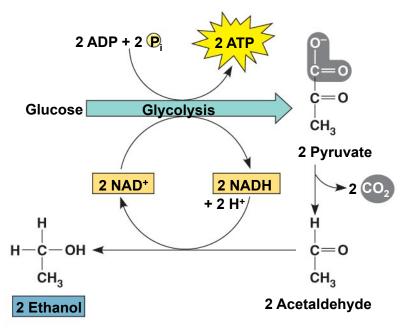




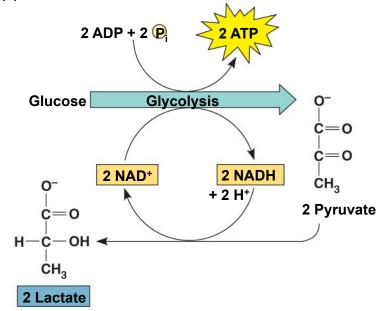
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(a) Alcohol fermentation



(b) Lactic acid fermentation

