

Glossary

Abscess a localized pocket of infection or purulent exudate surrounded by inflammation.

Accommodation the lens of the eye adjusts its shape for distance.

Acetylcholine (ACh) a neurotransmitter.

Achlorhydria lack of hydrochloric acid in the gastric secretions.

Acidosis an increased number of hydrogen ions; a blood pH of less than 7.4.

Acute a disease with sudden onset of signs and short course.

Adenocarcinoma malignant tumor arising from glandular epithelial cells.

Adenoma benign tumor made up of glandular epithelial cells.

Adhesion a band of fibrous scar tissue forming an abnormal connection between two surfaces or structures, e.g., binding two loops of intestine together.

Adrenergic related to the sympathetic nervous system transmitters, norepinephrine (noradrenaline) and epinephrine (adrenaline).

Afferent toward the center; e.g., afferent nerves carry impulses toward the central nervous system.

Agenesis lack of an organ or structure because of a developmental error.

Agglutination clumping together of cells or particles.

Albumin a plasma protein responsible for maintaining osmotic pressure of the blood.

Aldosterone a mineralocorticoid hormone that increases the reabsorption of sodium and water in the renal tubules.

Alkalosis a decreased number of hydrogen ions; a blood pH greater than 7.4.

Allele one of two forms of a gene at corresponding sites on a chromosome pair; the code for phenotype or characteristic manifested in an individual.

Allergen an antigen that can initiate an allergic reaction.

Alopecia hair loss.

Amenorrhea the absence of menstrual periods.

Amnesia loss of memory.

Amniocentesis removal of a small amount of amniotic fluid from around the fetus for examination and diagnosis.

Amputation the removal of a body part, often a limb or part of a limb, to remove a tumor, prevent spread of infection, or relieve pain.

Anabolism the building up or synthesis of complex compounds from simple molecules.

Anaerobic metabolism and function without oxygen.

Analgesic a substance that relieves pain.

Anaphylaxis a life-threatening systemic allergic or hypersensitivity reaction, with respiratory obstruction and decreased blood pressure.

Anaplasia undifferentiated primitive cells of variable size and shape, associated with cancer.

Anasarca severe generalized edema.

Anastomosis a connection between two blood vessels or tubes.

Androgen steroid hormone that enhances male characteristics, e.g., testosterone.

Anemia a decrease in circulating hemoglobin and oxygen-carrying capacity in the blood because of decreased erythrocyte production, decreased hemoglobin production, excessive hemolysis, or loss of blood.

Anencephaly congenital condition where most of the brain and skull are absent.

Anesthetic a substance that reduces sensation, locally or systemically.

Aneurysm an outpouching or abnormal dilated area in a blood vessel.

Angiogenesis the development of new capillaries.

Angiography an examination of blood vessels using radiographs with a contrast medium.

Angioplasty repair of a blood vessel.

Angiotensin-Converting Enzyme (ACE) an enzyme that converts angiotensin I to angiotensin II, a potent general vasoconstrictor and stimulus for aldosterone secretion.

Anion a negatively charged ion such as chloride, Cl⁻.

Ankylosis fixation or immobility at a joint.

Anomaly an abnormal structure, often congenital.

Anorexia loss of appetite.

Antagonism opposing action.

Antibiotic a substance derived from microorganisms that is used to treat infection.

Antidiuretic Hormone (ADH) increases absorption of water in the renal tubules.

Antigen a substance that causes the production of antibodies.

Antimicrobial an agent that kills or inhibits growth and reproduction of microorganisms.

Antineoplastic a substance or process that destroys neoplastic cells.

Antioxidant a substance such as vitamin E that reduces oxygenation and production of damaging "free radicals" during cell metabolism.

Antiseptic reduces the number of microorganisms on the skin.

Anuria absence of urine production.

Aphasia loss of the ability to communicate, speak coherently, or understand speech.

Apnea lack of breathing.

Apoptosis normal programmed cell death in tissues.

Arrhythmia loss of normal heart rate and rhythm; dysrhythmia.

Arteriosclerosis hardening and loss of elasticity of the arterial wall with narrowing of the lumen.

Arthroscopy examination and possible treatment of a joint through insertion of a small instrument.

Ascites abnormal accumulation of fluid in the abdominal cavity.

Asepsis the absence of pathogens.

Aspiration inhaling liquid or solid material into the lungs or withdrawing fluid or tissue from a cavity or organ.

Asymptomatic no signs or symptoms.

Asystole absence of cardiac contractions; cardiac arrest or standstill.

Ataxia impaired coordination, imbalance, staggering gait.

Atelectasis collapse and nonaeration of part or all of a lung.

Atherosclerosis development of obstruction by cholesterol plaques and thrombus on the walls of large arteries.

Athetoid involuntary writhing movement of limbs and body.

Atopic inherited tendency to hypersensitivities.

Atresia blind-end to a tube; loss of the lumen.

Atrophy degeneration and wasting of tissue, organs, or muscle due to decrease in cell size.

Atypical unusual, not characteristic.

Aura a sensation, e.g., visual or auditory, usually preceding a seizure or migraine headache.

Auscultation listening for sounds, perhaps with a stethoscope, within the body, e.g., lungs, heart, intestines.

Autoantibody antibodies to self-antigens such as cells or DNA.

Autoclave an appliance to sterilize instruments or materials with steam at high temperature and pressure.

Autodigestion abnormal destruction of tissues by activated digestive enzymes.

Autoimmune the development of antibodies to self-antigens.

Autoinoculation the spread of infection, e.g., by fingers, from one site to a second site on the body.

Autopsy an examination of part or all of a body, including organs, after death (postmortem) to determine the cause of illness and death.

Autoregulation automatic regulation or reflex control of blood flow in an area depending on the local needs.

Azotemia excess urea and other nitrogen wastes in the blood, as in renal failure.

Bacteremia bacteria present in the circulating blood.

Bactericidal chemical that destroys bacteria.

Bacteriostatic substance that reduces the growth and reproduction of bacteria.

Baroreceptor a sensory nerve receptor that is stimulated by a change in pressure, perhaps blood pressure.

Basal Metabolic Rate (BMR) the amount of energy (measured by oxygen requirements) to maintain essential function in the body at rest.

Benign nonthreatening, mild, or nonmalignant.

Bifurcation the division of a tube or vessel into two channels or branches.

Bilirubin a product from the breakdown of hemoglobin, excreted in bile.

Biopsy the removal of a small piece of living tissue for microscopic examination to determine a diagnosis.

Bolus a round mass of food ready to be swallowed; a dose of concentrated drug administered intravenously all at once.

Borborygmus the rumbling or gurgling sounds from gas in the intestine.

Bradycardia abnormally slow heart rate.

Bradykinin a chemical mediator released during inflammation causing vasodilation.

Bronchoconstriction contraction of smooth muscle in the bronchioles, narrowing the airways.

Bronchodilation relaxation of smooth muscle in the bronchioles, widening the airway.

Bruit an abnormal sound heard by auscultation, e.g., blood flow in an aneurysm.

Cachexia extreme loss of weight and body wasting associated with serious illness.

Calcification deposits of calcium in tissues.

Calculus a stone developing in the body, e.g., kidney or bile.

Carcinogen a substance that causes cancer by changing normal cells.

Cardiomegaly a heart that is larger than normal size.

Caries (dental) destruction of the tooth surface; a cavity or erosion in the enamel surface of a tooth.

Carpopedal Spasm a strong muscle contraction of the hand or foot.

Carrier a person hosting an infectious pathogen, who shows no signs of the disease, but could transmit the infection to others.

Catabolism the breakdown of complex molecules into simple molecules during metabolism.

Cataract an opacity of the lens of the eye.

Catheter a small tube inserted into the bladder to remove urine; a tube inserted into a blood vessel or other structure to allow drainage or maintain an opening.

Cation a positively charged ion such as sodium, Na^+ .

Chemical Mediator a chemical released in the body during an inflammatory response or immune response.

Chemoreceptor a sensory nerve receptor stimulated by chemical changes such as pH.

Chemotaxis the movement of cells toward or away from an area of the body in response to chemical signals; e.g., phagocytic cells move to an area of tissue injury.

Cholestasis obstructed flow of bile in the liver or biliary tract.

Chorea involuntary repeated jerky movements of face and limbs.

Chorionic Villus part of the placenta that can be tested for genetic defects in the fetus.

Chromosome made up of genes, the genetic code of the living cell, consisting of DNA.

Chronic a condition with insidious or slow onset, mild but continuous manifestations, and long-lasting, often progressive effects.

Chyme thick, semifluid mixture of partially digested food passing out of the stomach into the duodenum.

Clonic Movements consisting of rapid, alternating contraction and relaxation of skeletal muscle.

Coagulation the process of changing a liquid into a solid, e.g., blood forming a thrombus.

Cognitive intellectual abilities, e.g., memory, thinking, problem solving, judgment, initiative.

Cohesion tendency to stick together or be attracted.

Colic sharp severe pain resulting from strong, smooth muscle contraction, e.g., intestinal.

Collagen the common protein making up connective tissue and bone.

Collagenase an enzyme that breaks down collagen fibers.

Colostomy surgical creation of an artificial opening from the colon onto the abdominal surface.

Coma unconscious state; person cannot be aroused.

Communicable Disease a disease that can be transmitted from an infected person, directly or indirectly, to other susceptible hosts.

Complement a series of inactive proteins circulating in the blood; when activated, they can destroy bacteria or antigens, or participate in the inflammatory response.

Compliance the ability of the lungs to expand and recoil or the patient's willingness to follow a prescribed treatment.

Congenital present at birth.

Contamination the presence of a pathogen on a body, clothing, or inanimate object.

Contracture shortening of a muscle or scar tissue causing immobility and deformity of a joint or structure.

Contralateral opposite side of the body.

Contusion tissue injury or bruise; bleeding into tissues.

Corticosteroid the steroid hormones from the adrenal cortex, including the glucocorticoids (cortisol) and mineralocorticoids (aldosterone).

C-reactive Protein (CRP) appears in the blood with inflammation and necrosis.

Crepitus the noise heard when the ends of a broken bone rub together or when fluid is present in the lung.

Culture growth of microorganisms on a specific nutritious medium in a laboratory.

Cyanosis bluish color of skin and mucosa that occurs when a large proportion of hemoglobin is unoxygenated.

Cyst a closed sac or capsule lined with epithelium, containing fluid.

Cytology the study of cells.

Cytotoxic a substance that damages or destroys cells.

Débridement surgical removal of dead tissue and foreign material from a wound.

Decubitus (Ulcer) skin breakdown from prolonged pressure on skin and tissue over a bony prominence leading to compressed blood vessels and ischemia.

Dehydration a deficit of water in the body.

Dementia progressive loss of intellectual function, loss of memory, personality change.

Demyelination loss of the myelin sheath from a nerve surface, interfering with conduction.

Denude stripping off skin, leaving bare.

Dermatome an area of skin innervated by a specific spinal nerve.

Detoxification the removal of a toxic or poisonous material and or neutralization of its effects on a person.

Dialysis a procedure to remove wastes and excess fluid or adjust blood to normal values in cases of renal failure.

Diapedesis the passage of leukocytes through intact capillary walls to a site of inflammation.

Diaphoresis excessive perspiration.

Differential Count the proportion of each type of leukocyte in a blood sample.

Differentiation increased specialization of cells for certain functions.

Diffusion the movement of molecules from an area of high concentration to low concentration.

Diplopia double vision.

Disinfectant a chemical that may destroy or inhibit the growth and reproduction of microorganisms.

Disorientation mental confusion with inadequate or incorrect awareness of time, place, and person.

Diuresis excessive amount of urine.

Dyscrasia abnormality of the blood or bone marrow; abnormal cell characteristics or numbers.

Dysentery severe diarrhea, often bloody, with cramps.

Dyspareunia pain or discomfort in the pelvis during sexual intercourse.

Dysphagia painful or difficult swallowing.

Dysplasia disorganized cells that vary in size and shape with large nuclei.

Dyspnea difficulty breathing.

Dysuria painful urination.

Ecchymoses reddish blue discoloration of skin or mucosa because of bleeding.

Ectopic away from the normal position, displaced.

Edema the accumulation of excess fluid in cells, tissue, or a cavity, resulting in swelling.

Efferent moving away from the center; e.g., efferent nerve fibers carry motor impulses to muscles.

Effusion the accumulation of fluid leaking from a blood vessel into a cavity or potential space.

Electrocardiogram (ECG) a record of conduction in the heart.

Embolus a mass, e.g., blood clot, air, fat, tumor cells, that breaks away into the circulation and obstructs a blood vessel.

Embryo the early stage of an organism's life; in humans, the developmental stage between implantation in the uterus and 8 weeks.

Encephalopathy impaired function of the brain.

Endarterectomy removal of the intima and any obstructive material in an artery.

Endemic a disease that is always present in a specific region.

Endogenous originating from within the body.

Endorphins morphine-like substances produced in the body that block pain stimuli at sites in the brain and spinal cord.

Endoscope an illuminated optic instrument that can be inserted into a body cavity, tube, or organ to visualize any changes (bronchoscope, cystoscope, laparoscope).

Endospore (Spore) a latent form that certain bacteria can assume under adverse conditions, in order to survive extreme temperatures, drying, or chemicals.

Endotoxin a toxin released from the walls of certain Gram-negative bacteria following lysis.

Enteric related to the intestine.

Enterotoxin a toxin from certain bacteria that damages the intestinal mucosa.

Enzyme-Linked Immunosorbent Assay (ELISA) a test to detect certain antibodies.

Epidemic a disease occurring in higher numbers than usual in a certain population within a given time period.

Epistaxis nose bleed.

Erythema redness and inflammation of the skin or mucosa due to vasodilation.

Erythrocyte Sedimentation Rate (ESR) the rate at which RBCs settle out of a blood specimen (containing anticoagulant); an elevation in ESR is a general characteristic of inflammation.

Etiology cause or origin of a disease or abnormality.

Euphoria an exaggerated feeling of well-being or unrealistic elation.

Eupnea normal, regular, quiet breathing.

Exacerbation an acute episode or increased severity of manifestations.

Excoriation an abrasion or injury to the skin.

Exogenous originating from outside the body.

Exteroreceptors sensory receptors located close to the body surface and are sometimes referred to as cutaneous receptors.

Exotoxin toxin excreted by a bacterium, e.g., neurotoxin or enterotoxin.

Exudate a fluid that accumulates and may leak from tissue, e.g., a serous exudate due to allergy, a purulent exudate, or pus associated with infection.

Fascia sheet of fibrous connective tissue separating and supporting muscle.

Fecalith a hard mass of feces, often impacted, in the intestine.

Ferritin a storage form of iron.

Fetus the human child in utero between 8 weeks and birth.

Fibrinogen the plasma protein that is formed into solid fibrin strands during the clotting process.

Fibrinolysis the breakdown of fibrin.

Fibrosis growth of fibrous or scar tissue related to collagen deposits.

Fimbria a hair-like projection on some bacteria.

Fissure a crack or split in the surface of skin or mucous membrane.

Fistula an abnormal tube or passage formed between structures, e.g., between the esophagus and trachea or between the rectum and skin.

Flaccidity lack of tone in muscle; weakness and softness.

Foramen an opening in bone or membrane.

Free Radical a byproduct of cell metabolism that damages cell membranes, proteins and DNA.

Fulminant rapid, severe, uncontrolled progress of a disease or infection.

Ganglion a collection of nerve cell bodies, usually outside the central nervous system.

Gangrene necrotic tissue infected by bacteria.

Gene a unit of DNA (a nucleic acid sequence) in a particular location on a specific chromosome.

Genetic inherited.

Genotype the genetic makeup of a cell or individual.

Gestation the time between conception and birth.

Gingivitis inflammation of the gums in the mouth.

Globulin a group of proteins in the blood.

Glucocorticoid the steroid hormones from the adrenal cortex, e.g., cortisol (hydrocortisone), that increase blood glucose levels and act to decrease inflammation and allergic reactions.

Gluconeogenesis the production of glucose from protein or fat.

Glucosuria glucose in the urine.

Glycemic Index the rate at which an ingested carbohydrate elevates blood glucose levels.

Glycogen a polysaccharide, made up of glucose molecules, stored in skeletal muscle or the liver.

Glycoprotein a combination of protein and carbohydrate.

Gram Stain a stain for bacteria that differentiates the cell walls of Gram-positive bacteria from that of Gram-negative bacteria; used for identification and choice of drug treatment.

Granulation Tissue newly developed fragile tissue, consisting of fibroblasts and blood vessels, formed during healing.

Granuloma a nodular destructive mass associated with some chronic inflammation or infection.

Gynecomastia abnormal breast enlargement in men.

Hallucination a sensory perception, e.g., visual or auditory, that is not real but results from nervous system excitation.

Hemarthrosis bleeding into a joint cavity.

Hematemesis vomiting blood; may be called "coffee-grounds" vomitus because it appears brown and granular.

Hematocrit percentage of erythrocytes in a blood sample.

Hematoma a blood clot formed following bleeding into a tissue or organ.

Hematuria blood in the urine; may be microscopic (small amount) or gross (large amount, darkening the color).

Hemiparesis weakness on one side of the body.

Hemiplegia paralysis on one side of the body.

Hemolysis destruction of erythrocytes with release of hemoglobin.

Hemoptysis frothy sputum containing streaks of blood, usually bright red; spitting up blood.

Hemostasis blood clotting or controlling bleeding.

Heparin a substance present in the body to prevent blood clotting.

Hepatomegaly enlarged liver.

Hepatotoxin a substance that damages the liver.

Heterozygous having two different alleles at corresponding points on a chromosome pair.

Hirsutism excessive body hair in a male pattern.

Histamine a chemical released from mast cells and basophils during immune reactions; causes vasodilation and bronchoconstriction.

Holistic an approach to health care that includes the physical, mental, emotional, and spiritual needs of the patient.

Homeostasis a relatively stable or constant environment in the body, including blood pressure, temperature, and pH, maintained by the various control mechanisms.

Homozygous having two identical alleles at corresponding points on a chromosome pair.

Hypercapnia increased level of carbon dioxide (CO₂) in the blood.

Hyperemia increased blood flow in an area, resulting in a warm, red area.

Hyperkalemia abnormally high level of potassium ions (K⁺) in the blood.

Hypernatremia abnormally high level of sodium ions (Na⁺) in the blood.

Hyperplasia an abnormal increase in the number of cells resulting in an increased tissue mass.

Hyperreflexia excessive reflex responses.

Hypertension a persistent elevation of blood pressure.

Hypertonic a solution with a greater concentration of solutes or higher osmotic pressure than that inside the cells present in the solution.

Hypertrophy increased size of an organ or muscle due to increased size of individual cells.

Hyperuricemia excessive uric acid in the blood.

Hypoalbuminemia abnormally low serum albumin levels.

Hypoproteinemia abnormally low level of plasma protein in the blood.

Hypotension low blood pressure and decreased tissue perfusion.

Hypovolemia decreased blood volume.

Hypoxemia insufficient oxygen in the arterial blood.

Hypoxia a decreased or insufficient level of oxygen in the tissues.

Iatrogenic caused by a treatment, procedure, or error.

Ictal related to a seizure (postictal—following a seizure).

Icterus jaundice.

Idiosyncrasy an unusual reaction by an individual to a normally harmless substance.

Idiopathic no known cause.

Immunocompetent a person who can produce a normal immune response.

Immunodeficiency (Immunocompromised, Immunosuppressed) reduced ability of the immune system to produce an immune response to defend the body.

Immunoglobulin a protein with antibody activity.

Incidence the number of new cases of a disease in a certain population within a time period.

Incontinence lacking voluntary control over urination or defecation.

Incubation Period the time between the initial exposure to the infectious agent and the appearance of the first signs of infection.

Infarct, Infarction an area of dead tissue caused by lack of blood supply.

Inflammation the response to tissue damage, indicated by redness, swelling, warmth, and pain.

Insidious a disease whose onset is marked only by vague or mild general signs.

In Situ cell growth and reproduction, such as cancer, remaining at the original site, not invasive or spreading.

Interferons a group of antiviral glycoproteins produced by viral-infected cells.

Interleukin protein (cytokine) primarily produced by T cells, active in the inflammatory and immune responses and leukocyte communication.

Intraarticular into the joint cavity or joint space.

Intractable resistant to treatment, e.g., pain that cannot be relieved by drugs.

Ipsilateral same side of the body.

Ischemia decreased blood supply to an organ or tissue.

Isoenzymes cell enzymes, specific to certain organs, that differ slightly in structure, but have similar functions.

Jaundice yellow color of the sclera of the eye and skin due to excessive bilirubin in the body fluids for any reason.

Karyotype a visual demonstration of the pairs of cell chromosomes arranged in order of size.

Keloid abnormal healing causes overgrowth of collagen and mass of fibrous tissue.

Ketone or Ketoacid chemical byproduct of lipid metabolism.

Kyphosis increased convex curvature of the spine in the thoracic region; "hunchback".

Labile unstable, changing.

Laryngospasm closure of the larynx obstructing the airway.

Latent present but hidden and inactive.

Lesion an abnormality in the structure of a tissue or organ.

Leukocytosis an above-normal number of leukocytes (WBCs) in the blood.

Leukopenia a decreased number of leukocytes in the blood.

Lichenification hardening and thickening of the skin; leather-like.

Lithiasis presence or formation of stones or calculi, e.g., cholelithiasis—gallstones.

Lordosis exaggerated concave curve of the lumbar region of the spine.

Lymphadenopathy a disease affecting the lymph nodes.

Lymphoma malignant neoplasm of lymphoid tissue.

Lysis destruction of a cell.

Lysosome a membrane-bound vesicle in a cell containing digestive or lytic enzymes, including lysozyme.

Lysozyme enzymes found in some cells and in body fluids such as tears, sweat, or saliva, which can destroy some microorganisms.

Macroangiopathy degenerative changes in the walls of large arteries.

Malabsorption impaired absorption of nutrients from the intestines.

Malaise a general feeling of discomfort or unease, of being unwell.

Mast Cells located in the tissues, they release chemicals such as histamine, heparin, and bradykinin in response to injury or foreign material.

Mediastinum the area of the thoracic cavity between the lungs, in which is located the trachea, esophagus, and large blood vessels.

Megaloblast abnormally large, nucleated, immature erythrocytes.

Melena black, tarry stool caused by bleeding in the digestive tract.

Metabolic Syndrome syndrome associated with obesity including hypertension, type 2 diabetes and hyperlipidemia.

Metabolism the chemical processes occurring in living cells, consisting of anabolism (synthesis or building up of new compounds) and catabolism (breakdown of complex substances).

Metaplasia replacement of one mature cell type by another mature cell type.

Metastasis spread of cancer cells to distant sites by the blood or lymphatics; secondary malignant tumor.

Microcirculation blood flow in the very small blood vessels, e.g., capillaries.

Micrometastasis spread of malignant cells not yet detectable.

Microorganism very small living organism, not visible to the naked eye, usually single-celled.

Microscopic visible only when magnified by lenses in a microscope.

Mitosis a process of cell reproduction resulting in two daughter cells with the same DNA as the parent cell.

Morbidity the rate at which a disease occurs; the proportion of a group affected by a disease.

Morphologic the physical size, form, structure, and shape of cells or organs.

Mortality the number of deaths in a group for a specific disease.

Murmur an abnormal sound heard in the heart, caused by a defective valve or opening in the heart.

Mutation a change in the genetic makeup (DNA) of a cell, which will be inherited.

Mycosis fungal infection.

Necrosis death or destruction of tissue.

Neonate newborn child.

Neoplasm abnormal growth of new cells, benign or malignant.

Neuritis inflammation of a nerve.

Neuropathy degeneration of nerve fibers.

Neurotoxin a bacterial toxin that affects the nervous system function.

Neurotransmitter a chemical released upon stimulation from vesicles at the end of the axon of a neuron, in order to stimulate the receptor site.

Neutropenia a deficit of neutrophils in the blood.

Nevus a darkly pigmented lesion on the skin; a mole.

Nociceptor receptors for pain stimuli.

Nocturia urination required during sleep at night.

Nosocomial an infection acquired while hospitalized.

Nuchal Rigidity a stiff neck, often associated with meningitis or brain hemorrhage.

Nystagmus involuntary rhythmic movements of the eyes in any direction.

Occlusion an obstruction or blockage.

Occult hidden, difficult to detect.

Occurrence the incidence and prevalence of disease.

Oliguria abnormally small volume of urine output.

Oncogenic a substance or situation that causes cancer.

Oncology the study of cancer.

Opioid natural or synthetic substance that binds to opioid receptors in the central nervous system, relieving pain; related to opium derivatives such as morphine or codeine.

Opportunist a microorganism, normally nonpathogenic, that causes infectious disease when the person's resistance is reduced, microbial balance is upset, or the microbe is transferred to another part of the body.

Organogenesis the formation and differentiation of organs and systems during embryonic development.

Orthopnea difficult or labored breathing when recumbent that is usually relieved by an upright position.

Orthostatic Hypotension a drop in blood pressure occurring when a person rises from a supine to a standing position.

Osmosis the force that draws water through a semipermeable membrane from a solution of lower solute concentration to a solution of higher concentration.

Osmoreceptors sensory nerve receptors stimulated by changes in fluid and electrolyte concentrations.

Osteodystrophy a general defect in bone development related to altered calcium and phosphate metabolism.

Ototoxic a substance causing damage to the inner ear or auditory nerve.

Palliative providing comfort and relieving pain and other symptoms of a disease without effecting a cure.

Pancytopenia decrease in all blood cells, erythrocytes, leukocytes, and thrombocytes.

Pandemic a worldwide increase in the numbers of people affected by a disease.

Paraneoplastic Syndrome additional disorders such as Cushing's syndrome resulting from some malignant tumors.

Paraplegia paralysis of the lower limbs.

Parasite an organism that lives on or in another living organism.

Parenteral the injection of substances into the body, e.g., intramuscularly or intravenously.

Paresis muscle weakness or mild paralysis.

Paresthesia abnormal sensations.

Paroxysmal Nocturnal Dyspnea awakening in severe respiratory distress, usually associated with pulmonary edema.

Pathogen a disease-causing microorganism.

Pathogenesis the early stages in the development of a disease.

Pathogenicity ability of microorganism to cause disease.

Perforation a hole through the wall of a tube or hollow structure.

Perfusion the flow of blood in the microcirculation to supply oxygen and nutrients to cells.

Periodontal Disease inflammation and damage to the structures anchoring the teeth, including the periodontal ligament, gingiva, and alveolar bone.

Permeable Membrane permits certain substances to pass through.

Petechiae tiny, pinpoint hemorrhages under the skin.

Phagocyte a cell that can surround, ingest, and destroy microorganisms, cell debris, or foreign substances, e.g., a macrophage.

Phenotype the characteristics manifested by a person depending on genetic and environmental factors.

Phlebotomy incision into a vein and collecting of blood.

Photophobia increased sensitivity of the eyes to light.

Pili hair-like appendages on some bacteria for adhesion to tissue and transfer of DNA.

Placebo a medication that lacks active ingredients, prescribed for psychological effect or as part of research studies.

Plaque a flat raised covering or scale.

Plasma the liquid portion of blood, after cells are removed.

Polysaccharide a carbohydrate made up of many sugars; e.g., glycogen, starch.

Polyuria an abnormally large volume of urine excreted within a given time period.

Potentiate to increase the strength or effect.

Precursor a substance that can be used to form other materials.

Prevalence the total number of new and existing cases of a disease in a specific population at a given time.

Prion an infectious abnormal protein particle; does not contain DNA.

Probability the likelihood or chance of occurrence.

Prodromal the initial period in the development of disease before acute symptoms occur.

Prognosis the probable outcome of a disease.

Prophylactic a measure or drug to prevent disease.

Proprioceptors receptors that provide information about body movement, orientation, and muscle stretch.

Prostaglandins (PGs) a group of chemical substances in the body that can exert a variety of effects, such as vasodilation, muscle contraction, and inflammation.

Prosthesis an artificial replacement for a body part, e.g., a limb or heart valve.

Protease an enzyme that breaks down a protein into amino acids.

Proteinuria an abnormality whereby protein is found in the urine.

Pruritus itching sensation.

Pseudohypertrophy abnormal enlargement of tissue or organ due to excessive fat and fibrous tissue.

Ptosis drooping eyelid.

Pulse Pressure the difference between systolic and diastolic pressures.

Pulsus Paradoxus abnormal decrease in systolic pressure during inspiration.

Purpura reddish-blue discoloration of the skin due to bleeding; bruise.

Purulent like pus (microbes, WBCs, and cell debris); thick, yellowish material in tissue often resulting from bacterial infection.

Pyrexia fever.

Pyrogen a substance that causes fever, a rise in body temperature.

Pyuria pus in the urine.

Radioisotope a radioactive form of an element, giving off radiation (beta or gamma) in the body, used in diagnosis and therapy.

Radiosensitive responsive such as cells damaged by radiation.

Radiotherapy treatment of cancer with radiation from an external source (gamma rays), such as radioactive cobalt or an internal implant of radioactive material.

Rales a bubbly or crackling sound in the lungs caused by air mixing with fluid in the airways.

Reflux backward movement of fluid, e.g., from the stomach into the esophagus and mouth.

Regeneration tissue repair through replacement by identical functioning cells.

Regurgitation a reverse flow to the normal, e.g., vomiting.

Reservoir a site where pathogens can survive or multiply.

Resident Flora (also called microflora, indigenous flora, normal flora, microbiota) the variety of nonpathogenic microorganisms that normally permanently colonize various parts of the body.

Retroperitoneal behind the peritoneal membrane against the abdominal wall.

Retrovirus a virus containing RNA and the enzyme reverse transcriptase, required to convert RNA to DNA that is then integrated with host cell DNA.

Rhonchus a harsh noise heard in the lungs resulting from air passing through partial obstruction by thick mucus or exudates.

Sclerosis abnormal hardening of tissue.

Scotoma a defect in the visual field.

Sedative a substance that exerts a calming effect on a person.

Sedentary inactive lifestyle.

Seizure (Convulsion) sudden, involuntary movement with loss of awareness, caused by uncontrolled neuronal discharge in the brain.

Senescence related to aging, growing old.

Septicemia, Sepsis systemic infection arising from bacterial toxins in the circulating blood or bacteria reproducing and spreading through the circulating blood.

Serous watery secretion.

Serum the liquid portion of the blood, lacking cells and clotting factors.

Spasm a strong, involuntary muscle contraction.

Splenectomy removal of the spleen.

Splenomegaly enlarged spleen.

Stasis slowing of the normal flow of fluid.

Steatorrhea fatty, bulky stool resulting from malabsorption.

Stem Cell a basic cell that may divide to give rise to a variety of specialized cells, e.g., the blood cells.

Stenosis narrowing of a tube, valve, or opening (stricture).

Sterile absence of all forms of microorganisms.

Steroid hormones based on a cholesterol structure produced in the adrenal cortex or gonads.

Stomatitis inflammation and ulceration in the mouth.

Stricture abnormal narrowing of a duct or tube.

Stridor an abnormal high-pitched, crowing sound caused by obstruction in the trachea or larynx.

Stupor a state of extreme lethargy, unawareness, and unresponsiveness.

Subluxation partial dislocation of a joint.

Substernal Retraction the chest wall under the sternum moves inward during inspiration.

Supine lying down on the back.

Syncope fainting, temporary loss of consciousness.

Syndrome a group of signs and symptoms characteristic of a specific disorder.

Synergism a combination of substances or agents that produce an effect greater than expected.

Tachycardia excessively rapid heartbeat.

Tachypnea rapid, shallow respirations.

Tenesmus spasms or straining associated with forced or painful elimination of urine or stool.

Teratogen a substance or condition that impairs normal development of the embryo or fetus in utero, causing a congenital abnormality.

Tetany repeated skeletal muscle contractions or spasms, seen in the extremities and face, related to increased irritability of the nerves, often associated with hypocalcemia.

Therapeutic beneficial treatment.

Thrombocytopenia abnormally low number of thrombocytes or platelets.

Thrombus a blood clot attached inside a blood vessel.

Tinnitus abnormal ringing sound or noise in the ears.

Total Parenteral Nutrition (TPN) administration of a nutritionally complete fluid (protein, glucose, vitamins, etc.) into the superior vena cava.

Toxin a substance that can harm the body or interfere with its function; poisonous.

Transcutaneous Electrical Nerve Stimulation (TENS) electrical stimulation of nerve endings through electrodes placed on the skin, for relief of pain.

Transillumination the passage of light through a structure to determine if an abnormality is present.

Trisomy Cells contain an extra chromosome, for a total of 47; named for the pair where the extra chromosome occurs, e.g., trisomy 21.

Turgor indicates tension of the skin based on pressure within the cells; a measure of dehydration.

Ulcer an open, crater-like lesion on the skin or mucous membranes.

Ulcerogenic producing or aggravating ulcers.

Universal Precautions safety precautions at two levels, recommended to protect health care workers from infection, based on the assumption that all patients and all body fluids are sources of infection.

Uremia the end result of renal failure when waste products accumulate in the blood and fluid/electrolyte imbalance develops.

Uveitis inflammation of the uveal tract of the eye (iris, ciliary body, and choroid).

Vaccine attenuated or killed microorganisms administered to induce antibody production.

Vector an animal or insect that transmits disease.

Vesicle a small thin-walled sac containing fluid; e.g., a blister.

Viable ability to sustain life.

Virulence the degree of pathogenicity or disease that a microbe is capable of causing.

Visceroceptors receptors that are located internally and provide information about the environment around the viscera.

Wheeze a high-pitched whining sound typical of obstruction in the bronchioles and small bronchi.

Xerostomia dry mouth with reduced saliva secretion.

Index

Page numbers followed by "f" indicate figures, "t" indicate tables, and "b" indicate boxes.

A

Abnormal menstrual bleeding, 529
Abnormal spinal curvatures, 171, 171f
ABO blood groups, 191-192, 191t
Abortion, 584
Abruptio placentae, 588
Abscess
 brain, 351, 353f
 definition of, 71
 pancreatic, 470
 Staphylococcus, 105, 105f
Absence seizures, 369
Absorption, 436-437, 492
Accommodation, 388
Acetaminophen, 74, 398
Acetylcholine (ACh), 161, 335, 374
Acetylsalicylic acid (ASA), 73-74
ACh. *See* Acetylcholine (ACh)
Achalasia, 448
Achlorhydria, 193
Acid-base balance, 24
Acid-base imbalances, 28-34, 32t, 282-283, 440
 acidosis and, 32-33
 alkalosis and, 33-34
 compensation and, 31
 concepts and processes related to, 28
 decompensation and, 31
 pH and, 29-31
 types of, 31-34
Acidosis, 32-33, 265
 causes of, 32
 effects of, 32-33
 examples of, 31, 36t-37t
Acid pump inhibitor, 442-443
Acids, 30, 30f, 633
Acini, 524-525
Acne, 148
Acne vulgaris, 599, 599f
Acquired immunity, 118-120, 119t
Acquired immunodeficiency, 130
Acquired immunodeficiency syndrome (AIDS), 131-138
 case study on, 139
 children with, 136
 clinical signs and symptoms of, 135-136
 course of, 133-134, 133f
 diagnostic tests for, 135
 history of, 131-133
 people over 50 with, 136
 stages of, 131, 132f

Acquired immunodeficiency syndrome (AIDS) (*Continued*)
 T cells and, 117
 transmission of, 134-135
 treatment of, 137-138
 tuberculosis and, 135
 women with, 136
Acquired seizures, 368
Acromegaly, 416-417, 426-427
ACTH. *See* Adrenocorticotrophic hormone (ACTH)
Actinic keratoses, 153
Actinobacillus actinomycetemcomitans, 447
Activated partial thromboplastin time (APTT), 202
Active natural immunity, 119-120
Active transport, 492
Acute appendicitis, 476, 476f-477f
Acute asthma, 300, 321
Acute coronary syndrome, 233-243. *See also* Coronary artery disease
Acute disease, 6
Acute endocarditis, 257
Acute epididymitis, 542, 542f
Acute gastritis, 451
Acute glaucoma, 393
Acute infections, 105
Acute inflammation, 69-72
 diagnostic tests for, 72
 local effects of, 70-71
 pathophysiology and general characteristics of, 69-70
 potential complications with, 72
 systemic effects of, 71
Acute lymphocytic leukemia (ALL), 206, 206f-207f, 208
Acute myelogenous leukemia (AML), 206
Acute myocardial infarction, 240, 241f
Acute necrotizing ulcerative gingivitis (ANUG), 447
Acute necrotizing fasciitis, 149
Acute neurologic problems, 344-364
 brain injuries and, 355-359
 brain tumors and, 345-346
 infections and, 350-355
 spinal cord injuries and, 359-364
 vascular disorders and, 346-350
Acute pancreatitis, 469-471, 470f
Acute period of infections, 104-105
Acute poststreptococcal glomerulonephritis, 502-504, 504f, 514

Acute pulmonary edema, 249-250
Acute renal failure, 510, 511f, 512t, 621
Acute respiratory distress syndrome (ARDS), 265, 318-319, 319f
Acute respiratory failure (ARF), 319-320
Acute rheumatic mitral valvulitis, 256f
Acute tissue/organ transplant rejection, 121
Acute ulcerative colitis, 474, 474f
Acyclovir, 150
Addiction, 625
Addison's disease, 423, 425t
Adenocarcinomas, 296
Adenoma, 406, 416. *See also* Benign tumors
ADH. *See* Antidiuretic hormone (ADH)
Adhesions, 79f, 597
 in oral cavity, 431-432
 scar formation and healing, complications with, 78
Adolescence
 eating disorders during, 598-599
 infections during, 599-600
 musculoskeletal abnormalities during, 594-598
 normal changes during, 592-593
 obesity during, 593-594, 593f
 pregnancy during, 590
 sexual development during, disorders affecting, 600
 skin disorders during, 599
Adrenal cortex, 403, 422-423
Adrenal cortical adenoma, 423f
Adrenal gland disorders, 422-423
Adrenaline, 337
Adrenal medulla, 403, 422
Adrenergic-blocking drugs, 233
Adrenergic fibers, 337
Adrenergic receptors, 225, 337
Adrenocorticotrophic hormone (ACTH), 75, 407
Adriamycin, 561
Adult polycystic kidney, 509
Adult respiratory distress syndrome (ARDS), 318-319, 319f
AEDs. *See* Automated external defibrillators (AEDs)
Aerobic exercise, 162
Aerobic respiration, 162
Aerosol transmission, 99
AF. *See* Atrial fibrillation (AF)
Afferent arterioles, 494
Afferent fibers, 330