10.E: Exercises

It's Your Turn

1. Make a chart of the vitamins and minerals important for metabolism and list their main functions.
2. List four functions of blood.
3. With regard to the functions of iron in metabolism and blood health, describe how low iron levels lead to the characteristic signs and symptoms of iron-deficiency anemia.

Apply It

1. Draw a flow chart of the stages of nutrient catabolism and point out where the B vitamins are required.
2. Summarize in a paragraph why a pregnant woman requires more iron in the diet and why it is important for newborn babies to be screened for iron deficiency.
3. Plan a daily menu that meets the RDA for iron and iron-absorption enhancers.

Expand Your Knowledge

1. Read “Sir Frederick Hopkins—Nobel Lecture” on the history of the discovery of vitamins and summarize in a paragraph or two the importance of continuing scientific investigation to define the functions of vitamins in order to improve the health of humans. [http://www.nobelprize.org/nobel_prizes/medicine/laureates/1929/hopkins-lecture.html](http://www.nobelprize.org/nobel_prizes/medicine/laureates/1929/hopkins-lecture.html)
2. Go to the USDA database [http://www.ars.usda.gov/Services/docs.htm?docid=20958](http://www.ars.usda.gov/Services/docs.htm?docid=20958) and prepare a list of the top...
ten food sources of vitamin B₆ and vitamin B₁₂.

3. Why would having too many red blood cells decrease the amount of oxygen delivered to cells? To help answer this question visit the website of the National Heart, Lung, and Blood Institute (http://www.nhlbi.nih.gov/health/dci/Diseases/poly/poly_all.html).