

Figure 31.2

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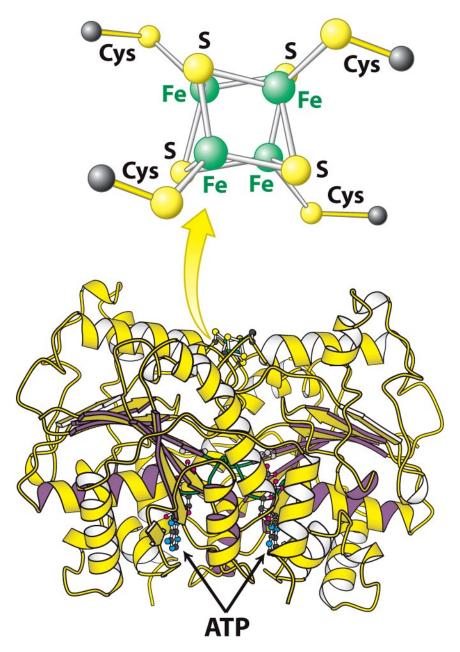


Figure 31.3

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P cluster MoFe cofactor Cys 🎤 Cys His Cys Cys 6 Cys 🔎 **Central** atom Homocitrate Cys

Figure 31.4

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$$O$$
 C
 C
 $COO^- + NAD(P)H + H^+$
 α -Ketoglutarate

Unnumbered 31 p543

$$-\text{OOC} \xrightarrow{\text{H}_3\text{N}} \text{H} \xrightarrow{\text{ADP}} \xrightarrow{\text{ADP}} \xrightarrow{\text{+H}_3\text{N}} \text{H} \xrightarrow{\text{O}} \xrightarrow$$

Glutamate

Acyl-phosphate intermediate

$$\begin{array}{c} \text{NH}_3 \\ \\ \text{OOC} \end{array}$$

Glutamine

Unnumbered 31 p544

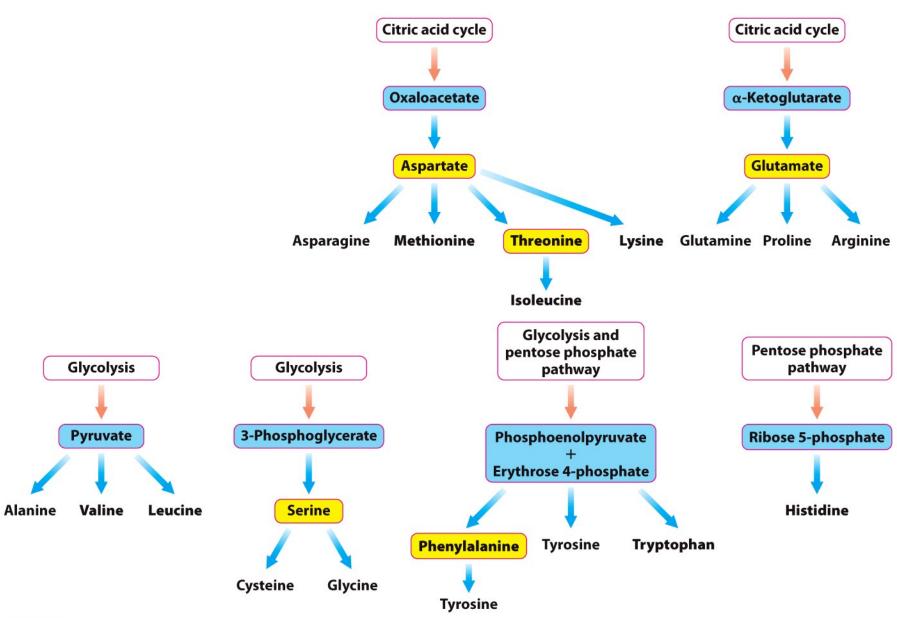


Figure 31.5

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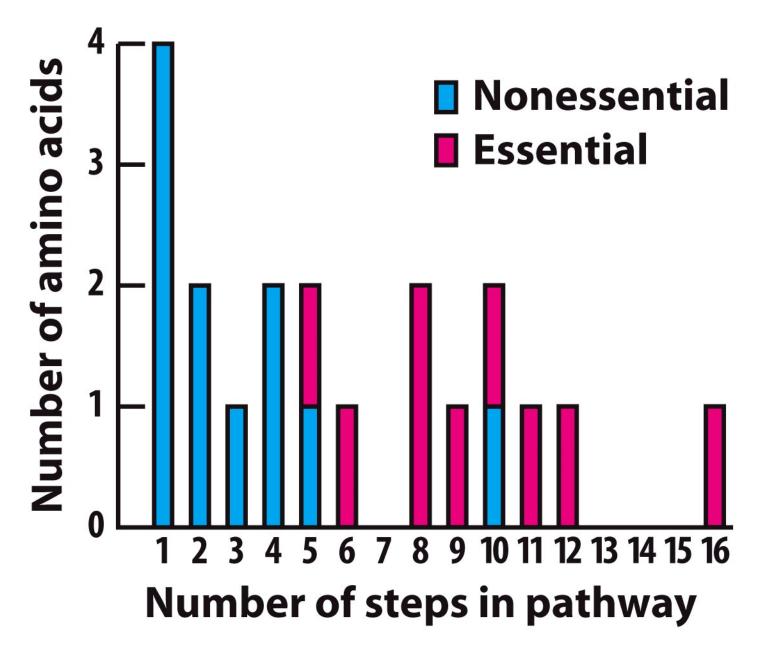


Figure 31.6

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Pyridoxine (Vitamin B₆)

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Pyridoxal phosphate (PLP)

Pyridoxamine phosphate (PMP)

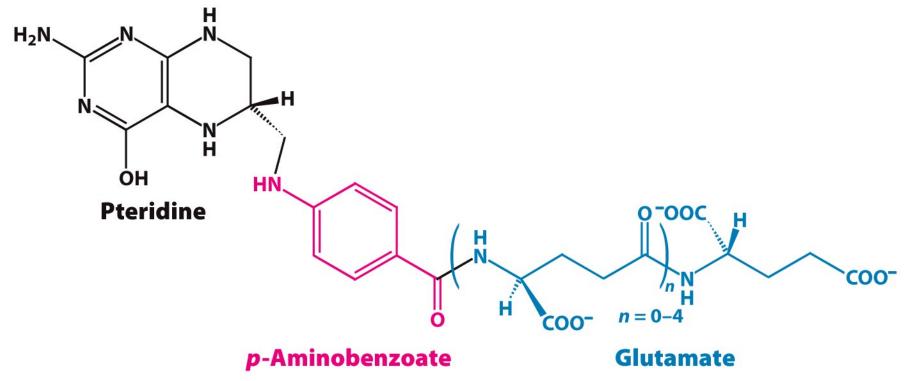


Figure 31.7

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Table 31.1 One-carbon groups carried by tetrahydrofolate

	Group	
Oxidation state	Formula	Name
Most reduced (= methyl)	—СН ₃	Methyl
Intermediate (= formaldehyde)	—CH ₂ —	Methylene
Most oxidized (= formic acid)	—сно	Formyl
	—CHNH	Formimino
	—сн=	Methenyl

Figure 31.8

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$$\begin{array}{c} -OOC \\ H \\ H \\ \end{array}$$

$$+ ATP \\ \begin{array}{c} -OOC \\ H \\ \end{array}$$

$$+ ATP \\ \begin{array}{c} -OOC \\ H \\ \end{array}$$

$$+ P_i + PP_i$$

$$+ P_i + PP_i$$

$$+ P_i + PP_i$$

Methionine

S-Adenosylmethionine (SAM)

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Riochemistry: A Short Cour

S-Adenosylmethionine (SAM)

S-Adenosylhomocysteine

Homocysteine

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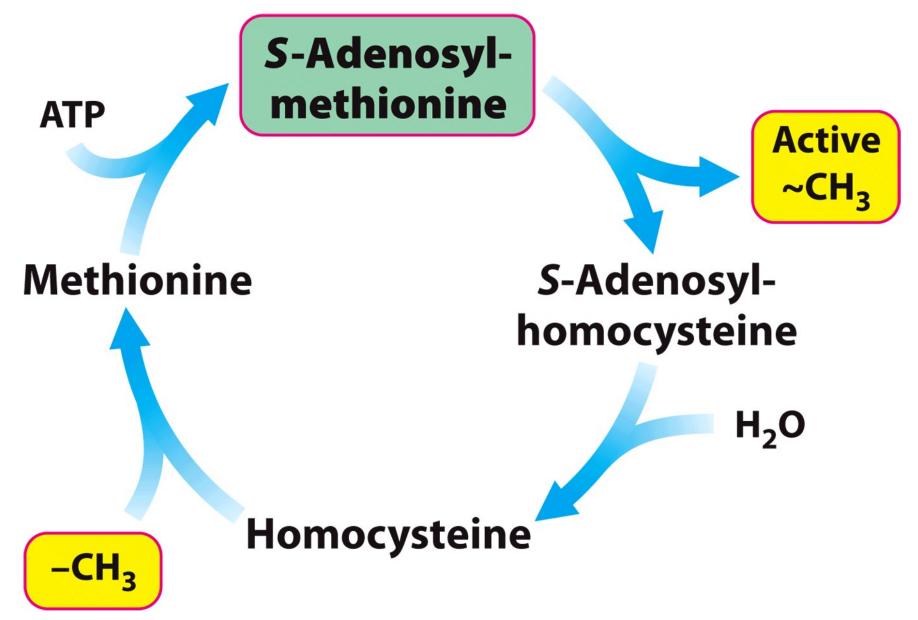


Figure 31.9

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Inhibited by Z A B C D E Z

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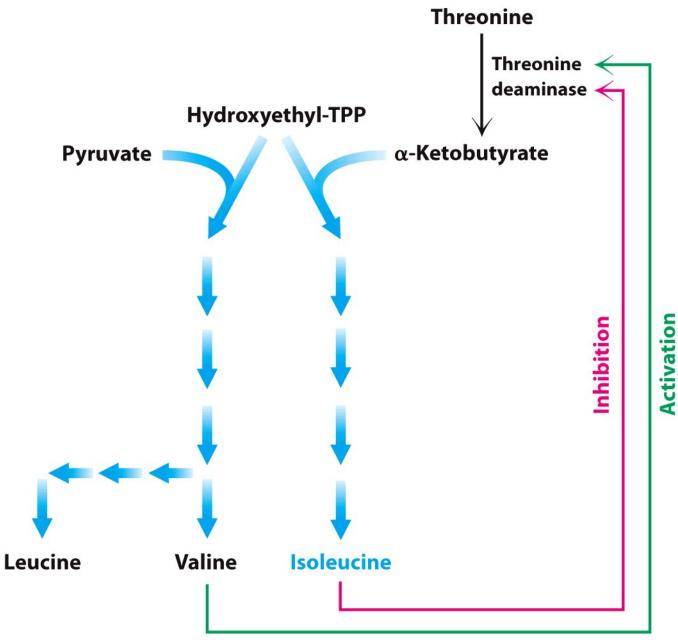


Figure 31.11

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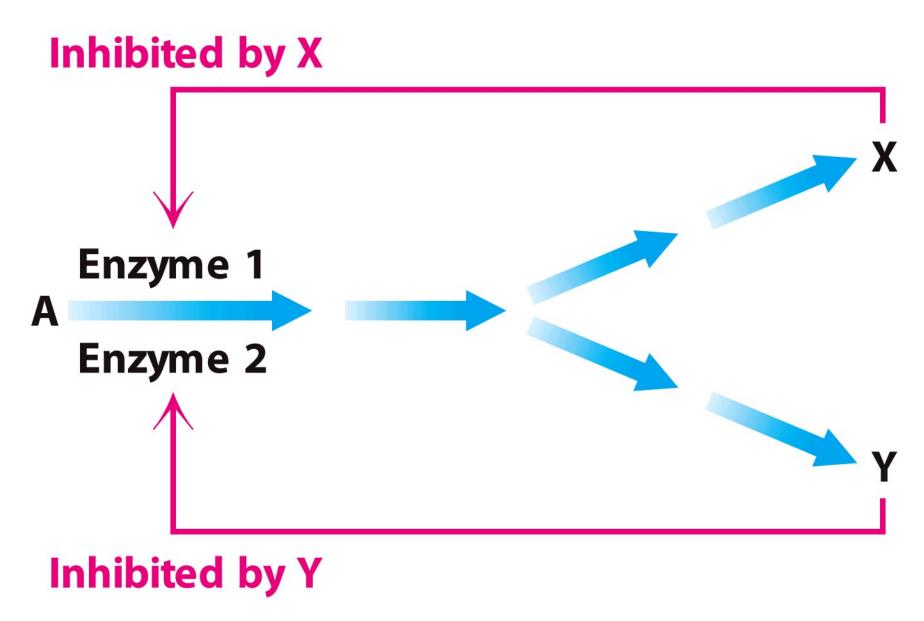


Figure 31.12

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