Chapter 6 Summary

• Food passes through the digestive tract:
  – Mouth
  – Pharynx
  – Esophagus
  – Stomach
  – Small intestine
  – Large intestine—during physical digestion.

• The accessory organs:
  – Salivary glands
  – Liver
  – Gall bladder
  – Pancreas

• Supply chemicals that also contribute to the digestion of food as it passes through the digestive tract.

Chapter 6 Summary

• The stomach supplies chemicals to aid digestion as well as generating physical contractions to physically break down food.

• The food is eventually liquefied into soluble units that can pass through cell membranes for transport via the circulatory system to all the cells in the body.

• The waste materials from the digestive process leave the body via the large intestine.

Chapter 6 Summary

• The nutrients that food supply include:
  – Carbohydrates
  – Lipids (fats)
  – Protein
  – Nucleic acids.

• Carbohydrates and lipids are broken down to supply energy; lipids also supply material for the cell membranes.

• Proteins are structurally and functionally diverse. They assist in:
  – Transport
  – Immunity
  – Muscle action
  – Used in most cellular structures.
Chapter 6 Summary

- **Nucleic acids** direct growth and development. Enzymes speed up chemical reactions, particularly for the production of energy.
- **Vitamins and minerals** are organic and inorganic substances that enable chemical reactions to occur and aid in tissue development and growth and immunity. These substances are needed for a healthy, functional human body.

Chapter 6 Summary

- Disorders of the digestive system and its accessory organs include:
  - Ulcers
  - Inflammatory bowel disease
  - Hepatitis
  - Cirrhosis
  - Gallstones.
- All disorders that affect digestion, including eating disorders, can seriously damage overall health by depriving the body cells of the nutrients they need to survive.