



UCDH Dental Hygiene Glossary

A Faculty/Student Venture

Editorial Compilation/Consultant

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Abducens Nerve: the sixth cranial nerve, which controls movement of one single muscle, the lateral rectus muscle, of the eye.

Abrasive: to scratch a surface or have rough texture being able to remove a layer.

Abscess: the destruction of tissue due to activity of bacteria producing pus, pain and swelling as result of microscopic cellular activity.

Abuse: to do harm or wrong doing to others or yourself; by physical or chemical means.

Abutment: a tooth, root or implant that serves as the support or anchor to a denture or a fixed or removable bridge. See *pontics*.

Abutment: a tooth, root, or implant that supports and maintains position of a fixed or removable prosthesis. See *pontic*

Accessory Nerve: the eleventh pair of cranial nerves consisting of fibers from the spinal cord

Acellular: a material that does not contain living cells.

Acinus: a generalized term referring to a saclike structure found at the terminal end of a gland duct or any other kind of passage such as in the lungs. Functions as a secretory cell in a gland. See *alveolus*

Acromegaly: the bones of the face, hands and feet along with certain organs of the body have overgrowth because the anterior pituitary gland is overactive in secreting growth hormones. But this can only happen in individuals whose bones have ossified.

Acrylic: a plastic used to make false teeth, retainers and other dental products.

Actinobacillus Actinomycetemcomitans: a gram-negative, non-motile, rod shaped type of bacteria that can be found in the mouth. *Actinobacillus actinomycetemcomitans* is associated with periodontal disease. See *periodontal disease*.

Action Potential: an electrical impulse that is transmitted through nerve and muscle cells. The electrical potentials are created by a series of polarization and depolarization events causing nerve impulses and muscle contractions to occur. See *polarization; depolarization*.

Acute: a very quick occurrence or sudden source of pain.

Acyclovir: an antiviral medication used to treat herpes virus 1 and 2 and the Varicella zoster virus (chickenpox) by interfering with viral DNA synthesis. Sold as Zovirax; it comes in oral, intravenous, and topical forms.\

Adaptation: is the adjustment that an organism goes through in order to function effectively to its environment.

Adrenergic: releasing epinephrine, an adrenaline-like chemical, when the nerve impulse passes; causes a fight-or-flight reaction in the body.

Adrenocorticosteroid: any group of steroid hormones derived from the adrenal cortex or hormones that produce effects in the body that resemble those of the hormones of the adrenal cortex.

Advocate: a person who supports, defends, argues or pleads a case for someone else or for one's self, usually in a legal situation.

Aerobe: a microorganism, such as bacteria, that lives and grows in the presence of oxygen. See *anaerobe*.

Aerosol: small pieces of solid or liquid material floating in the air for an extended amount of time.

Afferent: moving inward or toward a central part. Compare *efferent*.

Aggressive Periodontitis: a more severe gum disease caused by bacteria seen in people under 35 that occurs rapidly to those that are generally healthy. It usually presents itself with red, swollen gums, persistent bad breath, and possible loose teeth. See *periodontal disease*

Agonist: a drug or other chemical that binds to a receptor in the body and produces a natural or predictable response. Its main responsibility is to produce the specified movement. The agonist has a competitor known as an antagonist. See *antagonist*

Agranulocyte: a type of white blood cell that does not contain grainy particles.

Alara Concept: an acronym for As Low as Reasonably Achievable. This is a radiation safety principle that provides protection to both the operator and patients from too much radiation exposure. All precautions must be taken to limit exposure.

Alginate: a fast-setting mold material used to make casts of gums and teeth in dentistry that is derived from a substance of seaweed

Allergy: an abnormal reaction of the body to highly sensitive substances such as pollens and certain foods. It can occur by coming in contact with certain substances and/or by eating certain foods. The reactions usually include itchy eyes, runny nose, skin rashes, breathing problems or diarrhea.

Alveolus: a hole in the bone where teeth are anchored or small air sacs and air cells.

Amalgam: a silver filling, in which any metallic mixture of mercury is the chief ingredient. It is used in dental restorations and requires more extensive preparation than other types of fillings.

Ameloblast: cells present only during the development of a tooth. They are enamel forming cells. See *enamel*.

Amelogenesis Imperfcta (AI): represents a group of developmental conditions resulting from hereditary factors causing an abnormal formation of most or all of the enamel (external layer of the teeth). It affects the structure and clinical appearance of enamel of all or nearly all of the teeth. It is characterized by teeth having brownish coloration, unusually small size, pitted or grooved surfaces and prone to rapid wear and breakage.

Amylase: an enzyme or protein that aids in the breakdown of starches into simple sugars, it is found in saliva and pancreatic juice.

Anaerobe: a microorganism, such as bacteria, that does not require oxygen to live and grow. See *aerobe*.

Analgesic: a drug or medicine used to reduce pain without resulting in loss of consciousness; a painkiller.

Anaphylaxis: hypersensitivity; a violent allergic reaction that is life threatening, and involves sudden collapse, shock, and respiratory and circulatory failure; requires previous exposure to the allergen.

Anaphyphylaxis: a generalized life threatening allergic reaction caused by food allergy, insect stings, or medication. May result in death. See *Anaphylactic shock*.

Anaplasia: a change in cells going back to early development that is permanent and is associated with tumor cells.

Anemia: a pathological condition in which the blood is deficient in the oxygen-carrying, hemoglobin of red blood cells, or red blood cell volume or number. Symptoms are pallor and weariness.

Anesthesia: a drug, administered for medical or surgical purposes, that results in partial or total loss of sensation.

Ankylosis: is the abnormal stiffness or immobility of the bones of a joint.

Anode: a positively-charged electrical conductor used in making an x-ray picture. The anode receives electrons onto a plate of tungsten embedded within a copper rod and converts those electrons into energized x-ray particles.

Anodontia: also called anodontia vera, is the congenital absence of all primary or

Anorexia Nervosa: eating disorder- characterized by a distorted view of weight. A person often undergoes extreme dieting to maintain a weight far below that which is normal for his/her age and height. Anorexia is characterized by a thin waif like body and fine soft hair covering the body. See *Lanugo*.

Anoxia: when there is not enough oxygen in the tissues of the body.

Antagonist: a drug, substance or agent that exerts an opposite action to neutralize or block the action of another drug, substance, or agent.

Anterior Superior Alveolar Artery: originate from the infraorbital artery; they supply the upper incisors and canines; they also supply the mucous membrane of the maxillary sinus. See *infraorbital artery, mucous membrane, and maxillary sinus*.

Antiadrenergic: of or relating to the blocking of adrenergic responses in the body resulting in decreased blood pressure. See *adrenergic*.

Antibiotic: a chemical substance able to inhibit growth or kill unhealthy or unwanted growth of certain bacteria.

Antibody: a protein produced by lymphocytes in response to an antigen. Antibodies are essential to an immune response and reacts with a specific antigen that induced its synthesis. See *antigen*.

Antibody: a specific protein produced in the blood serum or body fluids in response to an antigen, such as a bacterium, virus, parasite, or transplanted organ, that destroys or neutralizes the antigen by binding to it; responsible for forming immunity. See *immunoglobulin*

Anticholinergic: physical blocking of a nerve impulse by inhibiting the action of acetylcholine on the synapse; thus inhibiting the parasympathetic reactions in the body. See *parasympathetic*.

Antigen: any substance that when introduced into the body can stimulate an immune response by the production of antibodies.

Antioxidant: any substance that inhibits the process of cellular damage that can be caused by the interaction of cellular molecules with free radicals.

Antiseptic: a chemical agent capable of preventing or inhibiting the growth of microorganisms on a living object.

Anxiety: an abnormal and overwhelming sense of fear and apprehension marked by signs and symptoms such as muscle tension, restlessness, diarrhea, palpitation, rapid breathing, jitteriness, hypervigilance, confusion, decreased concentration, fear of losing control, etc., resulting from self-doubt about one's capacity to deal with an impending or anticipated threat and the nature of that threat.

Apatites: a mineral composed of calcium and phosphate that is found in the bones and teeth.

Aphtha: a small round painful ulceration that may be yellow or pearl-colored found in the mouth, on the lips, and oral mucosa. May appear as specks or flakes. See *thrush, Candidiasis*

Apical: reaching the end of an object or at the bottom.

Apnea: a temporary stopping of breathing.

Articulator: a mechanical device, representing the jaws, designed with a hinge to reproduce the open, close and side-to-side movements of the lower jaw.

ASA Classification: a system for classifying a patient's physical health before performing any treatment and establishing the risks of treatment. ASA I- normal healthy patient, ASA II- a patient with a mild disease, ASA III- a patient with a serious disease that isn't incapacitating, ASA IV- a patient with a life- threatening and incapacitating disease, ASA V- a patient who is not expected to live 24 hours.

Asepsis: the act or process of having no infectious organism present.

Assessment: judging, analyzing, assessing, or evaluating a person, situation, or event.

Attached Gingival: the portion of gum tissue that is firm, resilient and bound to the underlying bone. It is continuous with the marginal gingiva and also called alveolar gingiva. See *marginal gingiva*.

Attrition: the typical wearing away of tooth surface due to everyday tooth-to-tooth contact such as chewing. See *bruxism*.

Aura: a subjective sensation (hearing voices, seeing colored lights, feelings of crawling or numbness) or motor phenomenon experienced before the onset of a neurological condition, such as an epileptic seizure or a migraine.

Autocoid: a chemical substance produced by one type of cell that affects the function of other types of cells in the same region, have a short duration, and are not blood borne. See *autacoid*.

Autoimmune: a term describing cells and antibodies arising from an individual's body that attack that individual's own body tissues. See *autoimmune disease*.

Autonomic Nervous System: part of the peripheral nervous system that controls involuntary actions of smooth muscle such as heart rate and blood pressure. It includes the sympathetic and parasympathetic nervous systems.

Avulsion: the powerful displacement of a tooth, whether by surgery or accident.

Axon: a long threadlike extension from a nerve fiber that conducts nerve impulses away from the body of a nerve cell.

Baby Bottle Caries: a type of severe decay found in young children usually between the ages of 1-3, that occurs as a result of putting your child to bed with a bottle full or milk, formula, or any juice with a high sugar content.

Baby Bottle Tooth Decay: decay of the front top teeth that involves babies being given sugary liquids such as milk or juice for an extended period of time. The bacteria in the mouth interacts with the sugar in the milk and juice to cause decay of the teeth.

Baby Teeth: the first 20 teeth that are formed in the mouth. These teeth will eventually fall out and be replaced by the permanent teeth.

Bacillus: a type of bacteria that is rod-like in shape. These bacteria can be both helpful (used in certain antibiotics) and harmful (cause food to spoil and cause certain diseases).

Bacteremia: presence of bacteria in the bloodstream. The detection of blood is always abnormal. Bacteria and is only released upon destruction of the bacterial cell.

Bacteria: a single celled microorganism that does not contain a nucleus or any other organelles.

Bacterial Enzymes: proteins produced by a cell that catalyze chemical reactions. See *catalyst*.

Bacterial Flora: bacteria that is found all over the human body. There is normal flora, which does not harm us and there are invaders, which are harmful. The oral cavity is a favorable spot for bacterial flora and includes many different species of bacteria.

Bactericidal: the ability and function of a substance to destroy bacteria.

Bacteriocidal: any substance that inhibits infection by killing bacteria.

Bacteriolytic: something (an agent) that can destroy or kill bacteria.

Bacteriostat: stops the multiplication or growth of bacteria without killing it.

Bacteriostatic: bacteria that is inhibited in growth without destruction by use of a chemical or biological material.

Bacteremia: occurs when there are bacteria in the bloodstream, which can be caused by trauma like dental work or infections to the body.

Bacteroides Forsythus: an anaerobic, gram-negative, bacteriostatic type of bacteria that is found in deep pockets below the gum line. It is associated with the aggressive form of a gum disease called periodontitis.

Bands: a thin metal ring that is placed around a tooth during orthodontic procedures that helps to secure attachment to the tooth.

Barbiturate: a class of drugs that can be used as a numbing agent. Barbiturates are used to induce sleep, control seizures and/or sedate a person suffering from tension or anxiety.

Barrier: material used to block a patient's body fluids including blood and saliva from coming in contact with someone providing health care. This stops the spread of disease from one person to another.

Basal Cell Carcinoma: the most common type of skin cancer that arises from the basal, or deepest, part of the skin. They are most commonly found on the face, neck and arms. It is usually caused by overexposure to UV rays from the sun.

Basophil: a type of white blood cell which is capable of ingesting foreign particles. Basophils contain histamine and heparin which aid in the body's response to an allergic reaction.

Bass Method: this is the method of tooth brushing that focuses on removing biofilm from the gum line. This will help in preventing gum disease. It is accomplished by placing the toothbrush at a 45 degree angle towards the roots of the teeth and using short, vibrating type strokes.

Bell's Palsy: sudden but temporary paralysis (muscles don't work) of one side of the face, believed to be caused by trauma to the facial nerve. Patient's face usually sags on one side, eye may not close, corner of the mouth may droop, and saliva may dribble on affected side.

Beneficence: the moral principle of doing good for the benefit of others.

Benign: not cancerous, not harmful to the body.

Benzocaine: one of the most common local numbing agents that is applied on the skin (topically).

Benzodiazepine: a class of drugs (medicine) that slow the central nervous system to help relieve nervousness and tension, often used to treat anxiety.

Beta Cell: a type of cell found in the pancreas that is responsible for producing insulin; a hormone that is responsible for regulating the levels of glucose (sugar) in the body.

Bibulous Pad: a cotton pad placed inside the cheek during sealant placement; covers the Stensen's duct (major salivary gland) and helps to keep the area dry.

Bicuspid: a tooth found only in permanent dentition that has two cusps or points.

Bifid Uvula: when the uvula (V-shaped fleshy mass in the back of the soft palate), is separated into two parts.

Bifurcation: A division into two branches or parts.

Bifurcation: any tooth that has two roots on it.

Bilateral: pertaining to both the left and right sides. Someone with bilateral cleft lip has

Binary Fission: a process by which one cell splits to form two cells of approximately equal parts.

Biocompatible: the ability of the material to coexist with living tissue or organisms, does not cause harm to nor is rejected by the body, non-toxic (note that even biocompatible materials may cause allergic reactions in some people).

Biofilm: a community or group of bacteria and organisms that attach to a wet surface and form a slime-like layer.

Biohazard: a substance that can cause harm to the health of humans or other animals; has the potential to cause infection.

Biological Width: the healthy distance from the junctional epithelium and tissue attachment to the top of the bone in the jaw. (see: junctional epithelium).

Bisecting Angle Technique: a way of taking a radiograph where the middle x-ray beam is pointed at an imaginary line. The imaginary line divides the long axis of the tooth and x-ray film packet. The x-ray beam is directed so that it crosses the imaginary line perpendicularly (or creates a "T" with it).

Bis-GMA: a plastic material used for dental sealants and other dental restorative materials.

Bisphosphonates: a type of drug that aids in the inhibition of bone resorption. These drugs are often used to treat osteoporosis.

Bitewing: a type of x-ray film that is used to detect cavities that may have formed in between two teeth. The film is placed between the upper and lower teeth and held in place by biting down.

Bleach: the act of whitening something by using a chemical agent. It is used in dentistry as a cosmetic dental procedure to whiten teeth. It can also be used as a disinfectant.

Bleeding Disorder: a disease when your body has trouble forming blood clots, and bleeds too much.

Bleeding On Probing: bleeding that is caused by gentle pressure exerted into the pocket between the gingiva and the tooth surface; no bleeding on probing indicates healthy gingiva.

Bleeding Time: a blood test that shows how fast platelets build up in the blood vessel to

Blisterform Lesion: an area in the mouth that is a well-defined elevation above the surface of the skin. It is fluid-filled (blood, serum, mucin, or pus) usually soft and see through. The size can vary from less than 1cm to larger than 1cm in diameter.

Blood Cell: a cell found in the blood and is also called *blood corpuscle*. In mammals, these fall into three categories: *red blood cells (erythrocytes)*, *white blood cells (leukocytes)* and *platelets (thrombocytes)*. Together, these three kinds of blood cells make up 45% of blood (the remaining 55% is *plasma*).

Blood Clot: a thickened clump of blood that forms to stop bleeding when a blood vessel has been injured such as in a cut.

Blood Coagulation: the process of liquid blood becoming a blood clot. It is an important part of a damaged blood vessels repair and healing process.

Blood Pressure: the force at which the heart is pumping blood throughout the body. It is measured by taking two readings. The first is the diastolic number, or the highest force the blood can pump the blood throughout the body. The second is the systolic number, or the lowest force the blood can pump the blood. Normal blood pressure is 120/80. Blood pressure is considered a major vital of the body and can assess a broad level of health of an individual.

Blood-borne Pathogen: a microorganism that, when transferred by blood from an infected person to another person, can cause disease.

Blunt: having an end or point that is rounded or dull; not sharp.

B-Lymphocytes: a type of white blood cell that is formed in the bone marrow and helps the body in the secretion of antibodies (proteins).

Board Certified: in the health profession; an individual has met requirements and passed an examination that allows them to work in their profession.

Body Mass Index (BMI): an index that expresses adult weight in relation to height, and is used to determine obesity. BMI is calculated as 704.5 times weight in pounds divided by height in inches squared. An adult with a BMI of 25-29.9 is considered over weight and a BMI of 30 indicates obesity.

Bolus: food that has been chewed and mixed with saliva, formed into a small round mass, and is ready to be swallowed.

Bone Loss: in teeth; the process of bone losing its density and breaking down; it is often caused by infection or other disease in the mouth.

Bone Resorption: a decrease in the density of bone. In dentistry, it is the resorption of the bone supporting the teeth. This resorption is a result of periodontal disease.

Bone Resorption: process in which bone cells breakdown and dissolve bone.

Braces: an orthodontic appliance applied to the teeth to fix the alignment. These are also used to make a straighter and more pleasing smile.

Bradycardia: slower than normal heart beat (less than 60 bpm).

Bradykinesia: derived from two Greek roots: Brady's, slow + kinesis, movement = slow movement, slow motion, slow moving. Bradykinesia is one of the first indicators of *Parkinson's disease*.

Bridge: one or more false teeth (crowns) that are permanently cemented to the teeth beside the missing tooth/teeth. A bridge is used to replace one or more missing teeth.

Bronchitis: inflammation of the airways of the lungs usually cause by in infection. Symptoms can include a persistent cough that can be accompanied with excess mucous, or phlegm, that builds up in the airways of the lungs.

Bronchoconstriction: tightening of the tissue that surrounds the bronchi which can cause coughing, wheezing, and shortness of breath.

Bronchodilators: a type of medication that expands the lungs, providing bigger airways.

Bruise: an injury to the body without breaking the skin but damaging blood vessels (artery or vein) allowing blood to seep into surrounding tissues and discolor the skin most often causing tenderness in the sight. Usually a result from a hit or fall.

Bruxism: grinding of the teeth for reasons other than normal functions such as chewing or biting, by someone undergoing stress, or unconsciously during sleep. It may cause damage to the teeth, headaches, and temporal mandibular joint disorders. See *attrition*.

Buccal Artery: a branch of the maxillary artery that runs obliquely forward and supplies blood to the buccinator muscle, skin, and mucous membrane of the cheek. See *maxillary artery, buccinator muscle, and mucous membrane*.

Buccal nerve: an afferent nerve located in the face that carries information from the skin, to the buccal membrane, ending at the second and third molar teeth.

Buccal: surface of the cheek inside the mouth (towards the back teeth).

Buccinator muscle: a thin muscle of the cheek that aids in mastication. It prevents food from being pushed into the space between the teeth and the cheek by pushing the food back onto the chewing surface of the teeth.

Buccoversion: a tooth that is twisted or placed towards the cheek and out of occlusion.

Buffer: something that can maintain the equilibrium of the environment that it is in.

Bulbous: A word used to describe an elevated, rounded curve resembling a bulb.

Bulimia Nervosa: an eating disorder that is distinguished by many episodes of eating large amounts of food (binge-eating), followed by purging, using laxatives, or sometimes even diuretics or excessive exercise.

Bulla: a fluid-filled blister that arises from the skin.

Burkitt's Lymphoma: a type of cancer found within the lymph nodes, usually in young African American children.

Burning Mouth Syndrome: a severe burning sensation usually found in areas of the mouth and on the tip of the tongue; usually associated with no specific cause.

Calcification: the process in which calcium causes bones and teeth to harden.

Calcium Channel Blockers: a drug that blocks the entry of calcium into the muscle cells of the heart and the arteries. They are used to treat hypertension, angina pectoris, cardiac arrhythmias, and stroke.

Calculus: mineralized hard deposits that are formed from food and bacteria in the mouth

Canal: a long narrow tubular channel in bone that carries blood and blood vessels.

Cancellous Bone: the soft, spongy bone located between two layers of denser bone. It is also called *trabecular bone* because it is composed of numerous bony trabeculae (large plates and rods) that form a lattice-like network of intercommunicating spaces filled with bone marrow.

Cancer: this is a disease in which the cells become abnormal then divide and spread to other parts of the body. These abnormal growths can be called tumors and can be cause severe damage or even death (malignant) or not harmful (benign) to body organs.

Candida Albicans: a yeast-like fungus, commonly part of the normal flora in the oral cavity. Candida may cause an infection in humans with immunodeficiency such as babies and elderly.

Candida: yeast like fungi that is part of the normal flora of the mouth, skin, intestinal tract, and vagina. Candida is an opportunistic organism that can cause thrush, athlete's foot, vaginitis, and other infections.

Candidiasis: an infectious disease produced by the yeast like fungus derived from any of the *Candida* species. It occurs most often in the mouth and respiratory tract. It occurs most often in people with reduced immune function, taking certain antibiotics, infants, and in persons debilitated by illness such as diabetes. Candidiasis normally will not cause any ill effects but could potentially turn to a systemic and potentially life-threatening disease.

Canine: one of the four pointed teeth situated between the lateral incisor and the first premolar. Canine are used for grasping food and are characterized by having the longest single root in the human mouth.

Canker Sore: a small shallow ulcer with a yellow base and red border that appear in the mouth. Canker sores can be caused by medications, allergies, and toothpaste containing sodium lauryl sulfate. The sores can be painful and are treated with a medicated oral mouth rinse.

Carcinoma: one of the four major types of cancer. This presents as any malignant tumor that arises from a type of tissue called epithelium. It can be found on the skin or the lining of body organs. Carcinomas can invade surrounding tissue and organs and may spread to other sites.

Caries: a progressive destruction of teeth, which causes decay. Caries is the most common childhood disease.

Cariogenic: foods that stimulate saliva secretion by lowering the pH in the oral cavity. Cariogenic foods contribute to the cause of dental caries.

Catalyst: a substance that speeds up a reaction without being consumed in the process.

Cathode: the negatively charged terminal of an x-ray tube consisting of tungsten filament wire set in a molybdenum focusing cup that directs the electrons toward the target of the anode. The cathode supplies the electrons necessary to generate x-rays.

Cell Membrane: the outer covering and semi-permeable barrier that surrounds the cytoplasm and controls the allowance of certain materials to pass in and out of the cell. The membrane is composed of a lipid layer with proteins embedded into it. It can also be called cytomembrane, plasmalemma, and plasma membrane.

Cell: the basic structural and functional unit of all organisms. It is capable of independent functioning and consists of various organelles within and on its outer surface (as a membrane or wall). Cells combine to form various tissues within a plant or animal.

Cementoenamel Junction (CEJ): the crown of a tooth is covered with enamel, and the root portion is covered with cementum. The place where enamel and cementum meet is called the cementoenamel junction, or *cervical line, neck*. The area above the junction is called the anatomic crown of the tooth and the area below the junction is called the anatomic root of the tooth.

Cementum: a thin layer of a bonelike material that provides protection for the root of a tooth.

Central Nervous System: the portion of the nervous system that consists of the brain and spinal cord.

Centric Occlusion: the natural relationship of occlusal surfaces that provide intercuspaton on opposing arches. See *intercuspaton*.

Cephalexin: an oral, antimicrobial drug, which is often administered for treatment in its hydrochloride form. Used in replacement of penicillin treatments and used especially for respiratory and urinary tract infections.

Channel: a passageway or groove through a cell's membrane that permits molecules to pass in and out. See *ion channel*.

Chief Complaint: the main concern that drives a patient to seek treatment.

Chlorhexidine: a chemical antiseptic agent used as a mouth rinse in dentistry. Chlorhexidine kills gram-positive and gram-negative microbes that cause periodontal disease.

Cholesterol: a fatty steroid alcohol C₂₇H₄₆O, that is present in animal cells and is synthesized by the liver. Cholesterol is important as a constituent of cell membranes and a precursor to steroid hormones. Its level in the bloodstream can influence the pathogenesis of certain conditions, such as the development of atherosclerotic plaque, coronary artery disease and gallstones.

Cholinergic: neurons or axons capable of releasing acetylcholine when a nerve impulse passes in the parasympathetic nervous system. Drugs are cholinergic if they produce the same effects as the parasympathetic nervous system.

Chromosome: a coiled strand of DNA which is the material responsible for the determination and transmission of hereditary traits and characteristics.

Chronic Obstructive Pulmonary Disease (COPD): relates to conditions that cause airway obstruction and makes it hard to breathe on both inhalation and exhalation.

Chronic Periodontitis: a bacterial infection resulting in inflammation within gum tissue, progressive destruction of the periodontal ligament, and loss of supporting bone around a tooth. It is related to the amount of dental plaque or dental calculus (tartar) that is present in one's mouth. It is also the most common form of periodontitis.

Chronic: used to describe a disease that develops slowly and lasts over a long period of time.

Cingulum: is a bump on a tooth located on the lingual surface. It is usually found on the four front teeth of the maxilla.

Cleft Lip: a birth defect that occurs in the upper lip. A cleft lip can occur when the medial nasal process and maxillary process does not fuse together. A cleft lip can be on one side (unilateral) of the lip or both sides (bilateral) and can often extend beyond the base of the nose.

Cleft Palate: a variation of a type of clefting deformity that is present at birth. It is caused by abnormal facial growth during development. A cleft is a fissure or opening, a gap. It is the non-fusion of the body's natural structures that form before birth. In this instance, the two plates of the skull that form the hard palate (roof of the mouth) are not completely joined. The condition can be symmetrical or asymmetrical, unilateral or bilateral. It may involve only the soft palate or both soft and hard palates, but almost never the hard palate alone.

Clindamycin: an antibiotic used to treat against gram-positive bacteria and anaerobic bacteria. Used commonly as a treatment for acne and applied topically.

Clinical Attachment Level (CAL): a measurement used to determine the stability of attachment of tissue at the base of a pocket or sulcus of a tooth. This is used as part of a periodontal maintenance program. It is a measurement from a fixed point, usually the cementoenamel junction, to the junctional epithelium. See *cementoenamel junction* and *junctional epithelium*.

Clinical Examination: the complete examination of the entire mouth, including the teeth to determine the health of the mouth. Findings help the clinician plan treatment for the individual.

Clinician: a health professional, such as a physician, psychiatrist, psychologist, or nurse who is involved with treatment, observation, and care of living patients.

Col: a cratered like area of tissue that is found in between where two teeth meet.

Cold Sore: a fluid-filled blister lesion caused by a herpes simplex virus that can appear on the lip and around the mouth. Cold sores can be very painful and usually heal on their own within a few days. The sores are commonly referred to as fever blisters.

Collagen: a protein fiber that is the main component in bone and tissues of the body to provide support, flexibility, resilience and stability.

Collimator: an optical device consisting of a tube containing a convex lens at one end and a slit at the other with the slit at the focus of the lens; radiation, as light, leaves the slit as a parallel beam.

Colonization: the multiplication of microorganisms such as bacteria in a host without tissue damage or invasion.

Common Carotid Artery: an artery that runs upward and supplies the head and neck with oxygenated blood. It divides into the external and internal carotid arteries. See *external carotid artery* and *internal carotid artery*.

Communicable Disease: an illness that can be passed from one person to another.

Complement System: a series of enzymatic proteins circulating in the blood that work together to perform many immune system functions by facilitating phagocytes and killing foreign cells.

Compliance: a tendency to readily give in to a wish, request, or demand, especially in a weak and subservient way.

Composite Filling: a tooth-colored filling material used to fill cavities.

Composite: a tooth-colored material made of acrylic and glass that is placed on a tooth after a cavity has been removed and hardens under a curing light.

Compton Scattering: one of the interactions of x-radiation with matter in which the electron is ejected from its orbital position and the x-ray photon loses energy because of the interaction, but continues to travel through the material along an altered path. This is also referred to as scatter radiation. See *scatter radiation*

Cone Cut: a term used to describe a technique error when taking dental x-rays. The error produces a clear, nonexposed area on a dental radiograph (x-ray) as a result of misalignment of the dental x-ray unit.

Congenital: a condition present at or before birth, regardless if it's inherited or acquired.

Connate: existing since birth; not to be confused with congenital, this is a condition present at or before birth, while connate means conditions developed during birth or delivery.

Connective Tissue: a form of fibrous tissue that supports connects, or surrounds other tissues and organs. Connective tissue typically has cells scattered throughout an extracellular matrix. Cartilage and bone are specialized forms of connective tissue. See *extracellular matrix*.

Consent: permission, approval, or voluntary agreement to an action proposed by another; to comply or be in concord in opinion or sentiment.

Contaminated Waste: any non-reusable object that has been in contact with blood, saliva, urine, or other body secretions

Contamination: the infection of a subject or object making it unclean or impure.

Contour: external outline of a tooth. It is essential for healthy gums, because during chewing it directs food away from getting caught in the gums. The original shape of the tooth must be maintained during dental procedures in ensure health.

Contrast: how sharply dark and light areas are differentiated on a film; or the difference in the densities. A film that is high contrast has many black and white areas; a low contrast film has many shades of gray. Contrast is affected by kilovoltage, the type of film used, developing conditions, and the type of tissue being irradiated.

Contusion: an injury in which the skin is not broken but blood vessels (artery or vein) are damaged and blood leaks out of blood vessels and gathers in surrounding tissues to produce discoloration, pain, swelling, and tenderness.

Corticosteroids: a class of steroid hormones made naturally in the body by the adrenal gland or synthetically for use as drugs to diminish an inflammatory response such as itching or irritation of the skin. The most common prescribed drug of this type is prednisone.

Cretinism: a congenital deficiency of thyroid secretion resulting in arrested physical and mental development. An affected child can be characterized by physical deformities, dwarfism, mental retardation, excessively dry skin, and often has a goiter. *See Goiter.*

Crossbite: an abnormal condition that deals with the occlusal surface and the teeth not meeting in a normal manner. Usually the mandibular teeth are more buccally or lingually than the maxillary teeth.

Crown: part of the tooth that is what covers the tooth. Also when a tooth has been broken a handmade crown can be made to replace the normal crown.

Curette (Curet): an instrument designed for scraping biological tissue or debris in a biopsy, excision, or cleaning procedure. In form, the curette is a small hand tool; at the tip of the curette is a small scoop, hook, or gouge. The verb *to curette* means *to scrape with a curette*. In periodontics, the edged hook (blade or working end) of the periodontal curette scrapes calculus (tartar) deposits from the crown and roots of teeth. The working end has a rounded back, rounded toe and is semicircular in cross section.

Curing Light: a UV light used tightly attach bonding material to the tooth surface, this process increases the hardening process of the material.

Curve of Spee: an anatomic curve of the occlusal surfaces beginning at the tip of the canine, dipping downward towards the buccal cusps of the premolars and molars.

Curve of Wilson: a curve that goes from the sharp areas on the chewing surface of the teeth over to the sharp areas on the opposite side. The bottom teeth have a curve that appears curved inward, while the teeth on the top have a curve that appears curved outward.

Cusp of Carabelli: is an accessory fifth cusp or lobe that can be found on the lingual surface of a maxillary first molar.

Cyst: is a sac that can be found in the mouth containing pus or fluid.

Cytokine: any of several regulatory, short lived proteins that are released by one cell to neighboring cells to regulate the function. They are best known for the generation of an immune response but they also effect changes in reproduction, growth and development, and injury repair.

Cytoplasm: a gel-like substance located outside of the nuclear membrane of the cell. Contains membrane bound organelles such as mitochondria and chloroplasts as well as water, proteins, carbohydrates, lipids, and trace elements. Controls metabolism of the cell.

Debridement: removal of foreign matter, hard or soft deposits from the tooth crown, root

Deciduous: The first set of teeth to erupt in the mouth before the permanent dentition (see dentition.) Deciduous teeth can also be referred to as milk teeth, baby teeth, temporary teeth and primary teeth. These teeth become visible during infancy until replaced by their permanent successors.

Decompenstate: breaking down or deterioration of the mind. A mental state that was previously well-maintained decreases. Decomposition can lead to a decreased ability to carry on daily activities.

Definitive host: an organism that harbors a parasite during the sexual reproduction stage of its life cycle.

Dementia: is not a specific disease but a group of symptoms affecting memory, thinking, language, judgment and behavior. It is caused by conditions such as strokes, infections, injuries, drugs, nutritional deficiencies or unknown causes. *Alzheimers* disease is the most common type of dementia.

Demineralization: process of excessive tooth enamel loss during the beginning stages of a cavity, can be reversed through fluoride and good oral hygiene care.

Denaturation: loss of normal function of a protein due to the change in shape of that protein from the harmful effects of such things as heat and chemicals.

Dendrite: is a short threadlike extension that stems from a nerve cell. The dendrite conducts electrical nerve impulses toward the cell body. See *impulse; nerve cell*.

Dens in Dente: an anomaly of the tooth that has a radiographic appearance of “a tooth within a tooth” and is most commonly found on the lingual maxillary lateral incisors.

Density: a processed radiograph’s overall darkness or lightness affected by exposure time, millamperes (quantity), kilovolts (quality), target-to-film distance, patient thickness, and developing conditions.

Density: the contrast between black and white on a photographic film that compares the thickness of the bone and/or tissue.

Dental Cavity/Caries: A soft, decayed area in a tooth that causes demineralization. Demineralization is usually caused by a frequent intake of sugars and starches. This causes the breakdown of enamel and eventually forms a sticky area where more bacteria are susceptible to appear. Progressive decay can eventually lead to the death of a tooth.

Dental Floss: A soft thread (either waxed or unwaxed) made of nylon, which is used to remove debris from the interproximal (in between) space of two adjacent teeth. It is useful to remove bacteria from in between the teeth to prevent the formation of dental caries (cavities.)

Dental Hygiene Diagnosis a conclusive description of a dental disease or condition based on medical history, radiographic and clinical examination, and symptoms.

Dental Hygienist: a member of the oral health care team, who is licensed through the state that works under the direction of the dentist providing preventive treatment including scaling, polishing, periodontal therapy, and local anesthesia.

Dental Index: a description of oral health with a number or score. The number is given based on clinical observations. It can describe an individual or group..

Dental Papilla: structure that forms the dentin and pulp of the tooth; that appears in the 8-10 week in utero.

Dental Plaque: a sticky buildup of acids, bacteria and food substance around and in between teeth and the gum line that causes cavity development if not removed by mechanical means, for example tooth brushing.

Dental Sac: several rows of flattened cells surrounding the dental papilla and enamel organ; they form the cementum, periodontal ligament, and the alveolar bone during tooth development.

Dentifrice: Any preparation; whether it be a paste, liquid, or powder that can be applied to the teeth (usually with a toothbrush) for removal of soft deposits such as plaque, and stain. Dentifrice is necessary to help maintain good oral hygiene.

Dentin Hypersensitivity: is a transient sharp pain or sensation of rapid onset that arises from exposed dentin. This sensitivity (or pain) can be caused by several factors that include: dental caries, exposed tooth roots, or attrition (worn teeth.)

Dentin: portion of the tooth that it covered by enamel and surrounds the pulp; it makes up the bulk of the tooth.

Dentinogenesis Imperfecta: A hereditary or genetic disorder of tooth development caused by under-mineralized dentin. This condition causes the teeth to become discolored, translucent, and usually weaker producing breakage, rapid wear, and loss. This problem can affect both the primary and permanent dentition.

Dentist: a licensed professional who specializes in treatment and care of the teeth.

Dentition: the general arrangement of the natural teeth in the dental arch. Dentition includes the primary (also known as the deciduous dentition) and/or the permanent dentition which are the teeth that succeed the primary dentition.

Dentogingival Fibers: fibers of the periodontal ligament that run from the cementum in the cervical region into the free gingiva to give support to the gingiva.

Dentures: A removable prosthetic appliance that is constructed to replace missing teeth. This appliance can be used in either the upper (maxillary) arch, or the lower (Mandibular) arch.

Depolarization: a sudden change in electrical potential within a cell's membrane that causes it to become neutral. This change is caused by the influx of molecules such as calcium and sodium that pass through the ion channels within the cell's membrane. See *ion channels*.

Desmosome: structures that join neighbor cells together. They also provide anchoring points for in between strands to help build a strong structural framework. See *macula adherens*

Developmental Groove: fine depressed lines on the chewing surface of the tooth that mark the junction of the lobes that a tooth develop from.

Diabetes Mellitus: a disease in which the pancreas in the body does not produce or properly use insulin, resulting in excessive amounts of sugar in the blood and urine. Symptoms include frequent urination, tiredness, excessive thirst, and hunger.

Diabetic Coma: a coma that results from poorly treated diabetes mellitus, characterized by a buildup of ketones (organic compounds) in the bloodstream, which can become fatal if not quickly treated. See *Kussmaul's coma*.

Diagnose: to recognize, distinguish, or identify a disease or problem by signs and symptoms.

Diagnosis: a statement of the problem; the act, identification, and/or examination of a disease from its signs and symptoms.

Diagnostic Models: a copy of a patient's mouth made from plaster after impressions of both the jaws are taken.

Diastema: A gap or vacant space between the teeth in the human dentition. This space usually occurs in the upper (maxillary) arch and usually most common between the incisors (center teeth.)

Diastole: the phase in the heart cycle when the chambers of the heart relax and fill with blood.

Digital Radiography: uses sensors to produces a radiograph where the image is present on a monitor screen. This allows the image to be enlarged and adjusted to show the best picture. Images can be saved, copied, and sent easier.

Dilaceration: a severe angular distortion of the root of a tooth that is caused by trauma to the tooth during development.

Dilantin: Otherwise known as Phenytoin; is a non sedative drug that is used as an anticonvulsant to treat grand mal (Tonic Clonic) seizures. This medication is widely used for patients that experience frequent convulsions. This drug alters the Na⁺ and Ca²⁺ ions whose conductances are important during the function of excitable nerve, heart, and muscle tissue.

Disease: a particular destructive process in an organism of humans, plants, and animals; usually has recognizable symptoms.

Distal Occlusion: a form of malocclusion where the mandibular teeth are posterior to their normal position in their relationship to the maxillary teeth. It is characterized by a molar and canine relationship; the molar relationship is by the buccal groove of the mandibular first permanent molar being distal to the mesiobuccal cusp of the maxillary first permanent molar by at least the width of a premolar, the canine relationship is by the distal surface of the mandibular permanent canine is distal to the mesial surface of the maxillary canine by at least the width of a premolar. It is then further characterized by two divisions; division I the mandible is retruded and all the maxillary incisors are protruded and division II the mandible is retruded and one or more maxillary incisors are retruded. *Also known as Class II occlusion or distoclusion.*

Distal: surface of the tooth that is farthest from the midline of the face.

Dorsal: the back or posterior part or an organ. In dentistry it is pertaining to the back surface of the tongue.

Double-blind Study: a scientific study in which neither the person performing the experiment nor the participants know which treatment is being given to each group. A double blind study is conducted to produce impartial results and prevents the changing of data on the part of the experimenter or participants.

Dysarthria: difficulty in uttering words due to difficulty in coordinating muscles of the mouth. Dysarthria can be caused by cerebral palsy or Parkinson disease. It may also be the result of a stroke, brain injury, or brain tumor.

Dyspnea: shortness of breath or difficulty breathing. Often occurs during intense physical activity or at high altitudes, but can also be a sign of a serious disease of the airway, lungs, or heart.

Ectodermal Dysplasia: a group of genetic syndromes causing an abnormal development or growth of tissues and structures that develop from the embryonic ectoderm. See *anodontia*, *hypodontia*, *oligodontia*.

Edema: the abnormal accumulation of fluid in the interstitial spaces of the tissues, resulting in the swelling of the infected area.

Edentulous: a condition that results in the lacking of all natural teeth; natural meaning teeth from infancy.

Edge to Edge: an occlusion in which the anterior (front) teeth of both the top and bottom jaw contact each other when teeth are in natural occlusion.

Efferent: moving outward or away from a central part. Compare *afferent*.

Embrasure: space between two teeth next to each other produced by curvatures of teeth which creates a spillway for food during chewing.

Enamel: hard, white tissue found to cover the anatomical and clinical portions of the crown of a tooth. This tissue is known to be the hardest tissue in the body.

Endemic: native, local; occurring in a particular area that seems to be “normal” to that area, but would seem rare to occur in other parts of the world. This can pertain to animals, diseases, and food. Example: seeing a panther in Utah.

Endocarditis: Inflammation of the lining of the heart cavity and valves. May result from rheumatic fever or bacterial infection. See *infective endocarditis*.

Endocrine Gland: part of the endocrine system; produces hormones and secretes them directly into the blood as opposed to through a duct.

Endoderm: the innermost layer of tissue during development. The endoderm will form the gut, lungs, liver, pancreas, and the digestive tract. Compare *mesoderm* and *ectoderm*.

Endodontist: a dentist who specializes in the diagnosis, prevention and treatment of diseases concerning the tooth pulp. Their most common service is a root canal.

Endogenous: produced from factors known to be from within the body or tooth.

Endoplasmic Reticulum: a complex of specialized branching and tube networks surrounded by a membrane in plant and animal cells. The function of the organelle is to create (synthesize), modify and detoxify proteins, lipids and chemicals within the cell. It is made up of two parts the rough endoplasmic reticulum and the smooth endoplasmic reticulum. The rough endoplasmic reticulum is where proteins are made. It appears “rough” because this is where ribosomes are located (ribosomes help make the proteins). The smooth part is where the synthesis and the metabolism of lipids takes place. It also plays a role in detoxifying chemicals in drugs and pesticides. The endoplasmic reticulum spreads throughout the entire cytoplasm of a cell creating surface area for cell interactions.

Endotoxin: a toxin contained in the cell walls of gram-negative bacteria that is released when the bacterium is destroyed, causing illness to the host. Also known as lipopolysaccharide. See *lipopolysaccharide, exotoxin, and gram-negative bacteria*.

Intrinsic: originating from within a body part, organ, or tissue.

Enzyme: a protein that changes the rate of a chemical reaction in a cell while remaining unchanged in shape and function so it may be reused.

Eosinophils: a type of white blood cell (*leukocyte*). They are stained easily with acidic dyes, such as *eosin*, that is present at sites of allergic reactions and parasitic infection. Also called *eosinophilic leukocyte, oxyphil, oxyphilic leukocyte, granulocyte*.

Epidemic: the widespread occurrence of an illness through a specific demographic in a community or region, such as a certain age or sex; greater than the expected number of cases, of infectious diseases but also applied to any disease, injury, or health related event. See *endemic, pandemic*

Epidemiology: a branch of medicine that studies the amount of disease and measures risks for acquiring those diseases during specific time periods in large populations of people. Epidemiology is also used to determine the source and cause of the disease in order to control it

Epithelium: a group of cells that make up the skin and other coverings for the inside and outside surfaces of the body. It is classified into many different types according to the shapes of the cells and the number of layers. The cells all perform different functions such as secreting, absorbing or protecting.

Erosion: wearing away of the tissue of teeth due to chemical means. Can also relate to factors from outside of the body such as diet, habits, or environment. Self purging, such as the eating disorder bulimia, is also a cause.

Eruption: the movement of a tooth emerging through the tissue of the oral cavity into its functional stage. Eventually, the clinical crown (what we see) penetrates the tissue (gums).

Erythroplakia: a red, abnormal flat wound or patch on the inside of the mouth that may be cancerous. especially in hospitals and human health care facilities.

Etch: is a process of eating away the tooth enamel with acid, therefore allowing dental material to strongly bond to the outer surface of the tooth.

Etchant: an acid used to engrave by eating out a design on teeth.

Etiology: the study of causes or origins; in medicine, the cause or origin of a disease or abnormal condition.

Euphoria: an exaggerated sense of happiness or well being that is not normal. Euphoria is often associated with bipolar disorder and is not generally connected to anything happening in the person's life, but is exaggerated by changes in brain chemistry and is considered an abnormal mood state.

Exfoliation: the process of shedding primary teeth, or what we tend to consider baby teeth.

Exocrine: secreting a substance through a duct onto the body surface. See *exocrine gland*.

Exotoxins: poisonous protein released from different types of bacteria, may be harmful to the host.

Explorer: a slender, pointed, handheld dental instrument used to detect imperfections of teeth such as hanging restorations or caries. Also has tactile ability to detect changes in tooth consistency on a tooth surface such as the pits and fissures, and grooves..

External Carotid Artery: the outer branch of the common carotid artery that supplies blood to the face, tongue and external parts of the head. It divides into the superficial temporal and internal maxillary arteries. See *superficial temporal and internal maxillary arteries* and *common carotid artery*.

Extracellular Matrix: a filamentous structure that is attached to the outer cell surface, serving as a scaffolding to hold tissues together and to help determine their characteristics. It provides anchorage, traction and positional recognition to the cell.

Extrinsic: pertaining to or originating outside the structure; external. When pertaining to staining of the teeth, it corresponds to the outside structure of the tooth and is removable.

Exudate: a fluid composed of cells and other cellular debris that are discharged from blood vessels or other small pores in the body. Usually excreted from an infected area. Essentially, one would consider this to be puss.

Facet: over time as the teeth continually contact each other, as in the process of chewing or grinding, the tips of the teeth begins to wear down and have a smooth appearance. This can also be known as a wear facet. See *bruxism*.

Fetal alcohol syndrome: the side effects in an infant whose mother consumed alcohol during pregnancy. The side effects include abnormalities of the face, head, and body. Mental and learning retardation is also common due to the brain damage from the alcohol.

Fibroblast: a cell found within connective tissue that makes the collagen fiber found throughout the body. Fibroblasts make the very inside of the tooth, the pulp.

Filiform Papillae: small projections on the front top 2/3rds of the tongue; they are the most numerous of the papillae. Don't confuse with taste buds.

Film Emulsion: the coating on a radiographic film that is a mixture of gelatin and silver halide crystals. The gelatin and silver halide crystals are sensitive to light or radiation. After exposure a picture will then be produced on a film. See: sliver halide crystals.

Fimbriae: fringelike appendages on certain types of bacteria, used to attach to other surfaces. See *pilus*.

Fissure: the developmental lines or grooves from where the lobes of a tooth join together. They are most commonly found on the biting surface or the surface towards the cheeks.

Floss: a soft, waxed or unwaxed string used to remove plaque from between teeth, both below and above the gum line. By using floss you can prevent cavities and disease.

Fluorapatite: a mineral that makes up the basic structure of teeth; it replaces hydroxyl particles when exposed to fluoride which increases the tooth strength and protects it from cavities.

Fluoride: the best mineral for strengthening the outer surface of teeth and preventing cavities. You can increase fluoride in the body by adding it to food, water, and taking fluoride tablets.

Fluorosis: a disorder resulting from the intake absorption of too much fluoride, shown by staining or mottling of the teeth.

Foramen: a natural opening in bone that is usually for the passage of blood vessels and nerves.

Frankfort Plane: an imaginary line that starts at each ear canal and follows the bottom of the eye socket. This line is very important to find the correct angulation when lining up the patient to the x-ray machine.

Free Gingival Groove: a shallow line or depression on the tissue surface that separates the free and attached gingiva. It runs parallel to the margin of the gingiva. This line may be visible clinically but is not obvious in many instances. See *free gingiva*, *attached gingiva* and *marginal gingiva*.

Fremitus: occlusal movement of a tooth felt by putting your finger against the side of the tooth towards the face while having the patient bite down on their teeth a few times.

Frena: a fold of mucous membrane that connects a more moveable area to a fixed area, limiting movement in the area. Ex: under the tongue, and connecting the gingiva to the lips.

Frequency: the number of waves that pass a given point in a certain amount of time. See wavelength from biological (true) parents or ancestors.

Fulcrum: a finger rest used for stabilization and as a lever to turn your finger on during instrumentation, usually the ring finger.

Fundus: the base of an organ or the part furthest from its opening.

Fungi: spore-producing organisms that absorb nutrient from their environment. Fungi include molds, yeasts, mildews, smuts, mushrooms and rust.

Fungiform Papillae: mushroom shaped, red, projections located on the top of the tongue, interspersed with the filiform papillae. Contains taste buds.

Furcation: the area between the roots of a tooth, when a tooth has more than one root.

Fusion: two teeth that bind two adjacent tooth buds during development.

Fusobacterium Nucleatum: a gram-negative, anaerobic, non-spore forming bacterium found in the mouth. It has the ability to adhere to both gram-negative and gram-positive bacteria, which makes it very effective in causing disease. It is primarily known for destroying the attachment of the gums to the teeth in a gum disease called periodontitis, but has also been known to cause disease in many other parts of the body.

Gag Reflex: the elevation of the soft posterior part of the roof of the mouth. This is caused by something touching or becoming in contact with the back of the tongue, wall of pharynx, or soft posterior region of the roof of the mouth or more known as the soft palatal region.

Gag: could be the result of physiologic or psychological factors. It refers to the strong, involuntary effort to vomit.

Gastroesophageal Reflux: a backflow or reflex of gastric (stomach) contents into the esophagus that produces a burning sensation and is a result of the inability of the lower esophageal sphincter to function properly.

Gemination: is when during the development of the teeth, one tooth tries to split but fails, producing a large rooted tooth or a tooth with two crowns (the part of the tooth that is shown in the mouth.)

Geographic Tongue: a condition that makes the tongue appear with “bald” patches surrounded with a white border. It resembles something like a map and can change in appearance over time.

Ghost image: is an image of something produced twice on the same film. This could be done on purpose or accidental. Most commonly occurs, in the dental profession, on a panoramic film (full mouth picture) when earrings are worn.

Gingiva: pale pink tissue known as *gums* that cover bones of the mouth (maxilla and mandible) and the spaces where the teeth sit (known as *sockets*).

Gingival Hyperplasia: a condition when the gums (gingiva) swell and enlarges which is produced by factors other than local irritation. The margin or edge of the gums may be high on the enamel partly or nearly covering the tooth.

Gingival Margin: a thin rounded edge of the gums (gingiva) nearest to the tooth surface. It contacts the tooth slightly above the Cementoenamel junction (CEJ) in health.

Gingival Papilla: wedge of gingival tissue that fills the interproximal space between two adjacent teeth. The purpose of the papilla is to keep food from becoming trapped between the interproximal spaces. See *interdental papilla*.

Gingival Pocket: a pocket that is formed by swelling of the gum (gingival) tissue of 2 mm or more without vertical movement of the gums along the tooth or destruction of the

Gingival Sulcus: “V” shaped space between the tooth and gingiva where it is common to catch food and is easily flossed. When healthy the depth is between 1-3mm.

Gingivectomy: surgical removal of inflamed or unnecessary gum tissue in order to prevent future diseases in the mouth and to improve the gingival esthetics. This procedure is usually done by a periodontist.

Gingivitis: swelling and reddening of the gum tissue due to less frequent removal of bacteria. This may cause bleeding and pain upon brushing and flossing; can be reversed if proper oral hygiene is learned and executed.

Gingivostomatitis: inflammation of the gum tissue (*gingival*) and other tissues in the mouth that is caused from the herpes simplex virus. It sometimes resembles small ulcers and is referred to as a combination of *gingivitis* and *stomatitis*.

Glossitis: inflammation of the tongue. Some customary signs are: pain, redness, swelling, heat, and decreased loss of function.

Gloves: sterile or clean fitted coverings for the hands that are usually latex or vinyl gloves. Gloves are required to be worn to protect the patient and also the health care personnel from blood, saliva, or mucous membranes. Gloves should be worn in addition to, but not as a substitute for hand washing.

Glutaraldehyde: a substance that is used in a water solution to disinfect and sterilize dental instruments that are sensitive to heat; a substance that bonds proteins in the tiny holes of the dentin layer of a tooth to decrease the size of the hole, which decreases sensitivity.

Glycemia: the presence of glucose in the blood, measured in milligrams per deciliter (mg/dl).

Glycolysis: the process by which the body breaks down sugars to create energy.

Goiter: a noncancerous enlargement of the thyroid gland, located on the front and sides of the neck. Goiters are associated with iodine deficiency and usually indicative of abnormal thyroid secretions.

Golgi Apparatus: the component of a cell that modifies different materials in the cell before they are transported to other destinations.

Gomphosis: a type of immovable joint such as a tooth held in a bony socket.

Graft: when something such as tissue is taken from something or someone and transplanted into another host to replace damaged or missing tissue and is expected to become part of the host tissue.

Graft-Versus-Host-Disease: occurs when newly transplanted tissue attacks and destroys host tissue. It is most common with bone marrow transplants.

Gram Negative: bacteria with double cell walls that when stained with a crystal violet dye, resist the stain of a purple color. It is believed to play a vital role in the destruction of tissue that results in a disease of the dental tissues called periodontitis.

Gram's Stain: a method of staining bacterial cells using different types of dyes to identify different types of bacteria. See *gram-positive*.

Gram-Positive Bacteria: bacteria whose cell wall is stained purple by a dye call crystal violet. See *Gram's stain*.

Granulocyte: a type of white blood cell characterized by the presence of grainy particles within the fluid of the cell (cytoplasm). They can be subclassified into three groups of leukocytes; neutrophils, eosinophils and basophils.

Granuloma: a bump usually found in the mouth that is formed due to inflammation of the tissues. It is often red and hard.

Gray: the unit of measurement showing how much energy is absorbed in the body when exposed to radiation.

Gypsum: a mineral used to make plaster of Paris, which is then used to make models and dies for dental procedures. Habits include *bruxism, mouth breathing or tongue tension*.

Hairy Leukoplakia: a condition that affects the mouth and the edges of the tongue that appears as white raised lesions that have keratin projections on the lateral and dorsal surfaces of the tongue. Most commonly found with patients that have AIDS.

Half-Value Layer: the thickness of a specified material (usually aluminum, copper, or lead), when introduced in the path of x-ray beams, will reduce the exposure rate by one-half.

Halitosis: unsatisfying odor from the mouth resulting from poor oral cleanliness, systemic conditions, use of tobacco products and alcohol, and eating strong foods.

Hallucination: a sensory experience is not generated by real life but generated by the mind. It may be a sensory experience in which a person can see, hear, smell taste or feel something that is not there.

Hard Palate: the top of the mouth which is hard and bony, that separates the mouth from the nasal cavity.

Hare Lip: a split in the upper lip that resembles the upper lip of a rabbit caused by failure of the two parts of the palate (roof of the mouth) to join.

Health: having no disease or affliction to ones body.

Heart Attack: a potentially fatal condition which results from a clogged or blocked artery which causes a lack of blood supply to the heart, and therefore, a lack of oxygen; accompanied by sudden severe chest pain and may include pain down one or both arms. May also be called *myocardial infarction*.

Heart Rate: a count of the amount of times the heart beats in one minute; may be felt through any readily accessible artery.

Height of Contour: the largest distance around the edge of the tooth, greatest bulge of the tooth.

Hematocrit: the number of red blood cells in the total amount of blood. See packed-cell volume.

Hematoma: a collection of blood outside a blood vessel (artery or vein) usually forming a clot and causing internal bleeding. It is frequently caused by nicking a blood vessel during injection of local anesthetic.

Hemidesmosomes: a specialization of the plasma membrane, found on the basal surface of an epithelial cell, representing half desmosomes, which forms the site of attachment between the basal epithelial cells to the basement membrane.

Hemodialysis: process by which a machine filters the blood for the body when the kidneys are not working properly. This can result from kidney disease or other toxic conditions.

Hemoglobin: component in red blood cells that give them their red color and carry oxygen to tissues.

Hemorrhage: a loss of a large amount of blood that can occur inside the body or outside the body. It can escape from an artery, vein, or capillary.

Hemostasis: the stoppage of bleeding by either a mechanical or physiological means.

Heparin: an acid that is found in the lung and liver tissue that prevents platelet agglutination and blood clotting. It is used therapeutically as a anticoagulant in the form of sodium salt.

Hepatitis A: an infection caused by the Hepatitis A Virus (HAV) which is mainly transmitted through food or water that has been contaminated with fecal matter. A vaccine is available to protect against the virus.

Hepatitis B: an infection caused by the Hepatitis B Virus (HBV) which is transmitted through blood, saliva, semen and vaginal secretions which can therefore classify it as a sexually transmitted disease. This virus can survive outside of the body for up to a week. A vaccine is available to protect against the virus.

Hepatitis C: an infection caused by the Hepatitis C Virus (HCV) which is transmitted through blood transfusions and contaminated needles. There is currently no vaccine available to protect against this virus.

Hepatitis D: an infection caused by the Hepatitis D Virus (HDV) which is transmitted through contaminated blood and needles, sexual contact, and a mother transferring it to her child during birth. The hepatitis D virus can only cause infection in the presence of hepatitis B. Therefore if a person never has hepatitis B they will also never have hepatitis D.

Hepatitis E: an infection caused by the Hepatitis E Virus (HEV) which is transmitted usually through water that has been contaminated with fecal matter. There is currently no vaccine available to protect against Hepatitis E.

Heredity: the passing of traits, resemblance, physical qualities, or disease to offspring.

Hiatus Semilunaris: a curved groove beneath the middle nasal concha in the middle meatus of the nasal cavity. It has openings for the maxillary sinus, the frontonasal duct, and the middle ethmoid cells open.

Histamine: a molecule that is found in all cells, but a higher percent is found in mast cells. It is associated with allergies and allergic reactions.

Histology: the study of tissue to see what the tissue makes up, and if there is anything wrong with it.

Holocrine Gland: is a gland that when it releases its fluid the cell dies and is secreted along with the fluid, then another one takes its place.

Homogenous: having the same consistency throughout

Horizontal Bone Loss: when the bone surrounding the tooth (alveolar bone) is destroyed at the same level as the bone surrounding the tooth next to it. It creates a horizontal line between the two teeth. It is the most common form of bone loss.

Hormones: a chemical substance produced naturally by the body in one area and then travels through the bloodstream to another area and causes an effect such as growth or metabolism.

Human Immunodeficiency Virus: a virus that infects the human body through body fluids but may take up to six months for a person to know they are infected with the virus. This virus can live in the body for up to fifteen years before any signs and symptoms may occur. The virus will eventually turn into AIDS (acquired immunodeficiency virus) and the chances of survival are slim.

Hutchinson's Incisor: a deformity which is caused by having syphilis at a young age.

Hyaline Cartilage: the most common, and weakest, type of cartilage; forms the fetal skeleton and will be a model to later change into bone. Located in joints and respiratory passages including the nose, larynx, and trachea, which all may have roles in the digestive system, and therefore, the oral cavity.

Hydrogen Bond: a weak chemical bond between a hydrogen atom and a small electronegative atom (i.e. oxygen, nitrogen, or fluorine).

Hydroxyapatite: an inorganic compound composed of calcium, phosphate, and hydroxide, which are found in the hard substances of the body such as the bone matrix and teeth, which imparts rigidity to these structures.

Hygiene: practices of keeping oneself clean and well as possible throughout the body.

Hyoglossus: a muscle located on both sides of the tongue and extends down to the hyoid bone which helps hold down and retract the sides of the tongue.

Hyoid Bone: a bone that is found in the front side of the neck, it is U-shaped, it is attached just below the tongue.

Hyperpnea: breathing deeper and quicker than normal to meet respiratory demands.

Hypersensitivity: the excessive response of the immune system to a foreign object. The symptoms range from a mild skin rash to anaphylaxis depending on the type of hypersensitivity.

Hypertension: elevated blood pressure beyond the standard of 120/80. There are many causes of hypertension but it results when the heart has to work harder to pump blood to all parts of the body. It therefore can cause a stroke and other heart conditions

Hyperthyroidism: condition that causes the thyroid gland to produce too many hormones. Symptoms include protruding eyes, increased heart rate, weight loss, hunger, heat intolerance, and frequent bowel movements.

Hypertrophy: abnormal enlargement or overgrowth of an organ or part of the body due to an increase in the size of the cells; not from an increase in the number of cells or from tumor formation.

Hyperventilation: an increased depth and rate of breathing greater than demanded by the body. Hyperventilation: breathing faster and/or deeper than the body requires. It is associated with anxiety and can lead to dizziness and fainting. It is the most common dental emergency.

Hypocalcemia: When the healthy level of calcium in the blood falls below the 4.0 mg/dL.

Hypocalcification: deficient (less than normal) calcification (building of calcium mineral) of bone or teeth.

Hypodontia: a congenital condition characterized by the absence of six or less permanent teeth. See *anodontia*, *oligodontia*.

Hypoglossal Nerve: the twelfth cranial nerves which supplies intrinsic muscles and other tongue muscles.

Hypoglycemia: a condition existing when the concentration of blood sugar is lower than normal blood glucose levels which will cause negative effects on the body. \

Hypoglycemia: abnormally low levels of glucose (sugar) in the blood. Symptoms include sweating, nausea, dizziness, confusion, difficulty speaking, tiredness, and headaches. This condition is treated by having the patient consume carbohydrate/sugar-rich foods or beverages, such as cake frosting or orange juice.

Hypoplasia: is the underdevelopment of the hard part of the tooth which if it is not formed correctly will make the teeth brittle.

Hypotension, Orthostatic: the sudden drop in blood pressure when a person stands up too quickly from a sitting or lying position causing dizziness, lightheadedness, or fainting. It is a side effect of medications taken for high blood pressure and depression. It is also associated with older adults. See postural hypotension.

Hypothyroidism: a disorder in which the thyroid gland stops functioning properly to make and distribute Thyroid Hormone (TH). Large protruding eyes is a common symptom that happens because of the accumulation behind the eyes.

Hypoxia: lack of oxygen being brought into the tissues of the body. It can be a result of administering nitrous oxide in a dental office and not giving strait oxygen at the end of the procedure.

Ibuprofen: a drug used to relieve mild to moderate pain, inflammation, and reduce fever. Common examples are Motrin and Advil.

Idiopathic: a condition or disease that arises spontaneously or from an unknown cause.

Immune Response: a body response and how it defends itself from bacteria, viruses, and things that are foreign or harmful to the body. Any microorganism (for example, a foreign cell or tumor) that invades or attacks the normal body cells are recognized as foreign—requiring the immune system to attack the foreign cell.

Immunity: the resistance a person has to disease. Immunity can be natural or gained from a previous infection or immunization.

Immunodeficiency: a condition in which the body's immune system is damaged or weakened so that is cannot fight infections.

Immunoglobin E (IGE): a type of antibody that is formed to protect the body from infection and comes as a result of an allergic reaction.

Immunosuppressant: an agent or substance that inhibits the body's natural immune response; usually used to avoid rejection of an organ after an organ transplant.

Immunosuppression: a reduction or suppression of the body's natural response to foreign substances.

Impaction: a tooth that either hasn't come out of the socket yet or has partially come out because it is covered by bone, soft tissue, or another tooth. Impaction makes it so the tooth cannot come out normally, like other teeth. The most commonly impacted teeth are wisdom teeth.

Impairment: the loss, damage, or malfunction of a part of the body or bodily function.

Impetigo: an infectious skin disease caused by germs and is characterized by microscopic pus-filled blisters on the face, neck, and hands. These blisters eventually crust over, and are most common in babies and children ages 2-6.

Implant: a metal device that is inserted into the bone of the upper or lower jaw permanently, used to replace a missing tooth.

Implantation: the surgical placement of an artificial tooth root into the upper or lower jaw bone to replace missing teeth.

Impression: an imprint of teeth and surrounding tissues using wax, plaster etc. used to make casts for a permanent record or for the fabrication of a dental restoration or prosthesis

Incidence: the extent to which disease occurs in a population. Cancer incidence is the estimated number of new cases of cancer diagnosed each year.

Incipient Caries: the beginning or early formation of a cavity that is only seen in the enamel (outer layer) of a tooth; it has the potential to be remineralized.

Incipient: beginning to appear or come into existence.

Incisive Foramen: a hole or an opening at the middle line of the front part of the hard palate directly behind the maxillary central incisors (two top front teeth).

Incisive Papilla: a small, round fold of tissue located directly behind the two front teeth of the upper jaw on the roof of the mouth.

Index: a standardized scale used as a reference to compare or describe the status of a group or an individual in regards to oral health. See *dental index*.

Indolent: a slow growing, non-active condition, which is usually painless.

Infection control: steps taken in order to prevent the spread of transferable diseases,

Infection: when disease-producing microorganisms invade the body and multiply, damage or release toxic agents. This usually results in inflammation. See *inflammation*. There are certain types of infection. See *primary infection* or *secondary infection*.

Inflammation: a response of body tissues to injury, infection, or irritation that is characterized by heat, redness, pain, and swelling.

Inflammatory Mediators: molecules that are released by immune cells that stimulate the inflammatory response when harmful agents invade our body. Inflammatory mediators of importance in periodontitis are the cytokines, prostaglandins, and matrix metalloproteinases. See *periodontitis*.

Informed Consent: the process of getting a patient's permission and full cooperation to participate in either a medical or surgical procedure after the patient has been fully informed and understood of all risks, benefits, possible alternatives, and course of treatment.

Informed Refusal: a patient's decision to not accept any treatment, after the doctor has explained the condition, the possible benefits of treatment, the possible risks of treatment or lack of treatment, and any other options of treatment.

Infraversion: the position of a tooth when it is depressed below the line of occlusion. The state wherein a tooth has failed to completely erupt and does not contact the opposing tooth.

Inhalation: the act of breathing in air or vapor into the lungs. Also known as *respiration*.

Inhaler: a hand held dispenser containing medicine in a mist or powdered form that is breathed into the lungs; most often used to treat respiratory diseases such as asthma.

Innocuous: not able to cause disease. See *pathogenic*.

Insomnia: long lasting inability to sleep or to remain asleep throughout the night; wakefulness; sleeplessness. The causes of insomnia may be physical, psychological, psychiatric, or presence of a specific sleep disorder.

Instrumentation: the use of dental instruments when treating a patient.

Insulin Dependent Diabetes Mellitus (IDDM): an absolute deficiency of insulin, a hormone needed in the pancreas that regulates the level of glucose in the blood. This deficiency results from the destruction of the insulin-producing beta cells in the pancreas; patients are dependent on insulin injections to sustain life; usually arises in childhood or puberty, but may occur at any age. It is characterized by excessive thirst, increased urination, increased desire to eat, loss of weight, diminished strength, and marked irritability. See *autoimmune diabetes, growth-onset diabetes, IDDM, juvenile diabetes, juvenile-onset diabetes, ketoacidosis-prone diabetes, ketosis-prone diabetes, type I diabetes*.

Insulin Shock: reaction to inadequate intake of food or too much insulin. Usually occurs in diabetic patients when they forget to eat a meal and don't have enough glucose in their blood.

Insulin: a hormone produced in the pancreas that regulates the concentration of blood glucose (the body's main source of energy) by absorption of the glucose into muscle

Integrity: a virtue consisting of reliability of an obedience to moral principles and character. This involves consistent and habitual honesty. Some ethicists feel that integrity is the first or primary virtue.

Interdental Papilla: wedge of gingival tissue that fills the interproximal space between two adjacent teeth. The purpose of the papilla is to keep food from becoming trapped between the interproximal spaces. See *gingival papilla and papillary gingiva*.

Interdental Septum: the bone of the jaw located between two teeth.

Interdental: between two teeth located next to each other.

Internal Carotid Artery: a division of the common carotid artery that supplies oxygenated blood to the brain. See *common carotid artery*.

International Normalized Ratio (INR): a system used in measuring the efficacy of certain blood thinning drugs such as warfarin. The system involves the ratio of a hormone in the body called prothrombin, which aids in blood clotting. The ratio is measured against a set standard.

Interproximal Space: the triangular space between two teeth that are right next to each other. See *interdental area*.

Intervention: to interfere as to modify to improve health; to change or alter the course of a disease; to intervene.

Intraoral: within the mouth.

Intrinsic Stain: a stain developing from without the tooth. May be caused by outside sources such as certain medications, or excessive exposure to the element fluoride, or by sickness or genetic problems. This stain cannot be removed by mechanical means such as polishing, scraping, brushing, or flossing. However; the stain can be lightened by dental whitening.

Ion: an atom that gains or loses an electron. See *electron*

Iontophoresis: a process where an electric current is created allowing the soluble salts found in fluoride supplements to cross the oppositely charged particles found in the outer surface of the tooth, making it possible for the fluoride to penetrate the inner portion of the tooth structure making it stronger and reducing sensitivity.

Iron Deficiency Anemia: the most common nutritional disorder known in the world, where iron shortage results in anemia, a blood condition in which there are too few red blood cells or the red blood cells are deficient in hemoglobin, a key molecule responsible for the transport of oxygen around the body. The lack of iron and hemoglobin can result in extreme fatigue.

Irrigation: flushing or washing of a certain area or site with a liquid inside the mouth for healing purposes.

Irritant: an agent that irritates or stimulates a response.

Junctional Epithelium: the tissue located at the base of the gingival sulcus which attaches to the tooth surface and creates a seal. Also, known as epithelial attachment. See *gingival sulcus*.

Kaolin Clay: A main component of porcelain used for its oil absorbing properties and used in the manufacture of many powdered and opaque cosmetics.

Kaposi's Sarcoma: a type of cancer that is characterized by the abnormal growth of blood vessels. It begins to appear as a red, pink, or purple red spots, raised areas of the skin, or patches. These lesions are often found on the back, neck, face, mucous membranes, or chest but can also occur in the internal organs. Kaposi's sarcoma is also associated with AIDS.

Karyotype: the observable chromosomal characteristics of an individual or species.

Keratin: A strong, fibrous protein that forms the rigidity of skin, hair, nails, feathers, and hooves.

Keratinization: basically increasing the roughness of skin. It is the process in which the epidermis creates its outer protective layer known as the stratum corneum by deposits of keratin.

Keratosis: A very common genetic disease characterized by an overgrowth of keratin on the skin and manifested as rough bumps or wart-like growths.

Ketoacidosis: a severe form of metabolic acidosis that is the result of ketones and high levels of blood glucose. It is most often associated with poorly controlled diabetes or can also occur as a complication from another illness. This condition is a life-threatening emergency. Signs and symptoms include confusion, nausea, vomiting, weight loss, shortness of breath, and a fruity odor on the breath.

Ketone: Any of a class of organic compounds containing an oxygen atom joined to a carbon atom by a double bond. The two remaining bonds from carbon are attached to alkyl groups which, by definition, only contain hydrogen and carbon atoms.

Ketonuria: A medical condition in which excessive amounts of ketone bodies are

Kidney Disease: damage or loss of function to the kidneys that is sometimes caused by

Kilogram: A measure of weight in the metric system equivalent to 1,000 grams and 2.2. pounds.

Kilohertz: A unit of measurement of frequency equal to one thousand cycles per second and 1,000 Hertz.

Kilovoltage Peak: a measure of the maximum or peak voltage applied across an x-ray tube.

Kinin: one of a group of polypeptides derived from kininogen that lowers blood pressure by dilating blood vessels and causes smooth muscle to contract. In addition, they cause local increase in the permeability of tissue capillaries and are therefore associated with inflammation. Kinins also play a role in allergic response and anaphylaxis.

Kussmaul Breathing: The very deep, rapid, labored, and abnormal breathing associated with severe ketoacidosis.

Kwashiorkor: severe malnutrition chiefly affecting young children especially of impoverished regions. Symptoms are seen soon after weaning and caused by a diet excessively high in carbohydrate and extremely low in protein. Kwashiorkor is characterized by a protuberant belly, failure to grow, anemia, liver damage, edema, discoloration of the skin or hair, and bulky stools containing undigested food

Kyphosis: Also called “humpback.” An abnormal forward or increased convexity in the curvature of the upper back area. It can be the result of bad posture or a structural, muscular abnormality in the spine.

Labial Frenum: a fold of tissue found at the midline of both the upper and lower arches

Labial: the inner lining of the lips or the tooth surface found towards the lips.

Labioversion: a tooth that is tilted out of the line of occlusion, more towards the lips than normal.

Lamina Dura: a thin, hard layer of bone (cortical bone) that lines the tooth’s socket. It appears as a continuous white (radiopaque) line around the tooth in a dental x-ray.

Lanugo: is small fine hair found on those suffering from anorexia nervosa (mental disorder resulting in extreme loss of weight). The body grows this hair in attempt to keep the body insulated and warm. *see anorexia nervosa*

Latent Image: an image on a radiographic (x-ray) film that is produced when the x-ray is exposed but cannot be seen until the film goes through a processor; as soon as the film is developed the image becomes visible.

Latent Period: the time between when the x-ray is taken and when the image shows up on the photograph.

Lateral Fossa: a smooth, depressed area that is located between on the facial surface between the lateral incisor and the cuspid; because it appears dark on x-rays, it can give us an impression that it is an abnormality or disease.

Lead apron: a flexible apron containing lead that is put over the patient during exposure of radiographs (x-rays) to protect the patient’s tissues from harmful radiation.

Leeway Space: the sum of the difference in the space between the primary canines and

Lesion: a localized pathological change in an organ or tissue due to trauma, infection or disease. See *injury or wound*.

Leukocyte: a colorless blood cell containing a nucleus that aids the body in fighting infections; leukocytes are divided up into granulocytes and agranulocytes. See *white blood cell*.

Leukoplakia: a white patch or area found on the lining of the mouth that can not be wiped off or characterized as any other disease. Usually caused by tobacco and may become cancerous.

Lidocaine: a local anesthetic also used as an antiarrhythmic drug.

Line angle: an angle formed where two surfaces of the teeth meet. Its name is made by combining the names of the surfaces that are meeting.

Linea Alba: a normal white line found on the cheek that runs parallel to the teeth.

Linear Gingival Erythema: a form of periodontal disease that presents itself as a red

Lingual Artery: an artery that supplies blood flow to the tongue and the floor of the mouth.

Lingual Foramen: a small opening on the inner portion on the middle side of the jaw where blood vessels pass through; it cannot be seen on x-rays.

Lingual Nerve: a nerve that innervates the tongue, floor of the mouth and the inner portion of our lower teeth.

Lingual Tonsil: tonsils that are located behind the top surface of the tongue.

Lingual: a medical term that defines the inner portion of the mouth where the surfaces of the teeth are directed towards the tongue or the hard/soft palate; opposite of facial/labial/buccal.

Linguoversion: a malposition in which the tooth/teeth are directed towards the tongue.

Lining Mucosa: the tissue that lines the cheeks, lips, soft palate and floor of the mouth.

Local Anesthesia: the application of an anesthetic drug to a specific area. This anesthesia creates a loss of sensation or a pain free area.

Long buccal nerve: the nerve that sends information to the brain from the area of the gingiva located in the area of the lower molars.

Lymph Node: a round, oval or bean-shaped accumulation of lymphoid tissue located along lymph vessels. It serves as a defense mechanism for the body by filtering bacteria and other toxins from the body as well as producing lymphocytes. See *lymphatic system*.

Lymphoblast: a cell that divides and eventually becomes a mature white blood cell.

Lymphocyte: constitutes about 25% of all white blood cells. Includes B cells and T cells (also called *B-lymphocytes* and *T-lymphocytes*) that function in the body's immune system by recognizing and deactivating specific foreign substances called *antigens*. Lymphocytes are found in the lymph nodes and spleen and circulate continuously in the blood and lymph.

Lymphoid: relating to tissue that is responsible for producing white blood cells and helps to fight infection. See *lymph tissue*.

Lymphoma: cancer found in the lymph nodes.

Lysis: destruction of red blood cells, bacteria, and other structures by a specific lysin; can also refer to the gradual decline of disease symptoms.

Macrodontia: an abnormal condition in which the teeth are too large. It can affect one or more teeth and may be caused by the fusion of two teeth.

Macroglossia: a very large tongue.

Macronutrient: an essential nutrient that is required in relatively large amounts (greater than 100 mg daily) for normal growth and development. This includes carbohydrates, fats, protein, water and certain minerals.

Macrophage: a cell found in tissues of inflammation that destroys other cells, especially connective tissue and bone, by surrounding and engulfing them with its cell membrane, a process known as *phagocytosis*.

Malignant Hyperthermia: a potentially fatal condition believed to be caused by an inherited alteration of muscle membranes that reacts to specific types of anesthesia with tetany and high body temperatures.

Malignant: a severe tumor or cancer of abnormal tissue that grows unrestrained within the body. It may stay localized in an area or spread to other parts of the body which is metastasis. When a tumor is said to be malignant, it is cancerous. If left untreated, a malignant tumor or disease will progressively become worse and may cause death. Malignant is also used to describe chronic progressive diseases.

Malnutrition: any disorder of nutrition; can include over-nutrition or under-nutrition. Results from an unbalanced, insufficient, or excessive diet.

Malocclusion: the way in which the upper jaw and lower jaw don't come together in alignment in relation to one another.

Malpractice: a medical professional's carelessness that causes harm to a patient. Malpractice is a result of a professional's lack of standard medical performance during treatment of a patient.

Mamelon: one of the three small bumps on the biting edge of a tooth when it first comes into the mouth.

Manager: an individual who conducts business, controls resources, and/or manages processes, materials or people.

Mandibular Condyle: a round projection of bone on the lower jaw, this connects the lower jaw to the skull.

Mandibular Torus: a non-cancerous bony lump or growth that occurs on the tongue side of the jaw bone inferior to the premolars and canines. Torii may occur due to stress on the teeth. Also known as *torus mandibularis* (*pl. mandibular tori*). See *Torus*.

Marasmus: a condition of continual undernourishment that occurs most often in children; usually caused by a diet lacking in calories and protein.

Marginal Gingiva: the portion of gum tissue that is closest to the visible teeth. It is unattached and encircles the entire tooth in a collar like fashion to form the gingival sulcus. See *gingival sulcus*.

Marginal Ridge: an elevation or ridge of enamel that forms the boundary nearest to neighboring teeth on the chewing surface of a tooth. See *enamel*.

Mask: a protective covering that is worn on the face in the hope of stopping the spread of germs during dental treatments.

Masseteric Artery: a branch of the maxillary artery that passes through the mandibular notch and supplies blood to the masseter muscle. See *maxillary artery*, *mandibular notch*, and *masseter muscle*.

Mast Cell: a cell that is contained in most types of body tissue. It plays an important roll in allergic reactions and infection by releasing inflammation causing histamine. Also called *mastocyte*.

Mastication: the act of chewing, which causes something such as food to be crushed and ground down by the teeth.

Masticatory Mucosa: mucous tissues that line the areas of the mouth used most during chewing, the gums and roof of the mouth.

Materia Alba: soft, white or cream colored mass collected around the necks of unclean teeth. It is composed of an accumulation of food debris, bacteria and dead cell elements.

Matrix: a supporting structure for something, such as a tooth, to develop in.

Maturation: the final stage of tooth development that develops hard tissues including dentin and enamel.

Maxillary Artery: an artery that originates in the external carotid and branches off into three divisions that supply the neck and face. The first division is the mandibular division which branches into the *deep auricular*, *anterior tympanic*, *middle meningeal*, *inferior alveolar*, and *accessory meningeal*. The second is the pterygoid division and branches into the *masseteric*, *pterygoid*, *deep temporal*, and *buccal*. The third branch is the pterygopalatine division which divides into the *sphenopalatine*, *descending palatine*, *anterior superior alveolar (infraorbital)*, *posterior superior alveolar*, *middle superior alveolar*, *pharyngeal*, and *artery of the pterygoid canal*.

Maxillary Sinus: A paired sinus (hollow space) located in maxilla or cheek area.

Maximum Permissible Dose (mpd): the maximum recommended amount of ionized radiation that one person in specific occupations, that are exposed to radiation, can receive without producing any harmful side effects to the body or body parts exposed.

Meal Plan: a plan used to control what a person eats. The plan is designed to meet specific dietary needs of an individual.

Mean: is the sum of all the numbers divided by the numbers added together.

Medial Nasal Process: protrusion of tissue at the midline of the face which is present during development, this later forms upper lip and nose.

Median: the number listed in the middle of a set of numbers arranged from smallest to largest.

Medical History: information collected from a patient or care giver about his/her past and present health and family health. Information such as medications, conditions, diseases, allergies, and concerns should be included. Information must be disclosed to the medical/ dental staff before treatment is begun.

Medicare: an insurance program chartered by the U.S. government that aids those who have social security or are Railroad Retirement beneficiaries. Only those over the age of 65 and those with certain disabilities are eligible. It is funded by both the U.S. government and premiums paid by those enrolled in Medicare.

Melanin: a substance produced by the body that gives coloring to oral mucous membranes, skin, hair and eyes. As an area receives more melanin it will have a darker brown color.

Melanocyte: a cell in the skin that produces pigment called melanin. Melanin is responsible for the color of the skin and can become malignant and form cancer of the skin. See *melanoma*.

Mental Artery: a branch of the inferior alveolar artery that emerges from the mental foramen and supplies the chin. See *inferior alveolar artery* and *mental foramen*.

Mental Foramen: A small opening in the bone that is located in the mandible at the premolar area in which nerves and vessels pass through. It is a radiolucent (dark) area

Mepivacaine: a local anesthetic (causes numbness/blocks pain in a specific area) in the amide group a derivative of xylylidine. Uses include infiltrations, block injections, spinal caudal and epidural anesthesia.

Mesenchymal Cells: Connective tissue that is capable of developing into bone, cartilage and lymphatic tissue.

Mesial: the side of a tooth facing toward the center of all of the teeth (between the central incisors). See *medial*.

Mesiobdens: A supernumerary (extra) tooth that is located in the middle (midline) of the face in the maxilla (upper jaw).

Mesoderm: the middle layer of tissue during development. Connective tissue, bone, cartilage and muscle develop from this tissue.

Mesognathic: having the both upper and lower jaws extend giving the facial outline a relatively flat appearance (straight profile).

Metastasis: the spread of cancerous or tumorous cells beginning at one site and spreading to other organs of the body.

Microdontia: primary teeth that grow in to be smaller than they should be.

Micronutrient: a dietary element that is essential in small quantities for proper growth and metabolism of an organism.

Microorganism: a living thing that is too small to see without a microscope such as bacteria, fungi, and viruses.

Microvilli: tiny hairlike structures that increase the surface area of epithelial cells, particularly in the small intestine. The increased surface area aids in improved absorption of nutrients. (See *Digestive System* or *Small Intestine*)

Microvilli: tiny hairlike structures that increase the surface area of epithelial cells, particularly in the small intestine. The increased surface area aids in increased absorption of nutrients. (See *Digestive System* or *Small Intestine*)

Midgut: The early part of the digestive tract of an embryo that will eventually form part of the intestine. Milliamperes is used to control the quantity of the x-ray beams. The higher setting will increase the temperature, thus producing a higher number of electrons.

Milliamperes: a unit of measurement used to describe the intensity of an electrical current.

Mitochondria: a spherical organelle located in the cytoplasm (gel-like substance) of almost all eukaryotic cells. It is responsible for all energy production (i.e. ATP production) within the cell giving it the nickname of the “powerhouse” of the cell. It consists of two sets of membranes, a smooth outer coat and an inner coat with tubules or finger-like projections known as cristae. It also contains genetic material for the cell and enzymes used for metabolism to convert food into energy.

Mitral Valve Prolapsed: a heart problem in which the valve that separates the upper and lower chambers of the left side of the heart does not close properly, when this happens a very small amount of blood may leak through, moving backward from the ventricle to the atrium; may be characterized by a heart murmur and sometimes chest pain and disturbed heart rhythm.

Mixed Dentition: a time in which a person has both baby teeth and adult teeth usually occurring between the ages of 6 and 12.

Mode: the most often occurring number in a group of values.

Molar: rearmost tooth in the mouth that is used for chewing and grinding; it is usually the largest tooth in the mouth. molars and the permanent cuspids and bicuspids; measured in millimeters.

Molars: large teeth in the back or posterior part of the mouth. Used for grinding food to ease swallowing and digestion.

Monocyte: A type of white blood cell (leukocyte) found in the blood stream that helps fight off chronic infections. In the presence of infection the monocyte becomes a macrophage that kills the infection by eat it (phagocytes).

Morbidity: percentage of healthy people compared to those whom are affected by a certain disease during a specified time period.

Mortality: percentage of cases of a reported disease in a particular population compared to deaths caused by the disease during a specified time period.

Mottled Enamel: yellow to black spotted tooth surfaces caused from intaking too much fluoride while the teeth are developing.

Mouth Breathing: due to possible obstruction of the nasal cavity, one breaths through the mouth instead of the nose. Usually occurs while sleeping.

Mouth Rinse: an antiseptic aqueous solution that cleans and refreshes your mouth and breath

Mouth: an opening in the head that is part of the face. It is where food enters the body and where speech is produced, it contains the teeth, tongue and lips.

Mouthwash: a flavored, liquid solution that is gargled to cleanse the mouth and freshen breath by killing bacteria.

Mucocele: a cyst in the mouth produced by a ruptured salivary gland that fills with

Mucogingival Junction: the point at which the loose alveolar mucosa and the attached gingiva of the alveolar bone join together.

Mucosa: musous tissue that lines cavities or organs. Also see *mucous membrane*.

Mucous Membrane: thin sheets of tissue that produce mucous and line structures in the body that open up to the outside, such as the mouth.

Mucus: thick, gel-like fluid produced by the mucous membrane that is used for lubrication of the mouth and protection of other organs

Muscular Trismus: a condition in which of the muscles of the jaw contract and result in painful and involuntarily opening and closing.

Mycosis: a disease or infection that occurs in the body due to fungus invasion.

Myeline Sheath: A covering of a nerve that helps speed up the time in which

Myeloblast: an immature *myelocyte* found in bone-marrow, not normally found in the blood, which develops into certain white blood cells (*neutrophils, eosinophils, and basophils*).

Myopathy: any disease or abnormal condition of the muscular tissues. Can be inherited or acquired; often involves the skeletal muscle.

Myxedma: a medical condition occurring in adults that results in the malfunction of the thyroid gland in which it produces insufficient amounts of Thyroid hormone. This condition is also called hypothyroidism.

Naris: the opening of the nose that allows air to flow in and out. See *nostril*.

Natural Killer Cell: a white blood cell (*lymphocyte*) that recognizes infected cells or tumor cells as “foreign,” without requiring prior exposure to them, and destroy them. Also called *NK cell*.

Natural Wrist Position: the pose in which the wrist and hand are in a state of rest. This includes a straight wrist, relaxed rotation of wrist, fingers slightly curled with the thumbs relaxed and straight.

Necrosis: tissue death, caused by disease, injury or restriction of blood supply.

Necrotizing Ulcerative Periodontitis (NUP): a very painful infection that includes ulcerated bleeding gums, destruction of the ligament that holds the tooth in the jaw bone (periodontal ligament) and dying of the bone itself. NUP is a rapid and destructive form of periodontitis and is also known as trench mouth. See *trench mouth and periodontal ligament*.

Neuron: the basic unit of the nervous system. The neuron is an electrically excitable cell which receives, processes, then transmits impulses or information away via synapses. See *Synapse*.

Neurosis: mental disorder that is characterized by avoidance and anxiety. Person is intact with reality and is socially normal but can be triggered to have anxiety and avoidance.

Neurotransmitter: chemicals which relay messages that permit nerve cells to communicate.

Neuroclusion: an occlusion in which the top mesiobuccal cusp of the first permanent molar properly aligns with the groove of the lower first permanent molar with abnormalities involving individual teeth. See *mesiobuccal cusp*.

Neutrophil: a white blood cell that is readily stainable by neutral dyes. Neutrophils are the first to arrive at a site of infection to kill and digest invading bacteria. See *phagocyte*.

Nodes of Ranvier: small gaps that occur along the myelin sheath that surround the axon of the nerve cell. See *myelin sheath; axon*.

Nodule: elevated solid tissue mass that is smaller than 1 cm in diameter.

Nonblisterform: hard, solid lesion containing no fluid

Normal Flora: bacteria and fungi found in the healthy human body that acts as a natural immunity against disease-producing microorganisms.

Nuclear Envelope: a small fluid filled cavity within the cytoplasm (gel-like substance) of a cell that separates the nuclear from the cytoplasm. It is bound within a single membrane and contains water, food, air or metabolic waste. It aids in cell secretion, excretion, storage and digestion.

Nucleus: the inner part of a living cell which carries the genetic code, controlling metabolism, growth, and reproduction.

Nutrient Density: method used to assess the quality of a food based on the amount of nutrients it contains compared to the total amount of food energy contained within it.

Occlusal: the portion of teeth that come in contact for the action of chewing.

Oculomotor Nerve: is the third of twelve paired cranial nerves, which supplies most of the eye muscles to control eye movement, pupil constriction, and opening of the eyelid.

Odontoblast: a cell that is found on the surface of the dental pulp (the center of the tooth) that functions in producing dentin. Dentin is the substance of tooth that is found under the tooth enamel (the outermost layer of tooth).

Olfactory Nerve: the first of the twelve cranial nerves. This cranial nerve has sensory function in which the nerve carries information relating to smell to the brain.

Oligodontia: a congenital condition characterized by the absence of more than six permanent teeth. See *anodontia, hypodontia*.

Operculum: a flap or lid of gum tissue partially covering the top of an erupting tooth, specifically the 3rd molar in pericoronitis. See *pericoronitis*.

Opioid: any morphine-like synthetic narcotic that produces the same effects as drugs derived from the opium poppy (opiates), such as pain relief, sedation, constipation and respiratory depression. The chemical works by binding to opioid receptors. Physical dependence can develop with ongoing administration of opioids, leading to a withdrawal syndrome with abrupt discontinuation. Opioids can produce a feeling of euphoria, and this effect, coupled with physical dependence, can lead to recreational use of opioids by many individuals. The most common opioid agonists are morphine and oxycodone.

Optic Nerve: is the second pair of cranial nerves, they are also called cranial nerve II. The optic nerve sends visual information from the retina to parts of the brain.

Oral Cancer: most often similar to squamous cell carcinoma but rapidly spreading and originating in the tissues that line the mouth and lips but most commonly involves the tissue of the lips or the tongue; may also occur on the floor of the mouth, cheek lining, gums, or roof of the mouth.

Oral Cavity Proper: the inside space of the mouth surrounded by the teeth and/or arches. Consists of everything from the roof of the mouth (hard and soft palate) down to the floor of the mouth (where the tongue connects).

Oral Cavity: the cavity of the mouth which begins at the teeth and cheeks and extends to the tonsils, including everything in between; beginning of the digestive system.

Oral Epithelium: the tissue that lines the oral cavity. It is composed of stratified squamous epithelium of varying thickness and degrees of keratinization. See *keratinization* and *squamous*.

Oral Mucosa: the membrane that lines the interior of the mouth.

Oral Pathology: the branch of dentistry concerned with the cause and origin of disease of oral structures, as well as structures surrounding the mouth, including oral soft tissues, mucous membranes, teeth, jaws, and salivary glands.

Orthodontist: a dentist specializing in correcting poor positioning of the teeth and jaw. Aesthetics is of concern to them along with correcting irregularities.

Osteoblast: a type of cell which builds up bone.

Osteoclast: a type of cell which breaks down bone.

Osteon: the basic unit of dense bone. It includes rings of tissue that encompasses a central canal where blood vessels, lymphatic vessels, and nerves pass through. See *Haversian System*.

Osteoporosis: a disease in which the bones become extremely porous, brittle, and weak. Osteoporosis is due to the loss of calcium from the bone matrix (or the framework of the bone). It occurs most commonly in postmenopausal women; as a result of the hormone estrogen being deficient.

Overbite: is the vertical distance by which the maxillary incisors (upper front teeth) overlap the mandibular incisors (lower front teeth).

Overdose: to take more than the prescribed amount of a drug.

Overjet: the horizontal forward projection of the upper teeth beyond the lower teeth. The distance is measured between the front surfaces of the anterior lower teeth and the inside surfaces of the anterior upper teeth. See *horizontal overlap*.

Overlapping: a term used to refer to a distortion of the tooth image in which the structures of one tooth are superimposed over the structures of the adjacent tooth resulting in overlapped, or unopened, contact areas. This is most often caused by incorrect horizontal angulation of the x-ray equipment cone.

Oxalate: a naturally occurring salt which when combined with calcium in the outer tooth's structure will decrease the size of the exposed tiny holes in the dentin which in return will decrease tooth sensitivity.

Oxalate: is a salt that occurs naturally in plants and is excreted by the urine. It helps in blocking the open dentinal tubules by creating calcium oxalate crystals which makes the dentinal tubules smaller, therefore decreasing the tooth sensitivity.

Pacemaker: an electronic device surgically placed in a patients chest to control heartbeats that may be too slow or too fast.

Pain: an unpleasant experience or suffering ranging from mild to excruciating, due to nerve stimulation. This could possibly be due to tissue damage or potential tissue damage, injury or illness.

Pandemic: a disease that not only affects people in one area, but in many different countries or even across the world. See *epidemic*.

Panoramic Radiography: a type of extraoral radiograph that shows both upper and lower arches on one film. This technique is used for detection of abnormalities, impacted teeth, infections, and solid growths.

Papilla: a small, nipple-like projection or elevation found in various parts of the body. It can be a pimple or pustule and is often found on the top of the tongue containing taste buds.

Papule: small solid lesion, 5 mm in diameter, that doesn't contain fluid.

Parafunction: persistent forces that occur other than normal tooth-to-tooth contact;

Parasympathetic Nervous System: a division of the autonomic nervous system that is responsible for a decrease heart rate and respiration, increased gland activity, and lowered blood pressure.

Parotid Gland: the largest of the salivary glands, it is located below and in front of each ear. It secretes saliva through the Stenson's Duct into the oral cavity. See salivary glands.

Parotid: largest of the salivary glands, it is located near the base of the ear and produces 25% of the total salivary secretions.

Pathogen: a means of causing a disease or sickness.

Pathogenic: the capability of a microbe to cause disease or an infectious disease.

Pathologic: related to or caused by disease.

Pathology: the science or study of the origin, nature, and course of a disease; the study of structural and functional changes caused by a disease.

Patient Education: customized instruction provided by health professionals to impart information to their patient in order to alter their health behavior and improve their health. Education enhances understanding and can motivate patients to comply.

Pediatric Dentistry: a dental specialty focusing on treating children, teens and people with special needs.

Pediatric: the physical and emotional health treatment and care of children.

Pellicle: a thin protective covering or skin.

Penicillin: a powerful antibiotic derived from mold that has the ability to destroy or kill certain kinds of bacteria. Most active against gram-positive bacteria (a certain type of bacteria)

Periapical Abscess: an infection characterized by a collection of pus around the apex of a tooth root resulting from pulp death.

Pericornitis: gingival inflammation around the crown of an incompletely erupted tooth. Pericornitis is most common on the mandibular third molars, and biofilm and debris can build up in area if not treated.

Perimyolysis: the wearing down of enamel through chemical or mechanical means, seen mainly on the lingual surface of anterior teeth. Most likely due to repeated vomiting in persons with an eating disorder.

Periodontal Abscess: infection and inflammation that is localized and very deep within the gum tissue; also called *lateral abscess, periapical abscess or pyorrhea*.

Periodontal Debridement: The processes of removing nonliving tissue around the tooth and or underneath the gums. This process promotes healing and prevents a worsened state of disease.

Periodontal Disease: a bacterial disease caused by multiple types of bacteria which affect the gums around the tooth, and in more extreme cases, can cause bone loss leading to tooth loss.

Periodontal Ligament: a network of collagen fibers that attach the roots of teeth to the alveolar bone. There are four groups of fibers; alveolar crestal, horizontal, oblique and apical, all of which help keep the tooth in place. Specific fibers attached at one end into cementum and at the other end into alveolar bone are called Sharpey's fibers. The periodontal ligament also contains lymph vessels, blood vessels and nerves which provide sensation and stimuli. See *periodontal membrane*.

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Periodontal Screening and Recording (PSR): a simple standardized system used to screen for gum disease by briefly examining in between and by the tongue of all of the patients teeth separated in six areas with a blunt tipped probe instrument. See *periodontal probe*.

Periodontal: relates to the area around a tooth.

Periodontitis: inflammation of periodontium around the tooth resulting in bone loss, pus formation, bleeding and possible tooth loss.

Periodontium: functional supporting tissues surrounding the teeth such as the gingiva, cementum, periodontal ligament and alveolar bone.

Periosteum: a material that covers bone surface containing blood vessels and nerves. It can allow for attachment for muscles and tendons to the bone.

Phagocyte: a cell that is able to surround, engulf and digest harmful microorganisms or other foreign bodies in the bloodstream and tissues.

Pharmacokinetics: a branch of pharmacology dedicated to the fate of a substance administered externally. The rate at which drugs are absorbed, distributed, metabolized, and eliminated by the body.

Pharmacology: the study of drugs and their actions on the body. The science of the properties, use, and effects of medicinal drugs.

Phobia: an illogical and unrealistic fear connected to a particular object or event. The phobia can cause a person to avoid situations or events that can trigger the fear.

Phosphoric Acid: a clear, colorless, odorless acid formed by oxidation of phosphorus, is part of acid etchant.

Photon: a particle with energy that travels at the speed of light in a straight line.

Pinocytosis : when a cell ingests small particles, fluid from outside the cell or other materials through its membrane into its cell body.

Placebo: An inactive substance with no value and containing no medication used as a control in an experiment with a medicinal drug to compare its effects with those of a real drug or treatment, but sometimes is given to the patient through his believing that he will get well.

Platelet: A small colorless disk-shaped particle found in the blood of mammals, which plays an important role in the formation of blood clots.

Polishing: to make smooth by abrasion or rubbing; to remove outer or extrinsic stain on teeth.

Polydipsia: an extreme need for liquids, which can occur in poorly controlled diabetes mellitus.

Polymorphonuclear Leukocyte: a white blood cell used in the first line of defense in fighting bacterial infections that play a role in periodontal disease, also called neutrophils or granulocyte.

Polyphagia: the excessive desire to eat, which can occur in poorly controlled diabetes mellitus.

Polyuria: frequent, excessive urination (at least 2.5 liters per day for an adult), which can be a result of poorly controlled diabetes mellitus.

Porcelain: a ceramic transparent material used for dental restorations such as crowns, inlays, and veneers. Made from a mixture of particles of feldspar, kaolin, and quartz, and fired at high temperatures.

Porphyromonas Gingivalis: a gram-negative, anaerobic, rod-shaped bacterium found in the oral cavity. It works with other bacteria to cause disease in the gums called periodontal disease. It can attach to the tooth surface below the gum line and replace the gram-positive bacteria that are normally there. This causes swelling of the gum tissue, which will loosen the gums from the teeth and begin the process of disease.

Posterior Superior Alveolar Artery: a branch of the maxillary artery that supplies the upper molars and bicuspids teeth. The PSA continues forward through the alveolar process to supply the gums. See *maxillary artery*, *alveolar process*.

Posterior: the location of a structure or part of the human body that is situated toward the back or behind.

Potassium Nitrate: is a white crystalline chemical compound that is found in toothpaste that blocks nerve transmissions in order to relieve sensitivity pain.

Prediabetes: a state in which blood sugar levels are above normal, but not high enough to be considered diabetes mellitus. It indicates an increased risk of developing diabetes mellitus.

Pregnancy Category B: a safety class for pregnant woman, which indicates no fetal risk or adverse effects on the fetus.

Premedication: drugs administered to depress the central nervous system for sedation to help reduce anxiety and calm the patient down before anesthesia.

Premolar: one of eight teeth, four per arch, that replace the primary or deciduous molars. Located between the permanent first molar and canine. See *bicuspid*.

present in the urine. Occurs when diabetes is uncontrolled or body is starving.

Prevalence: the amount of people with a current case of a disease during a specific time period.

Preventive: to prevent illness or disease through preventive measures and/or agents rather than to treat a disease after it occurs. The ideas behind these measures are to prolong the life of the patient and the community.

Primary teeth: the first teeth in a child's mouth which are temporary and later replaced with permanent or adult teeth.

Probe: a slim dental instrument with a round tip used for measuring pocket depths in the

Prognathic: a condition of the maxilla (upper jaw) in which it projects forward beyond centric relation.

Prognosis: a forecast of the probable course and/or outcome of a disease; a prediction of the outcome: the prospects of recovery as expected by the nature of the specific condition and the symptoms of the case.

Prognosis: the prediction of the probable course of a disease and the chances of recovery.

Prophylaxis: prevention and protection against, rather than treatment of a disease. Preventive measures most commonly involve mechanical, biologic or chemical agents which fight off infectious organisms. Within the definition of prophylaxis are two divisions: primary prophylaxis prevents disease development while secondary prophylaxis helps a previously infected patient's condition from becoming worse.

Prostaglandin: a group of hormone like substances that help in natural body functions such as metabolism, control of blood pressure, and contraction of smooth muscle. Prostaglandins also play an important role in bone destruction seen in disease.

Prostaglandin: a hormone-like substance produced in various tissues that regulates many body functions such as controlling blood pressure, smooth muscle contraction and plays a role in the inflammatory response.

Prosthesis: an artificial replacement of one or more natural teeth or tissues or a therapeutic device to improve and alter function.

Proximal Contact Area: the surface where neighboring teeth touch, each tooth has two.

Pseudostratified Epithelial Tissue: epithelium that appears as more than one layer due to the positioning of its cell nuclei. The cells are tightly packed together and nuclei appear to be at different levels, suggesting more than one row. See *pseudostratified columnar epithelium*.

Psuedomembrane: a gray, loose layer of tissue that covers necrotic gingiva that develops occasionally during infection and inflammation commonly seen in necrotizing periodontal diseases. The membrane looks like real tissue, but it is composed of leukocytes, erythrocytes, bacteria, fibrin and mucous. Also called a false membrane.

Public Health: the science of community health that is concerned with the mental, physical, and emotional states of individuals throughout a community; how through organized society efforts to promote, protect and restore individuals health is achieved.

Pulp Cavity: a cavity in the central part of the crown of a tooth that contains pulp chambers, pulp canals, blood vessels, connective tissue, nerves, and lymphatic's.

Pulp Stone : calcified masses of dentin that appear to be small and circular in shape lying inside the dental pulp.

Pulp: living tissue of the tooth that is made up of blood vessels, lymph vessels and nerves that serve to communicate with their related systems.

Pulpitis: infection in the innermost part of the tooth involving blood vessels and nerves, caused by cavity or other trauma, indicated by a painful toothache.

Pulse: the regular beat of the heart caused by dilation of an artery that is filling with blood

Punctuate: appears as tiny spots, points, or depressions that have a different color and look than the surrounding skin.

Pus: a yellow-white fluid accumulation near an infection site, made mostly of white blood cells, cellular debris, and dead tissue.

Pustule: small elevation on the top surface of the skin or the inside of the mouth that contains fluid.

Quadrant: an equal division of the mouth by four, divide each *arch* directly by the *mid-line*; teeth numbers 1-8 is called quadrant 1, teeth number 9-16 is called quadrant 2, teeth numbers 17-24 is quadrant 3, teeth numbers 25-32 is quadrant 4 in an adult mouth with *wisdom teeth*.

Radiation Scatter: the radiation that is deflected from its path once it comes in contact with matter. This radiation is scattered in all directions except for the direction it came from.

Radiographs: an image produced on a photographic film by radiation other than visible light, especially x-rays which have a shorter wavelength and are capable of passing through an object.

Radiology: the branch of medicine that uses radiation for medical diagnosis and treatment of disease

Radiology: the degree of opacity of a material that transmits light.

Radiology: the medical branch dealing with radiation in the form of x-rays for the use of diagnosis and treatment plans of disease in bones, organs, etc. See *radiation*.

Radiolucent: dark or black areas on a radiograph. Structures permit the passage of the x-ray beam.

Radiopaque: whitish areas on the radiograph. Structures resist the passage of x-ray beams.

Rampant: growing unrestrained and very widespread, such as cavities spreading through the mouth quickly.

Recall: an appointment or series of appointments that are used as “check up” appointments to review the health of a patient’s mouth after initial treatment and plan more treatment accordingly.

Recession: loss of the gingival margin away from the crown of the tooth. Can cause an increase in sensitivity due to the exposure of the root surface.

Recurrent Caries: decay that occurs under an existing restoration. Can be the result of insufficient removal of decay before the restoration was placed, or poor oral hygiene that increases chance of decay returning to the area.

Red Blood Cell: free-floating blood cell that carries oxygen and nutrients around the body. Also called *erythrocyte*, *red blood corpuscle*, *red cell*, *red corpuscle*, *RBC*.

Remineralization: restoring minerals into the enamel of the teeth where decay has caused the enamel to break down. It can reverse the decay process with the help of fluoride treatments.

Reparative Dentin: irregular dentin formed in response to trauma, irritation, and decay.

Repolarization: when a cell is relieved of a current electrical potential that restores it to a resting state. The repolarization resting state follows immediately after an action potential is created. See *action potential*.

Research: diligent scholarly or scientific inquiry with the intent to find truth.

Resin: is used to cover the newly etched (when acid eats away the surface) surface of the tooth.

Resorption: gradual loss of mineralized tissue. This is often the result of shedding primary teeth, or a cyst. Can be observed radiographically.

Rete Pegs: epithelial extensions that project into the underlying connective tissue; also known as interpapillary ridges. See *epithelium* and *connective tissue*.

Rete Pegs: thickened extensions of the epithelium that project down into underlying connective tissue. See *epithelial ridges*.

Retinopathy: a noninflammatory disease of the retina (the thin light-sensitive membrane that covers the back of the eye) that can lead to blindness. In diabetics, this is caused when the blood vessels in the retina are affected.

Retrognathic: having the upper jaw extend farther out than the lower law creating a convex profile.

Retrognathic: refers to having a prominent maxilla (upper jaw) and a mandible (lower jaw) positioned posterior to its centric relationship. It can be characterized by recession of both of the jaws. See *distal occlusion*.

Retromolar Pad: cushion of tissue just behind the last molar in the lower arch.

Ribosome: a small organelle within the cytoplasm composed of RNA. Translates the mRNA (messenger RNA) to protein used in the cell.

Rickets: a bone disease seen in children that results from a deficiency of vitamin D. The vitamin deficiency is caused by poor nutrition or lack of exposure to sunlight. Characteristics include: soft bones, bow legs, and slow growth.

Risk Factor: a characteristic of a person, including age, race, gender, environment, or situation, that increases their chances of developing a disease or disorder.

Risk: increased probability of an adverse event, and its consequences.

Rugae: small ridges of soft tissue across the anterior of the hard palate.

Saliva Substitute: a mixture with physical and chemical properties similar to saliva used to treat dry mouth. See *artificial saliva*

Saliva: clear, watery, liquid secreted in the mouth by the salivary glands and mucous glands, which moistens the mouth.

Salivary Glands: the mouths organ that secretes or produces a fluid called saliva, which helps with the processes of swallowing and speech.

Sanitization: a cleaning process which reduces microbial contaminants to insignificant levels to what is considered a “safe” level

Sarcoma: a cancerous tumor that arises from connective tissue such as muscle, fat, and bone.

Sarcomere: the smallest functional unit of a muscle fiber. It is made up of filaments that form light and dark regions referred to as ‘bands.’ Filaments are anchored to Z discs which are found at both ends of a sarcomere.

Scaling: the instrumentation of the crown and root surfaces of the teeth in order to remove plaque, calculus (hardened plaque) and stains thus assisting to prevent periodontal diseases and uphold a healthy periodontium.

Scatter Radiation: radiation that has been deflected from its path by the interaction with matter. This form of secondary radiation is scattered in all directions by the tissues of the patient’s head during exposure to x-radiation. See *secondary radiation*

Schizophrenia: a long lasting mental disorder. A patient with schizophrenia may experience symptoms of delusions, hallucinations, and disturbances. These disturbances can be in the form of thought, mood, sense of self, sense of relationship to the external world, and in behavior. There can also be a splitting of the personality.

Screening: an initial systematic examination or assessment to identify or detect an unsuspected disease.

Scurvy: a disease caused by a deficiency of vitamin C, characterized by weakness, spongy bleeding gums, loosening of the teeth, bleeding beneath the skin and mucous membrane

Sealant: a plastic material used to cover the grooves on the biting surface of a tooth to prevent cavities.

Secondary Radiation: the less penetrating radiation given off by any matter irradiated with x-rays. This form of radiation is created at the instant the primary beam interacts with matter and gives off some of its energy, forming new and less powerful wavelengths. This is often referred to as scatter radiation. See *scatter radiation*

Sedation: the reduction of anxiety, stress, mental excitement and irritability by the administration of a depressant drug, it is generally given before a medical procedure is performed.

Sedation: the use of medication (sedative) to produce a state of reduced agitation or anxiety in a patient.

Selective Serotonin Reuptake Inhibitors (SSRI's): a popular class of antidepressant medications used to treat psychological conditions including depression and anxiety disorders. This class of drug includes such popular medications as Prozac, Celexa, Paxil, Luvox, and Zoloft.

Self care: the ability of a person to take care of their own healthcare needs and the ability to cope with an illness or disability on one's own.

Self-angled Curet: an instrument that is tilted at the tip creating a cutting edge and a working edge that are correctly angulated to the tooth surface. The lower facing edge is placed against the tooth and removes hardened deposits.

Semi Supine: posture located between mid position, which is sitting up right, and *supine* position, which is lying down.

Sequence: a method of organizing all of the steps of a patient's dental treatment into the most logical and effective order for the patient.

Sessile: a wide and flat based abnormal tissue that is stuck directly onto the skin surface.

Sextant: the three divisions of the maxillary and mandibular jaws which divide and group the teeth into six groups as follows; 1-5; 6-11; 12-16; 17-21; 22-27; 28-32.

Shank: length of metal located between the handle and working end of a dental instrument.

Sharpening: the process of creating or refining a sharp edge while preserving the original shape of the instrument.

Sharpey's Fibers: connective tissue fibers that connect the cementum of the tooth to the alveolar bone.

Sialadenitis: the swelling of one or more salivary glands. This is most commonly related to infection. See *salivary gland*

Sinus: an air filled pouch or cavity within the facial bones, lined by mucous membranes

Sjogren's Syndrome: chronic lifelong disorder that causes dry eyes and dry mouth, by attacking and destroying the exocrine glands.

Smear Layer: a thin layer of debris produced from different dental instrument techniques. It protects the exposed nerves by providing a protective layer over the tiny holes in the dentin; can only be removed by acid etching. See *etching*.

Smoking Cessation: to stop the habit of smoking, scheduled activities and meetings are designed to help others stop smoking.

Smooth Muscle: a type of muscle that does not have and lines and can not be voluntarily controlled; found in the throat, digestive tract, and blood vessel walls.

Sodium Bicarbonate: a white, crystalline, water-soluble solid with cleansing power seen in powder or granules that is used in effervescent beverages, toothpaste, fire extinguishers, and medicines as an antacids. Also called *baking soda*.

Sodium Lauryl Sulfate: a chemical compound that is a mixture of sulfates of sodium that is used in removing grease but is found in many shampoos, toothpastes, household, and industrial products for its lathering effects.

Soft Palate: the posterior portion of the roof of the mouth made of muscular tissue and surrounded in mucous membrane, separates the mouth/throat region from the nose when swallowing or sucking.

Soft Tissue: any noncalcified tissue of the body that does not contain minerals such as bone. Soft tissue connect, and support other structures of the body. This includes muscle, tendons, ligaments, and fascia. Not all soft tissues are a type of connective tissue, ex. nerves and blood vessels.

Somatic: any type of cell pertaining to the body that does not produce egg or sperm.

Sonic Scaler: a mechanical scaler device that uses energy to vibrate the tip and spray water which in turn breaks up the hard deposits on the tooth surface. *See ultrasonic*

Space Maintainer: a fixed dental appliance worn to prevent the drifting of teeth into the space left by prematurely lost deciduous teeth due to accident and/or decay. It is intended to maintain the space in order for the eruption of the permanent successors.

Spatter: a splash of liquid or particles that are suspended in the air that are sometimes large enough to be visible to the human eye and may cause contamination.

Specialized Mucosa: located on the dorsum (top) of the tongue made up of keratinized and nonkeratinized epithelium. Contain taste buds such as filiform, fungiform, circumvallate (vallate) and foliate.

Sphenopalatine Artery: a branch of the *maxillary artery* that passes through the *sphenopalatine foramen* and supplies blood to the nasal wall and septum. It ends on the nasal septum as the *posterior septal branches*.

Sphygmomanometer: an instrument with an inflatable band that is used to measure blood pressure by restricting blood flow to upper arm.

Spicule: a somewhat larger piece of mineralized plaque found on the tooth.

Spores: a reproductive structure in fungi, bacteria and cryptigans that is a thick, resistant particle produced by a bacterium or protist to survive in harsh or unfavorable conditions.

Squamous: an epithelial cell with a flattened shape. These are tissue cells usually found on the surface.

Staining: discoloration of teeth or restorations due to intrinsic or extrinsic factors, may or may not be permanent. *See intrinsic and extrinsic*

Standard Deviation: a statistic that measures the amount of deviation from an average. The more spread apart the data is, the higher the deviation.

Standard Precautions: measures that are taken to make sure every patient and caretaker is protected against harmful disease. Blood and body fluids (except sweat) are treated as infectious regardless of whether or not it is. These standards are implemented and monitored by the CDC (Center for Disease Control) and OSHA (Occupational Safety and Health Administration).

Statutory Laws: written law in a country created and changed by the legislature. *See legislature.*

Stem Cell: found in the *bone marrow* and is capable of reproducing and making a variety of mature cells (*white blood cells, red blood cells and platelets*). All blood cells come from this single type of cell.

Sterilization: process that removes or destroys all forms of microbial life and bacterial spores.

Steroid: natural or synthetic fat soluble compounds made of similar basic structures making up hormones, body constituents, and drugs.

Stippling: the orange peel appearance of normal gums. When present it is a sign of health, but must not always be present to indicate health status of the gums.

Stomatitis: an irritation or inflammation of the oral mucosa (tissue in the mouth). It is often brought upon by dentures, allergies, and other irritants. Sometimes resembles ulcers in the mouth.

Stomatitis: inflammation of the tissues within the mouth resulting from various factors including dentures, medications, poor oral care, infections, allergic reactions, or trauma.

Streptococci: a gram positive, often pathogenic bacterium that occurs in pairs or chains. They cause various diseases in humans including endocarditis, scarlet fever, and strep throat.

Streptomycin: used in medicine in the form of its white, water-soluble sulfate salt, in the treatment of tuberculosis and bacterial infections.

Stretching: is a form of exercise in which muscles are elongated to the fullest extent to increase their elasticity.

Striae of Retzius: incremental brown growth lines seen microscopically in tooth enamel

Stroke: cerebrovascular accident (CVA) caused by blood clots in the blood vessels that inhibit the blood supply to the brain and therefore block nutrients and oxygen from getting to the brain. The result is abnormal brain function and can result in temporary or

Subgingival: a level below the margin of the gums (gingiva).

Sublingual Gland: a small salivary gland located on both sides of the mouth under the tongue. It secretes mucin (the viscous part of saliva). See *salivary gland*.

Subluxation: where there is a slight displacement or movement of a joint that may pop out but will then pop back into place, may lead to a dislocation.

Submandibular Gland: a salivary gland located inside the lower jaw beneath the floor of the mouth. It produces 70% of the total amount of saliva.

Submandibular: the area beneath the lower jaw. Also an area for certain salivary glands.

Submucosa: a layer of tissue found beneath the mucosa (or lining layer) of an organ that provides necessary blood and nutrient supply.

Succedaneous Teeth: the permanent teeth that erupt in the location of the previous primary teeth, these do not include the permanent molars.

Sugar-Free: without sugar, or less than 0.5 grams of sugar.

Sulcular Epithelium: the tissue that lines the inner aspect of the soft tissue wall of the gingival sulcus. It is found sandwiched between the junctional epithelium at the base of the gingival sulcus and the oral cavity epithelium at the height of the free gingival margin.

Sulcus: a shallow crevice or groove between the free gingiva and tooth surface extending around its circumference.

Summative Evaluation: the gathering of information and/or data used to form a conclusion on a study conducted on a group of learners. It is a summary that explains and evaluates all parts of an implemented program. It is helpful in determining whether the implemented program should be retained, altered, or eliminated.

Supereruption: a tooth rising above the normal occlusal plane due to lack of opposing tooth. See *overeruption*

Supernumerary Teeth: teeth which appear in addition to the regular number of teeth in the mouth. They can be located anywhere, however they are generally located in the center of the mouth or in the molar regions.

Supine: lying on your back with your face, abdomen, and toes pointing up.

Suppuration: formation or discharge of pus that is a result of inflammation. See *pus*.

Supragingival: matter located above the gum line on the surface of a tooth.

Supraversion: the condition in which the tooth extends beyond the normal occlusal line.

Surveillance: careful observation of a group used to monitor disease and death in a specific group of people over a period of time.

Susceptible Host: a person, environment or object that does not have a defense against specific germs or a disease.

Suture: a stitch used to unite the tissue of a wound, tear, or incision.

Swallowing: the act of forcing food or liquid in the mouth to move into the stomach by the use of muscles in the throat.

Sympathetic Nervous System: a part of the autonomic nervous system that is automatic (not consciously controlled) involved in preparing the body for states of stress and action or. Signs include increased heart rate and respiration, cold and pale skin, dilated pupils, and raised blood pressure.

Synapse: a junction formed between two nerve cells that creates an impulse which passes from the nerve axon to the dendrite causing stimulation to a surrounding neuron, muscle, or gland cell. See *axon; dendrite*.

Syncope: another word for fainting that is commonly used by healthcare professionals. It is caused by a lack of blood flow to the brain and results in temporary loss of consciousness.

Synergism: by acting together, the sum of two different elements working together have a greater effect than if each element worked separately.

Systole: the contraction, or period of contraction, of the heart. The period specifically during which the left ventricle of the heart contracts to drive blood into the aorta and pulmonary artery; systolic pressure is the highest or greatest pressure within the heart.

Tachycardia: an excessively rapid action of the heart above normal.

Tachyphylaxis: due to overexposure of a drug, the body rapidly becomes tolerant of the drug's affect. Repeated administration of the minimum dosage could still cause a tachyphylaxis reaction.

Taste Buds: little bunches of cells located on the dorsal surface of the tongue that provide the recognition of taste.

Temporalmandibular Disorder: problems associated with the temporomandibular joint (TMJ) which connects the lower jaw with the skull and commonly associated with pops and pain in the joint.

Temporomandibular Joint: The articulation in the skull that connects the mandible and the temporal bone that creates a joint.

Tetany: contractions of in the muscles of the mouth or jaw produced when the levels of calcium and or production of parathyroid hormone (PTH) fall below normal.

Tic: a repeated contraction of muscles that cause an involuntary twitching movement; especially prominent when a person is under stress.
tissues.

T-Lymphocyte: a cell that matures in the thymus and attacks cells that have been previously marked as invaders. T-lymphocytes intensify the immune response by making these invading cells secrete proteins which attracts nearby macrophages to kill and ingest them.

Tolerance: the natural or developed ability of an organism to resist continued or increasing use of a drug; physiological resistance or unresponsiveness to an antigen that normally produces a reaction.

Tomography: is a method or process of producing a two- or three-dimensional radiograph from inside the body.

Tooth and Nail Syndrome (TNS): is an uncommon inherited disorder that affects the nails and teeth. The nails may be thin and spoon shaped. Whereas, several baby and/or permanent teeth may be missing. The teeth present may have a pointed or a narrow shape. See *witkop syndrome*.

Tooth Bud: the first stage in the development of a tooth. Part of a three series sequence; bud, cap and bell.

Tooth Whitening: a treatment that is intended for individuals with yellow or stained teeth that want to make their smile whiter and brighter.

Toothbrush: a handheld stick with a brush on the end that is used to clean your teeth.

Toothpaste: a powder, liquid, or gel dentifrice that is put on your toothbrush and used to clean your teeth.

Topical: a gel that is applied to the skin or mucous membrane to make the surface numb.

Torsiversion: a malposition of a tooth that is turned along its long axis.

Torus: a bony growth appearing as a rounded projection in the oral cavity.

Transmission: the passing of a disease from one person or group who has it to a person or group of people that have not had the disease before.

Transseptal Fibers: periodontal fibers that continue from the mesial cementum of one tooth over to the distal cementum of the neighboring tooth.

Transverse Ridge: an elevated ridge on the chewing surface of a premolar or molar tooth joining two triangular ridges, labial and lingual. See *labial, lingual*.

Trauma: mental, emotional, or physical damage or injury.

Treatment Plan: the schedule made of each procedure and appointment that will be performed to eliminate disease from a patient's mouth.

Trench Mouth: A rapid, painful infection of the gums that is not contagious. It has a very bad odor and is painful with bleeding of the mouth and gums. It can cause pain, fever, and sometimes cause tiredness. See *Vincent's angina* or *Necrotizing Ulcerative Gingivitis*.

Triangular Ridge: triangular surface that slopes from tip of tooth down ward toward the center of the tooth on the chewing surface. This ridge is seen on molars and premolars.

Trifurcation: an object that is separated into three roots or branches.

Trigeminal Nerve: the fifth cranial nerve which is responsible for sensations of the face, and also supplies the muscles of mastication.

Trismus: after a long dental procedure, one may experience painful muscle spasms and will not be able to open their mouth to a normal width.

Trochlear Nerve: the fourth cranial nerve which controls the superior oblique muscles of the eyeballs.

Tubehead: the heart of the x-ray processing system. It is a tightly sealed heavy metal housing that contains the x-ray tube which helps produce the dental x-rays.

Tubercle: a thickened area of elevated enamel on the surface of the tooth. See *enamel*.

Tumor: any type of abnormal mass that swells within tissue and has no function. Can be potentially life threatening.

Tungsten Filament: a hard, heavy, gray-white, metallic filament found in electric contact points and is the source of electrons in electron tubes. It produces an intense light when an electric current is passed through it. This is the basic artificial light source used in photography.

Ulcer: open sore inside the mouth that is painful and appears white with a red, inflamed border.

Vaccination: an injection or shot given to help protect a person from a specific disease.

Vacuole: a small fluid filled cavity within the cytoplasm (gel-like substance) of a cell. It is bound within a single membrane and contains water, food, air or metabolic waste. It aids in cell secretion, excretion, storage and digestion.

Vacuum Tube: a sealed glass tube where most of the air is absent. This is a device used to switch or modify electrical signals by controlling how the electrons move in a low-pressure space. See: electrons

Vagus Nerve: longest nerve in the body. It is the only cranial nerve that originates in the brain, which then extends down to the colon. It controls parts of the heart, stomach, and throat region.

Validity: the extent to which the process or experiment measures what it was supposed to measure.

Vallate Papillae: 10-12 large circular projections on the back of your tongue. They form a v-shape which separates the front of the tongue from the back of the tongue. Vallate

Varnish: a smooth, glossy, transparent solution that is painted on the surface of a tooth to protect the dentin and pulp from temperature changes. It can be made of fluoride to prevent cavities and reduce sensitivity.

Vasoconstrictor: a reaction, substance, and condition that will cause your blood vessels to shrink in size.

Velocity: the speed that something happens, such as the speed of a wave in dental radiography. See *radiography*.

Veneer: a tooth covering bonded to the facing of a tooth to improve the appearance of one's tooth and/or to protect a damaged tooth.

Ventral: pertaining to the front or directed toward the belly surface. Compare *dorsal*.

Vermilion Zone: a darker-colored border that outlines the upper and lower lips.

Vertical Bone Loss: bone loss that does not occur parallel to the teeth.

Vertical Tooth Mobility: depression of the tooth into the jaw.

Vesicle: a small elevation on the inside of the mouth resembling a blister and containing fluids.

Vestibule: the area of the mouth between the cheeks and the teeth and/or gums.

Virulence Factors: ability of a microorganism to produce a disease.

Vital Signs: signs that determine if a person is alive. These include pulse, respiratory rate, temperature, and blood pressure.

Vitamin: any group of organic compounds which are essential for normal nutrition and have to be supplied in the diet because they cannot be synthesized by the body. They act as coenzymes and precursors of coenzymes in the regulation of metabolic processes but do not provide energy or serve as building units.

Volatile Sulfur Compounds: microorganisms that when metabolized cause bad breath. Found on the surface of the tongue.

Voltage: the measurement of the electrical force that determines the speed of the electrons that move from negative

Waiting Room: an area in the Dental Office that people sit or stand while they await the attention of the dental professionals.

Walking Stroke: an up and down movement made with a dental instrument that is well controlled on the tooth surface during an examination.

Wandering Rash Tongue: a noncancerous disorder where the thread-like raised bumps on the top of the tongue may disappear and re-grow. It is characterized by a red portion with a thick white border. In the red areas, the bumps are missing. Whereas, in the white border there are an abundance of bumps. It usually occurs on the tip, sides, and surface of the tongue, can occur and reoccur in different areas of the tongue, and has a map-like appearance. See *geographic tongue*

Warfarin: a drug that prevents blood clots from forming. A common trade name is Coumadin.

Washing Process: a step in x-ray film processing that removes excess chemicals and halts the action of the developer.

Water Fluoridation: the act or process of adding fluoride to a drinking water supply with the purpose of reducing dental caries.

Water-Cooled Instrument Tips: electronically powered devices use these, and water constantly exits the tip to cool the friction between the instrument and the tooth.

Wavelength: the distance between two points in the same phase.

Wavy Tissue Boundary: the boundary where two tissues of the body meet, such as the epithelium and connective tissue, which has a wavy appearance.

Wax: a clear thick substance used to prevent metal braces from causing discomfort.

Well Controlled Diabetes: a condition or disease that is maintained and is the desired state that a patient with diabetes should be for dental work. HBA1C should be between 6-8% and blood glucose should be at 126- 160.

Whartons Duct: a long salivary duct located under the tongue that is commonly involved with salivary formation.

Wheal: an area of skin where fluid is trapped in the tissues causing the tissue to swell. It may be either red or pale. Itching is often present and may be a sign of an allergic reaction.

Wheezing: difficulty breathing due to the constriction of the throat, resulting in a hoarse whistling sound.

White Blood Cell: a blood cell that forms the basis of our immune system. These cells

White Corpuscle: a white blood cell (*leukocyte*) that protects the body by surrounding and eating bacteria. This is an important part of the body's defense system.

White Spots: a condition which may be caused by poor oral hygiene or poor enamel formation.

Whitening: a process that uses an agent (usually hydrogen peroxide) to change the teeth to a lighter shade.

Whitlow: also known as Felon, is an infection on the finger caused by contact of the herpes simplex virus.

Whooping Cough: aka Pertussis; is caused by *Bordetella pertussis* and is a disease of the respiratory mucous membrane that causes severe coughing that ends in a "whooping" sound. This condition is highly contagious and most common in children.

Width of Attached Gingival: the distance between the mucogingival junction and the bottom of the gingival sulcus or the periodontal pocket.

Wilkins, Esther M.: a dental hygienist who also went to dental school, who is a mentor and icon in dental hygiene, who is also a founding Director of the Dental Hygiene Department at the University of Washington.

Wilms Tumor: the most common malignant tumor of the kidneys in children. It is caused by the inactivation of a tumor suppressing gene.

Wisdom Tooth: the eighth tooth from the center of the mouth to the back of the mouth. Also known as a third molar, and usually erupts last, if it even erupts at all.

Withdrawal: physical and mental signs and symptoms following the discontinuance of a substance they were physically dependent upon.

Witkop Syndrome: is an uncommon inherited disorder that affects the nails and teeth. The nails may be thin and spoon shaped. Whereas, several baby and/or permanent teeth may be missing. The teeth present may have a pointed or a narrow shape. See *tooth and nail syndrome (TNS)*.

Witness: someone who can report first hand on something they have seen, heard or experienced.

Work Related Disorders: a disorder caused by repetitive movements that result in muscle pain such a carpal tunnel; often work related.

Work Space: the area allocated in a dark room for unwrapping films before processing.

Working End: the part of the dental instrument that is angled on the tooth and does the work; as opposed to the non working end which is not used to work on the tooth.

World Health Organization: a group within the United Nations. Their main focus is on promoting and increasing public and international health. They do this by supporting health services, aiding in emergencies, preventing and controlling diseases, and advertising food and medical standards

Written Consent: patient signs a document giving the healthcare provider permission to perform the tasks and treatment needed.

X-Ray Tube: an electronic tube located in the x-ray tubehead that generates x-rays; includes a leaded-glass vacuum tube, cathode, and anode. See *anode*, *cathode*

X-Ray: a picture used in medicine and dentistry to determine any abnormal areas in the body. Waves travel at a certain frequency through the body, and penetrate tissues at various degrees to show different shades of gray, showing more solid substances as more opaque (white)

Yaws: A common chronic infectious, contagious disease which is known by red bumps or lesions on the skin of the face, bones, and joints (look similar to syphilis), which usually occurs in warm humid regions of the tropics.

Yeast: an asexual, single-celled fungus which converts carbohydrates to alcohol and is used to raise the dough when making bread, can also be found in other moist or humid environments.

Yellow Bile: was inspired by a ballet from 1946; it is a supposed biological substance that influences different personalities in people; including sanguine, which stands for light hearted, fun loving, leader yet can be cocky, arrogant and indulgent; choleric, meaning mean spirited, suspicious and angry; melancholic, which is a deep ponderer, often kind, considerate, and creative yet can be dramatic and depressed; phlegmatic, are self-content, kind, and shy yet can be lazy and resistant to change.

Yellow Fever: a potentially deadly viral disease, caused by a flavivirus, originated in South America and Africa which is spread by the Aedes aegypti mosquito; its symptoms include, fever, chills, headache, nausea, black vomit and the absence of urination, as well as jaundice.

Yellow Marrow: a yellow, specialized lipid storage found within bone cavities at the ends of long bones in adults.

Yield point: the point at which a material (plastic or metal) is stressed so much that it is now permanently distorted and has a decrease in strength.

Yin-Yang: the Chinese principle of opposition in the universe; opposing forces although opposite, complete one another.

Yohimine: a derivative of the African yohimbe tree containing adrenergic-blocking agents used for arteriosclerosis and angina pectoralis, also said to have an aphrodisiac agent used for erectile dysfunction.

Yoke: a wooden beam used to join a pair of oxen to assist in a heavy load; sweater design; television cable network; a clamp used in scuba gear.

Yolk: the inner portion of an egg which serves as the food source for an embryo.

Zero Order Kinetics: a state where the enzyme reaction is independent of the reactant concentration; increasing or decreasing the reactant concentration does not affect the reaction rate.

Zero: is the lowest position in an angle without reaching the negative numbers; a neutral position.

Zinc Oxide Eugenol: is the combination of zinc oxide and the liquid eugenol, creating a powder that is used as a dental material such as cement, base, etc.

Zithromax: also known as z-pack, is an antibiotic medication in the macrolide group, used to treat infections such as middle ear infection or pneumonia. It is bacteriostatic and bactericidal, fighting bacteria in the body.

Zolpidem: is a non-benzodiazepine used for insomnia, muscle relaxation, and anti-convulsants.

Zone (neutral): is the area between the cheeks and surrounding the tongue in which denture impressions are taken.

Zonography: is an x-ray imagining technique, similar to tomography, producing films of body sections with a relatively thick plane of focus. See *tomography*.

Z-Plasty: is a surgical procedure for scar revision by using the transposition of tissue flaps.

Zygomatic Arch: bone arches below each eye, consisting of the fusion of the zygomatic process with the temporal bone and the temporal process with the zygomatic bone.

Zygote: the stage in the developing ovum, where the male and female gametes unionize.



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