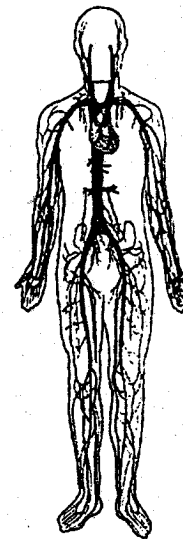
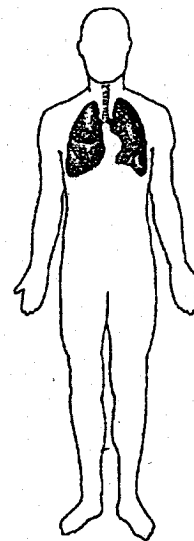
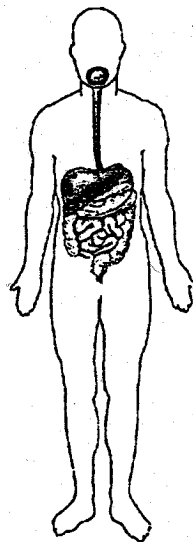
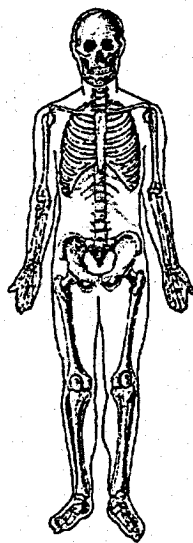
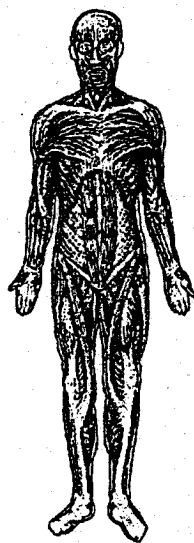


**Figure 33.9**  
Human organ systems and their functions.



**Name of System**

**Muscular system**

**Skeletal system**

**Digestive system**

**Respiratory system**

**Circulatory system**

**Life Process**

*Acquires materials and energy*

*Acquires materials and energy*

*Acquires materials and energy*

*Exchanges gases*

*Transports material*

**Specific Functions**

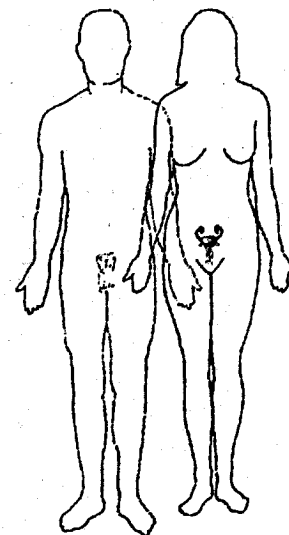
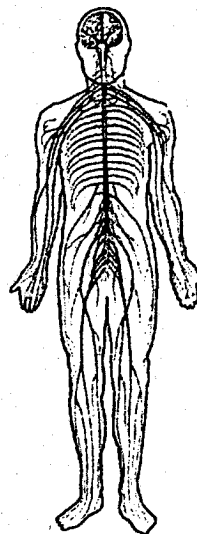
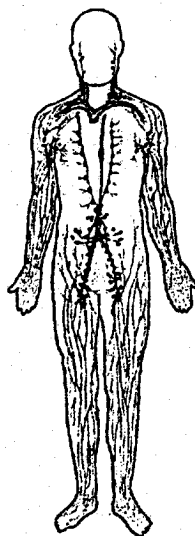
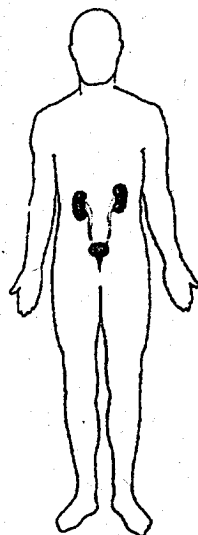
Produces body movements; produces body heat; maintains posture and supports the body

Provides rigid framework for body movement; supports and protects internal parts; produces blood cells; stores minerals

Digests food into small molecules and absorbs these molecules

Exchanges gas between external environment and blood; maintains blood pH by excreting carbon dioxide

Transports nutrients and oxygen to and metabolic wastes from cells; distributes hormones; protects against injury and microbes



**Excretory system**

**Lymphatic system**

**Nervous system**

**Endocrine system**

**Reproductive system**

*Excretes wastes*

*Protects the body from disease*

*Coordinates body activities*

*Coordinates body activities*

*Produces offspring*

Maintains volume and chemical composition of blood and tissue fluid

Transports excess tissue fluid to bloodstream; transports fat to blood; helps provide immunity against disease

Along with endocrine system regulates body systems; learning and memory

Secretes hormones that regulate body metabolism, growth, and reproductive system

Male: produces hormones and sperm; transfers sperm to female. Female: produces hormones and egg; provides site for fertilization of egg, implantation, and development of embryo and fetus