Vocabulary Chapter 16  The Human Animal: Maintenance of the Internal Environment

**homeostasis**
The process of maintaining a stable internal environment in the body
*Example: When we are feeling well, our homeostasis is balanced.*

**vein**
A blood vessel which returns blood to the heart
*Example: The walls of veins are not thick as blood pressure is low.*

**artery**
A blood vessel which carries blood away from the heart and out to the parts of the body
*Example: The walls of arteries are thick because of high blood pressure.*

**capillaries**
Small blood vessels connecting arteries to veins
*Example: The capillaries in our intestines help with absorption of food.*

**valve**
A structure found in the heart and veins designed to prevent the backflow of blood
*Example: The valves in the athlete’s heart were working well.*

**stroke**
A potentially fatal condition which develops as a result of a blood clot or blockage in a blood vessel in the brain
*Example: Strokes can lead to partial paralysis of the human body.*

**clot**
A condition in the chemistry of blood in which the blood stops leakage from a wound or other injury in which blood is released
*Example: Blood clots can be helpful or harmful. It depends on the situation.*

**heart attack**
A condition that develops when the blood flow to the heart is blocked or stopped
*Example: The heart attack resulted when a blood clot blocked the main artery to the heart.*

**vessel**
A tube-like structure found in organisms and designed to carry liquids
*Example: Arteries and veins are blood vessels.*

**immunity**
Resistance to disease
*Example: The vaccination has produced an immunity to smallpox in most Americans.*

**pathogen**
Any organism that can carry disease.
*Examples: rats, germs, viruses*

**mucus**
A thick sticky liquid
*Example: Mucous membranes in our respiratory system trap and remove dust.*
antigen
a substance that the human body recognizes as dangerous
Example: Parts of viruses are attacked by the body as antigens.

autoimmune
A situation in the body in which the body’s defense mechanisms attack its own cells
Example: AIDS is an autoimmune disease.

respiration
The exchange of gases in and out of the body
Example: Respiration is the process in which oxygen enters our bloodstream.

breathing
The movement of air into and out of the lungs.
Example: Breathing is involuntary. You don’t need to think about it.

hemoglobin
A pigment in red blood cells that allows them to carry oxygen
Example: Hemoglobin makes respiration possible in humans.

metabolism
The total of all the chemical reactions in an organism
Example: Faster metabolism produces more heat in the body.

shiver
A process in which muscles generate heat
Example: Shivering during cold weather warms our bodies.

radiation
Direct heat transfer
Example: The sun warms our bodies by radiation

receptor
A special cell which can receive signals such as light or heat
Example: Our eyes contain many light receptor cells.