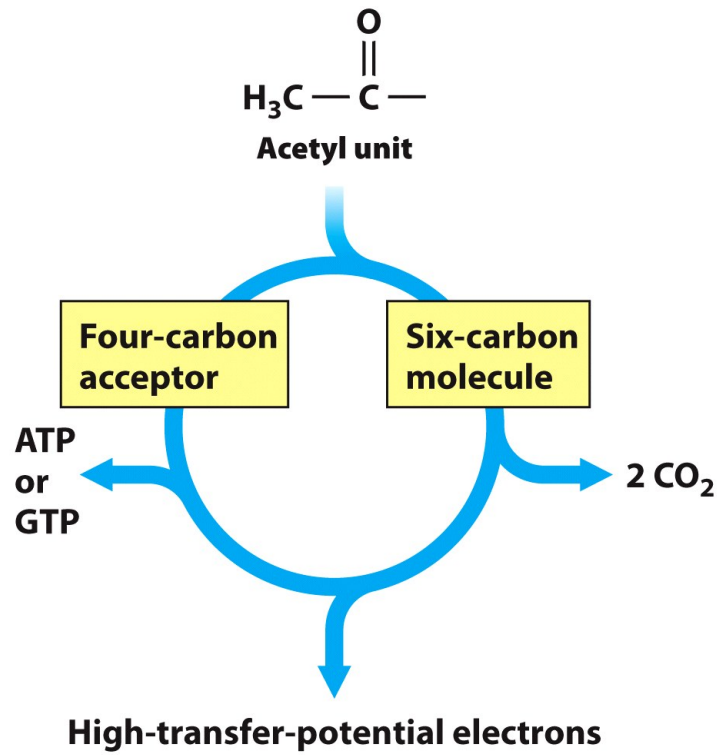


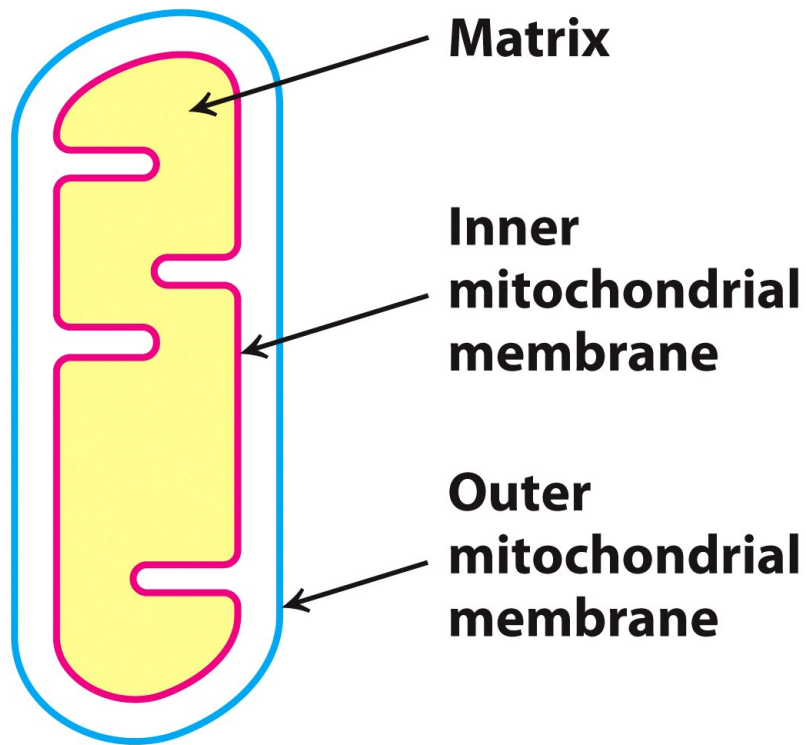
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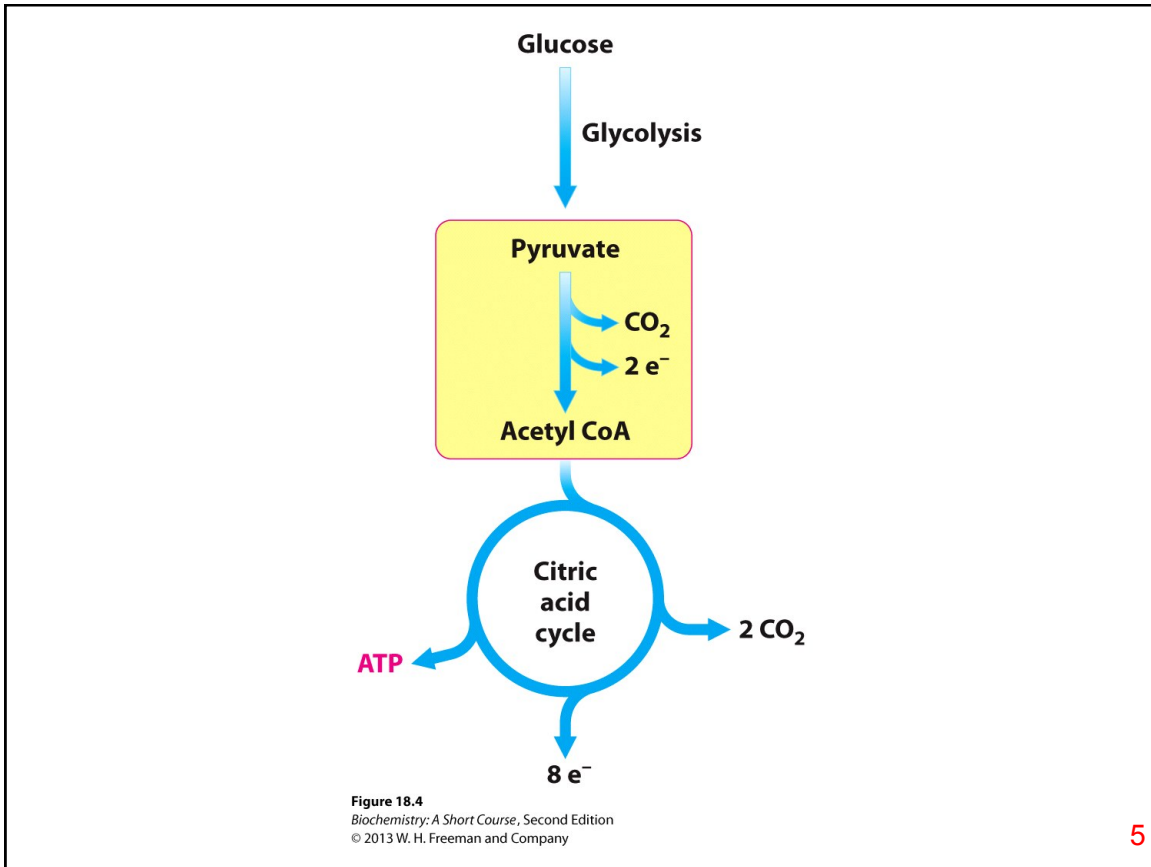
**Figure 18.3b**  
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**Table 18.1** Pyruvate dehydrogenase complex of *E. coli*

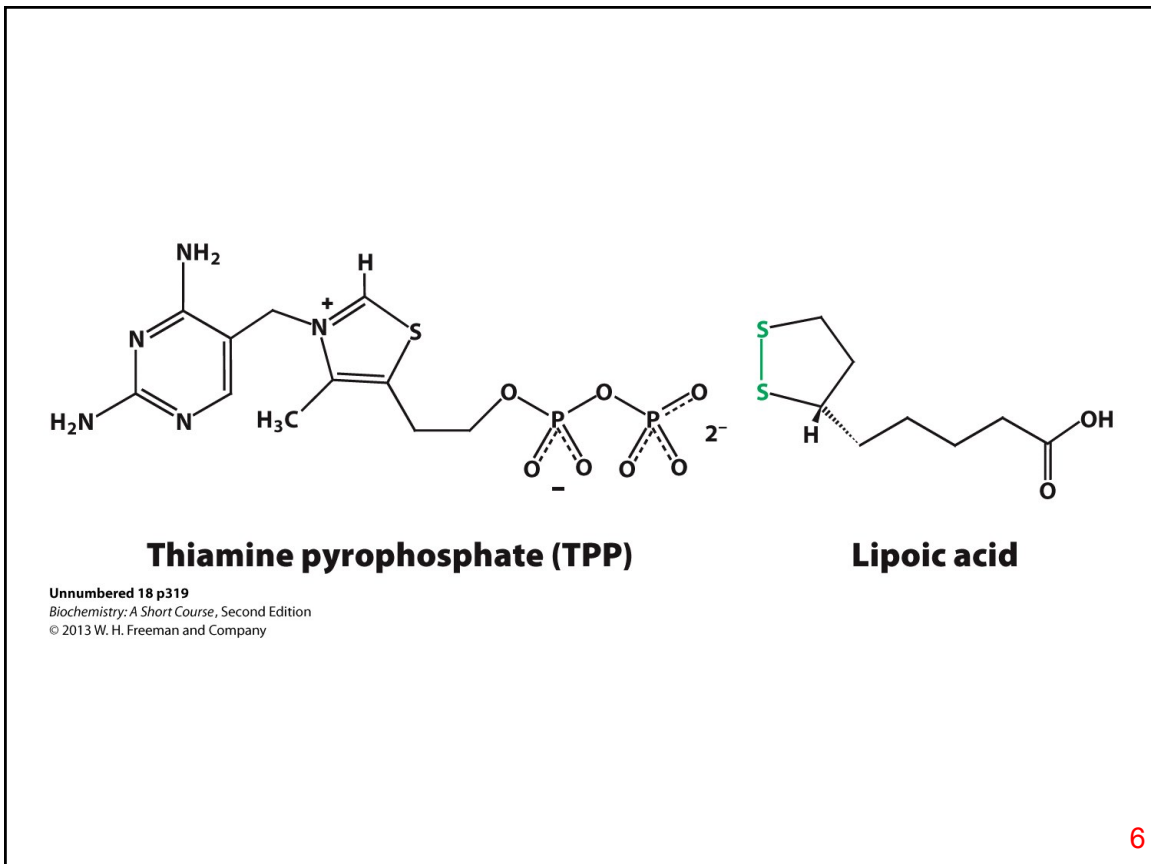
| Enzyme                           | Abbreviation   | Number of chains | Prosthetic group | Reaction catalyzed                             |
|----------------------------------|----------------|------------------|------------------|--|
| Pyruvate dehydrogenase component | E <sub>1</sub> | 24               | TPP              | Oxidative decarboxylation of pyruvate          |
| Dihydrolipoyl transacetylase     | E <sub>2</sub> | 24               | Lipoamide        | Transfer of acetyl group to CoA                |
| Dihydrolipoyl dehydrogenase      | E <sub>3</sub> | 12               | FAD              | Regeneration of the oxidized form of lipoamide |

**Abbreviations:** TPP, thiamine pyrophosphate; FAD, flavin adenine dinucleotide.

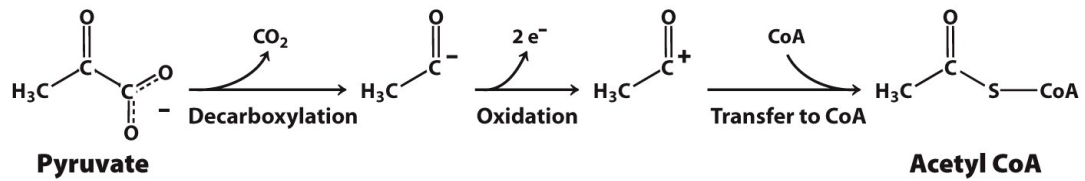
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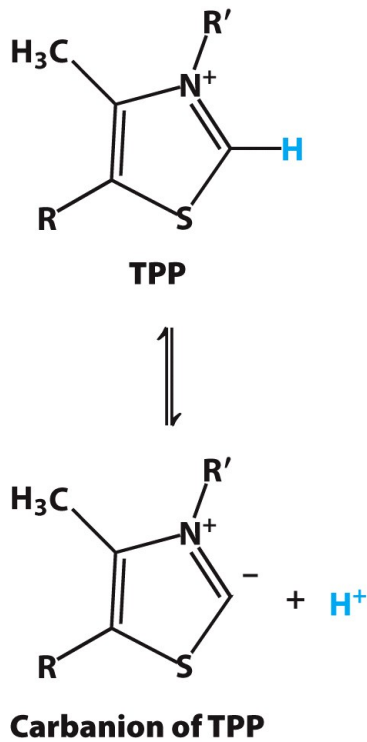


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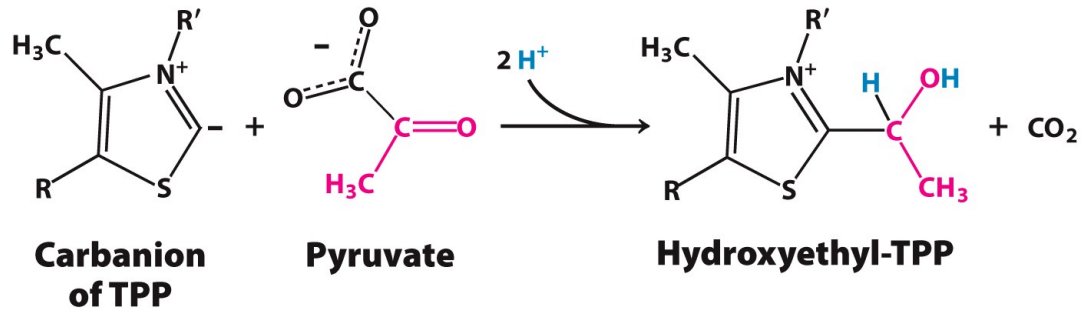
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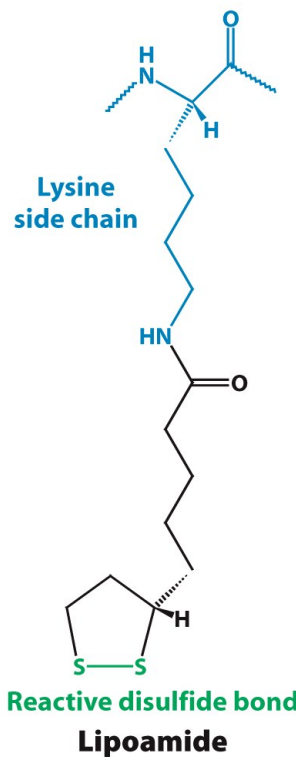
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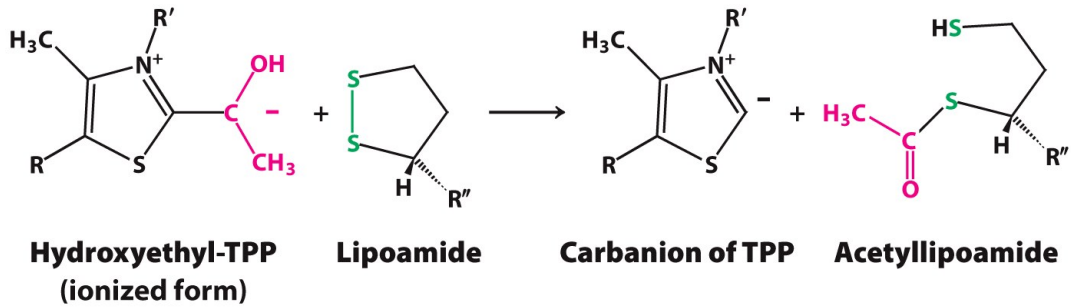
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9



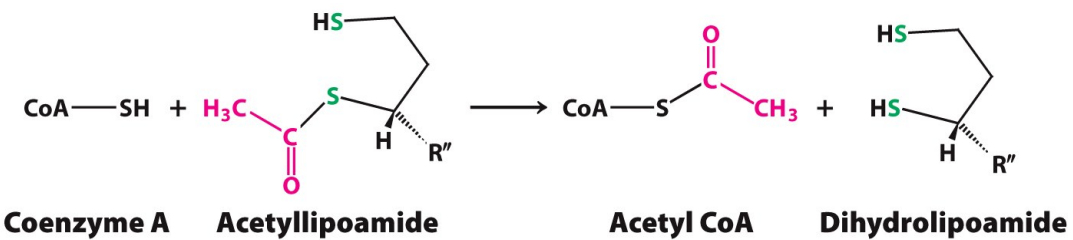
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10



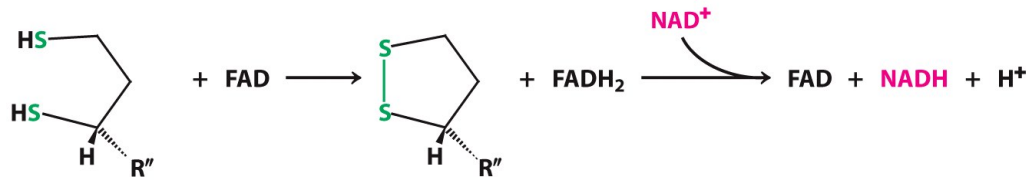
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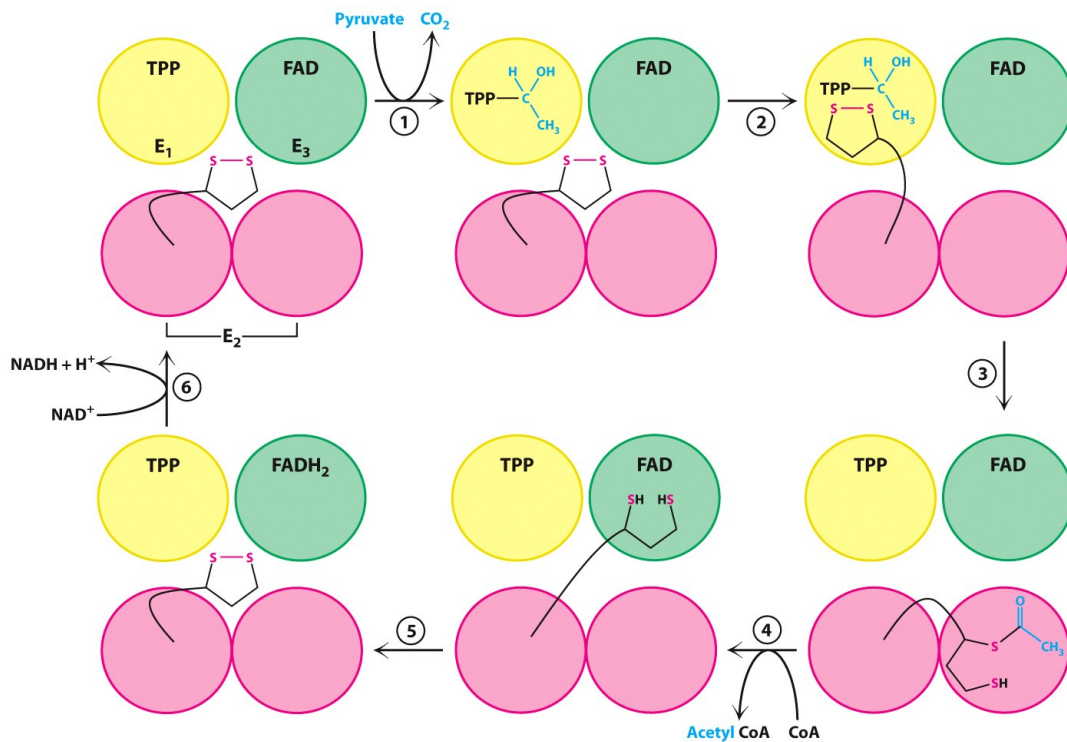
12



**Dihydrolipoamide**

**Lipoamide**

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**Figure 18.7**  
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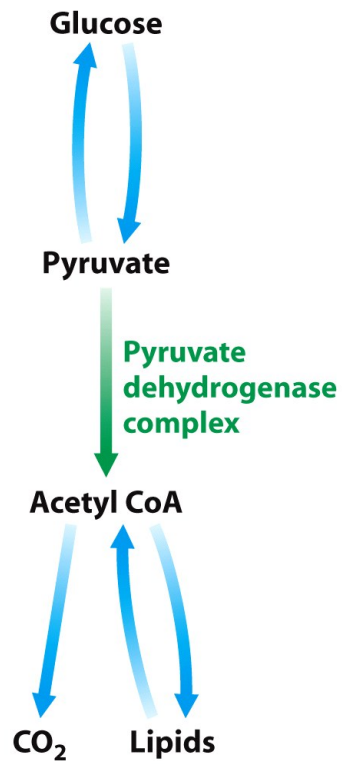


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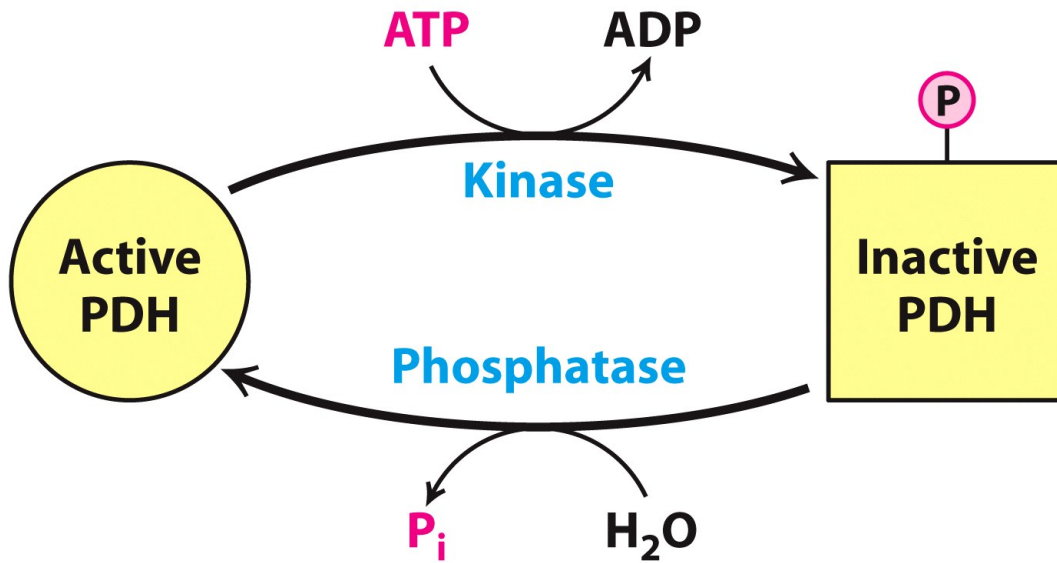
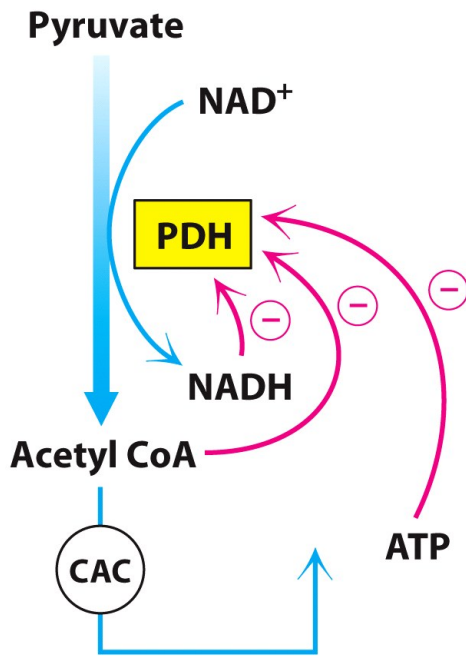


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**(A) HIGH ENERGY CHARGE**



**(B) LOW ENERGY CHARGE**

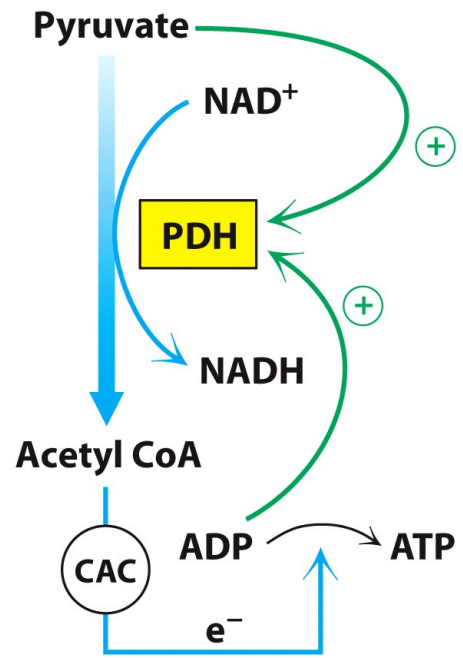


Figure 18.10  
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