

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.