

**Accutane** - an oral prescription acne medication that inhibits oil production, and helps control severe acne. Some side effects may include hair loss, headaches, liver problems, extreme dryness of the skin and eyes. Glycolic acid and retinol products should not be used while taking accutane and for 6 months after you stop the medication.

**Acne** - an inflammation caused by blockage of the oil glands, which results in blackheads and pimples. Abnormal clumping of cells in the follicle.

**Aesthetician** - a trained professional who provides treatments such as facials, chemical peels, microdermabrasion, extractions and other procedures that relax the body and clean or beautify the skin.

**Alpha hydroxy acid (AHA)** – A classification of acids which come from natural sources used to chemically exfoliate the top layer of skin. These acids are derived from citric acid, tartaric acid, malic acid, lactic acid, and glycolic acid; also known as fruit acids. There are many forms of aha's, however the most effective form is Glycolic Acid because it has the smallest molecular size and is able to enter the follicle (pore) and purge the dead cells that form and clog your pores. Glycolic acid is often used to describe all AHA products. It is used to refine the skin and removes discoloration, fine lines and wrinkles, small acne lesions and keratinocytes or dead skin cells leaving the skin lighter, fresher, with less discoloration and a smaller looking pore size. Since AHA or glycolic acid does not change the structure and function of the skin it is not classified as a drug. Preparations containing glycolic acid range from 4% to 20% for everyday use on the skin and may be combined with other ingredients like salicylic, hyaluronic and Vitamin C. AHA's are non Comedogenic. The pH should be between 3.0-3.5 for home care glycolic products as this will stimulate collagen production in the epidermis.

**Anagen** – The active stage of hair growth where the root is attached to the papilla. This is the ideal stage in which to have an Electrolysis treatment. Hair treated in this stage has a lower chance of growing back.

**Antioxidants** - substances found in vitamins and other materials that help repair and prevent cell damage caused by free radicals. Free radicals are responsible for damaging the skin and breaking down collagen, which leads to wrinkles. Examples of antioxidants include grape seed extract, green algae (flavonoids), lycopene (beta-carotene), ginseng, licorice, rosemary, juniper, lipoic acid, alpha-linoleic acid. The strongest known natural antioxidants are ginkgo biloba and green tea.

**Ascorbic Acid** – water soluble vitamin C. Not as stable or active a compound as ascorbyl palmitate

**Ascorbyl palmitate** - fat-soluble Vitamin C which is a very stable compound

**Astringent** - a substance, such as witch hazel or alcohol, that causes skin tissue to tighten.

**Avobenzone (generic name for Parsol 1789)** - an ingredient in sunscreen that blocks UVA radiation. Per the FDA Parsol 1789 give the maximum UVA protection possible.

**Azelaic acid** - an oleic acid derivative used by dermatologists to treat acne. It also has skin lightening properties, and is used in the treatment of rosacea.

**Benzoyl peroxide** - a strong antibacterial recommended by the American Dermatology Association as the number one ingredient to used to help clear up acne; it can over-dry skin, and should not be used excessively. It can bleach clothing.

**Beta-hydroxy acids (BHAs)** - acid extracts that are enzymes that exfoliate the top dead layer of skin called the stratum corneum. They have the same effect as AHAs, but they're less irritating.

**Blackheads** – (aka comedone) formed when oil and dead skin cells become trapped in a pore and mix with bacteria.

**Botox** - a substance injected into the face to smooth wrinkles in the skin by paralyzing the underlying muscles.

**Catagen** – This is the stage of hair growth where the root detaches itself from the papilla, and begins to work its way up and out of the skin. Although hair in this stage can still be treated with electrolysis, it has a higher occurrence of regrowth.

**Collagen** – a natural substance found in skin, which diminishes as we age, and the lack of collagen leads to wrinkles. The injectable form is a protein used in anti-aging skincare products that is derived from the connective tissues of young cows (or synthetic versions).

**Comedogenic** – Describes a substance that clogs pores.

**Comedone** – A blackhead. It is a collection of shedding skin cells, along with other follicle debris which gets lodged into the pore. This is caused primarily from a glue like substance in the follicle. Because the skin above the comedone is open, when it reaches the air, it oxidizes and turns a darker color (hence the name blackhead). Only the tip of the comedone is dark, the remainder lodged beneath it is lighter in color.

**Dehydration** - The lack of moisture, not oil, in the skin. Dehydration causes the skin to look less plump, less healthy, flat, dull or off color and is not cured with heavy creams or oils. Dehydration may be caused by very cold or hot weather, medication, illness, harsh skin care products or lack of water intake.

**Depilatory** - Cream used to melt away unwanted hair with calcium or sodium thioglycolate or sulfides.

**Dermatitis** - Skin inflammation accompanied by redness, itchiness, dryness, or cracking.

**Dermis** – This is the layer of skin beneath the epidermis. Treatments to this area are far more invasive than those performed on the epidermis. Any treatments to this area must be performed by a physician, and may pose more potentially dangerous side effects.

**Dihydroxyacetone (DHA)** - the active ingredient in self-tanners

**Enzymes** - exfoliants derived from papaya, pineapple, or papain (a papaya derivative) that can help even out the skin's color and tone. They digest dead cells, while leaving the live cells unaffected.

**Epidermis** – This is the outer or surface layer of the skin, which is comprised of dead skin cells. All esthetic skin care treatments deal with only the epidermis.

**Epsom salts** - crystals derived from magnesium sulfate that are used in the bath to relieve common aches and pains. They may also be used as post Electrolysis after care, to draw out any post treatment infection.

**Esthetician** - (see Aesthetician)

**Exfoliate** – This is the sloughing off of dead skin cells accelerated through the use of either a physical (i.e. microdermabrasion) or chemical (i.e. glycolic acid) agent.

**Extraction** – The physical manipulation of removing a comedone (blackhead), milia (whitehead) or pimple. This can be done by hand, or by the use of a metal implement.

**Folliculitis** - An inflammation of the hair follicle that looks like a rash and is usually found in areas of the body where skin has been irritated by shaving or waxing; also called razor bumps.

**Free radicals** - A molecule that damages normal, surrounding cells by depleting them of oxygen.

**Fruit acid peel** - A facial peel using alpha-hydroxy acid.

**Glycolic acid** – An alpha hydroxy acid derived from sugarcane which dissolves the sticky substance in the pores which lead to blackheads and pimples. It also helps refine wrinkles and evens out the skin's texture and coloring. All glycolic acids are alpha hydroxy acids, but not all alpha hydroxy acids are glycolic acid.

**Humectant** - A non-oily ingredient that attracts moisture from the atmosphere, retards evaporation, and helps hold water. Common ones include glycerin, propylene glycol, sorbitol, hyaluronic acid, urea, and lactic acid.

**Hyaluronic acid** - A protein used in moisturizers (and also found in human skin cells) that helps hold moisture in the skin.

**Hydrate** – To add moisture to the skin.

**Hydroquinone** – A skin bleaching ingredient available in both prescription and non prescription strengths. It is used to combat hyper pigmentation. A phenolic compound derived from benzene that is used in skin bleaches. The most tried-and-true of skin bleaches; it works by blocking the formation of melanin. Prolonged product use can lead to photo sensitivity or hypo pigmentation.

**Hyper pigmentation** – The addition of pigment (or coloring) to the skin. This typically occurs in either a freckling like fashion, or in splotches. Sun damage is the most common cause. Skin bleaching agents can be used to help alleviate this problem.

**Hypo pigmentation** – This is the permanent loss of coloring in the skin. It can be described as the opposite of a freckle. It typically occurs in spots about the size of an average mole. It is commonly the result of years of sun damage. There is a medical condition called vitiligo, where it occurs over larger areas of the face and body. Currently, there is no cure for the loss of pigment in the skin.

**Ingrown Hair**- Hairs that point inward instead of growing outward and become trapped beneath the skin. They can cause folliculitis.

**Keratin** - the protein that forms the base of human skin, hair, and nails.

**Keratinization:** process by which dead skin cells (keratinocytes), sebum (oil) and cosmetics build up an unattractive layer on the skin. This build up prevents hydrators (moisturizers), exfoliants (glycolic and salicylic acids) and acne products from working well on the skin. The skin will look flat or dull with a shiny surface.

**Kojic acid** - a pigment lightener which comes from mushrooms and has been used safely for many years in Japan with no known side effects. It blocks active tyrosinase in the cell thereby inhibiting pigment production.

**Lactic Acid** - A form of Alpha Hydroxy Acids. It is odorless and colorless and made from the metabolism of glucose and glycogen in blood and muscle tissue. It is also present in sour milk, beer, pickles and sauerkraut as well as any food made by bacterial fermentation. It is twice the molecular size of glycolic acid and cannot enter the follicle in order to adequately clean the follicle.

**Liposomes** - tiny lipid (fat) balls that deliver moisture to the skin. Because of their small molecular size, they are able to penetrate the cell wall reasonably well and are used in moisturizers.

**Melanin** - gives pigment to the skin.

**Microdermabrasion** – A treatment using a machine incorporating a fine spray of crystals, and a suction system used simultaneously to physically exfoliate the dead surface cells of the skin.

**Milia** – This is known as a whitehead, or a closed comedone. Unlike the blackhead, the milia has a layer of skin covering the opening. There is no way to remove a milia without breaking the surface of the skin to form an opening from which it can be removed. Since air doesn't reach it, it remains white in color. It looks like a tiny pearl trapped under the surface of the skin.

**Noncomedogenic** - does not clog pores.

**PABA (para-aminobenzoic acid)** - a chemical sunscreen that blocks UVB rays. Its popularity has waned because it can irritate the skin.

**Papain** - an enzyme derived from papaya that is used to exfoliate the skin.

**Papilla** – The tiny capillary blood supply whose sole function is to nourish the hair root in a given follicle, causing the hair to grow.

**Parasol 1789 (the brand name for avobenzone)** - an ingredient in sunscreens that blocks UVA radiation.

**Peel** – An application of an acid or enzyme to cause the rapid cellular turn over to reveal the healthier looking skin beneath the overgrowth of dead skin cells.

**pH** - the measure of acidity or alkalinity of a substance, which is graded on a scale of 1 to 14. A pH 7 is neutral; below 7 is acidic; above 7 is alkaline.

**Photo damage** – This is damage to the skin caused by exposure to the sun or tanning booths.

**Photo sensitive** – This is a condition in which the skin becomes hypersensitive to the harmful affects of ultra violet rays (from sun or tanning beds) usually due to medications (like tetracycline) or the use of various products, like hydroquinone or retinol products.

**Propylene glycol** - a humectant that is good for people with oily skin.

**Propylparaben** - a preservative.

**Retinoid** - an anti-aging product containing ingredients derived from Vitamin A.

**Retinol** – These are products derived from Vitamin A and are primarily used in anti-aging skin care. Most commonly known are Retin-A and Renova. Retinol products have extreme exfoliating properties to them, and can cause a great deal of noticeable peeling. Although the peeling process can be beneficial, it can cause the user to feel emotionally uncomfortable due to the excess shedding of skin.

**Retinyl palmitate** - a Vitamin A derivative used in anti-aging skin care. This derivative is minimally effective.

**Salicylic Acid:** it occurs naturally in wintergreen leaves, willow bark and sweet birch. It is used in skin care products as an anti bacterial, anti-itch and preservative, and as over the counter aspirin. . A beta-hydroxy acid, it helps exfoliate dry, flaky skin and prevent and heal blemishes. Because of it's wonderful properties its main use is as a *keratolytic* in treating acne, Rosacea and oily skin.

**Sebaceous glands** - oil-producing glands attached to the hair follicles.

**Sebum** - the oil secreted onto the skin from the sebaceous glands. It may glue down Keratinocytes (dead skin cells) and make pores look larger. Sebum also mixes with keratinocytes and anaerobic bacteria to form acne lesions.

**Sun Protection Factor (SPF)** - the number tells you the amount of time it will take your skin to burn with sunscreen compared to the amount of time before you'd burn with no sunscreen. (In other words, an SPF of 8 means you can stay in the sun 8 times as long as you could with no protection on your skin before your skin begins to burn.) This number pertains only to UVB rays.

**Telogen** – This is the resting phase of the follicle. The hair is completely detached from the papilla, and is in the process of falling out, or has fallen out on its own, and eventually the life cycle of the hair will repeat itself and move back into the anagen phase. A follicle can remain empty (dormant) for up to four months.

**Titanium dioxide ("micronized")** - a physical sunscreen that it protects the skin from some UVA and all UVB rays. It is also used to give opacity to face powder, eye shadow, and foundation.

**Tocopherol acetate** - Vitamin E.

**Tretinoin** - A Vitamin A derivative that is the active ingredient in anti-aging prescription drugs such as Retin A and Renova.

**Tyrosine** – An amino acid used by the body to produce melanin.

**Tyrosinase** – produces melanin

**UV light (ultraviolet)** - Rays from the sun (UVA and UVB) that penetrate the skin and cause premature aging and skin cancer.

**Whitehead** – See milia

**Witch hazel** - an astringent derived from the twigs of the Hamamelis virginiana plant.

**Zinc oxide** - an opaque, physical sunscreen which protects from some UVA rays and all UVB rays, and is also used to give opacity to face powder and foundation.