

Chapter 26, Nutrition and Metabolism

“Apply What You Know” Answers

- p. 996—Leptin and CCK are peptides, so if taken orally, they would probably be digested and would have no pharmacological effect.
- p. 999—By the time blood passes through the capillaries and into the veins, it has given up some of its glucose to the tissues. Thus, less glucose is found in the venous blood than in the arterial blood (exceptions being in the hepatic portal system during the absorptive state, and from the hepatic veins to the left ventricle in the postabsorptive state).
- p. 1003—Such a person will be in a state of positive nitrogen balance, because the individual is using amino acids to synthesize protein and rebuild damaged tissue. Nitrogen intake thus exceeds nitrogen excretion in such circumstances.
- p. 1008—Lactic acid has more free energy than pyruvic acid. The fermentation step that converts pyruvic acid to lactic acid is a reduction reaction. Reduction reactions increase the free energy content of the product.