For the use of a Registered Medical Practitioner or a Hospital or a Laboratory Only

AHA GLOW (Aloe Vera + Glycolic Acid + Vitamin E Gel)

COMPOSITION

Key ingredients:

Aloe Vera......5 % w/w Glycolic Acid......1 % w/w Vitamin E Acetate.....0.1 % w/w

Ingredients: Acrylate Copolymer, Sodium Cocoyl Apple Amino Acids, Decyl glucoside, Polysorbate 80, Sodium Laureth Sulfate, Phenoxyethanol, Fragrance, Potassium hydroxide, Purified water and coloured millicapsules.

DESCRIPTION

Alpha hydroxy acid

Alpha hydroxy acids are a group of natural acids from foods. Some alpha hydroxy acids are gluconolactone; citric, glycolic, lactic, and malic acids and others.

Vitamin E

Vitamin E is found naturally in some foods, added to others, and available as a dietary supplement. "Vitamin E" is the collective name for a group of fat-soluble compounds with distinctive antioxidant activities.

Naturally occurring vitamin E exists in eight chemical forms (alpha-, beta-, gamma-, and delta-tocopherol and alpha-, beta-, gamma-, and delta-tocotrienol) that have varying levels of biological activity. Alpha- -) tocopherol is the only form that is recognized to meet human requirements - tocopherol form of vitamin E.

Aloe Vera

Aloe vera is a natural product that is now a day frequently used in the field of cosmetology. Aloe Vera comprises of more than seventy-five effective components, which includes the twenty amino acids and the eight essential amino acids indispensable for the human body. Besides these, they also contain certain enzymes effective for metabolic health, essential vitamins, minerals, poly-saccharides that render immune-stimulating properties along with its magical healing touch. The substances in Aloe Vera such as Salicylic Acid, Saponins and Sterols provide its analgesic, anti-inflammatory and antiseptic properties.

CLINICAL PHARMACOLOGY

Pharmacodynamics

Mechanism of action

Alpha hydroxy acid

Glycolic acid reacts with the upper layer of the epidermis, weakening the binding properties of the lipids that hold the dead skin cells together. This allows the stratum corneum to be exfoliated, exposing live skin cells

Vitamin E:

Vitamin E is a fat-soluble antioxidant that stops the production of ROS formed when fat undergoes oxidation. Scientists are investigating whether, by limiting free-radical production and possibly through other mechanisms, vitamin E might help prevent or delay the chronic diseases associated with free radical

Aloe vera Healing properties

Glucomannan, a mannose-rich polysaccharide, and gibberellin, a growth hormone, interacts with growth factor receptors on the fibroblast, thereby stimulating its activity and proliferation, which in turn significantly increases collagen synthesis after topical and oral Aloe vera. Aloe gel not only increased collagen content of the wound but also changed collagen composition (more type III) and increased the degree of collagen cross linking. Due to this, it accelerated wound contraction and increased the breaking strength of resulting scar tissue. An increased synthesis of hyaluronic acid and dermatan sulfate in the granulation tissue of a healing wound following oral or topical treatment has been reported.

Effects on skin exposure to UV and gamma radiation:

Aloe vera gel has been reported to have a protective effect against radiation damage to the skin. Exact role is not known, but following the administration of aloe vera gel, an antioxidant protein, metallothionein, is generated in the skin, which scavenges hydroxyl radicals and prevents suppression of superoxide dismutase and glutathione peroxidase in the skin. It reduces the production and release of skin keratinocyte-derived immunosuppressive cytokines such as interleukin-10 (IL-10) and hence prevents UV-induced suppression of delayed type hypersensitivity.

Anti-inflammatory action:

Aloe vera inhibits the cyclooxygenase pathway and reduces prostaglandin E2 production from arachidonic acid. Recently, the novel anti-inflammatory compound called C-glucosyl pheromone was isolated from gel extracts.

Effects on the immune system:

Alprogen inhibit calcium influx into mast cells, thereby inhibiting the antigen-antibody mediated release of histamine and leukotriene from mast cells. In a study on mice that had previously been implanted with murine sarcoma cells, acemannan stimulates the synthesis and release of interleukin-1 (IL-1) and tumor necrosis factor from macrophages in mice, which in turn initiated an immune attack that resulted in necrosis and regression of the cancerous cells. Several low-molecular-weight compounds are also capable of inhibiting the release of reactive oxygen free radicals from activated human Neutrophils

Moisturizing and anti-aging effect:

Mucopolysaccharides help in binding moisture into the skin. Aloe stimulates fibroblast which produces the collagen and elastin fibers making the skin more elastic and less wrinkled. It also has cohesive effects on the superficial flaking epidermal cells by sticking them together, which softens the skin. The amino acids also soften hardened skin cells and zinc acts as an astringent to tighten pores. Its moisturizing effects has also been studied in treatment of dry skin associated with occupational exposure where aloe vera gel gloves improved the skin integrity, decreases appearance of fine wrinkle and decreases erythema. It also has anti-acne effect.

Antiseptic effect:

Aloe vera contains 6 antiseptic agents: Lupeol, salicylic acid, urea nitrogen, cinnamonic acid, phenols and sulfur. They all have inhibitory action on fungi, bacteria and viruses.

Use in pregnancy, nursing mother, use in children and older Patients

Vitamin E

Pregnancy/nursing

Trials have been conducted in pregnant women. The majority of trials report no increase in negative fetal outcome, but results regarding birth-weight are conflicting. Considering the evidence of harm (all-cause mortality), high-dose vitamin E supplementation should be used with caution. Natural food sources are preferred

Aloe vera

Pregnancy and breastfeeding:

Oral aloe is not recommended during pregnancy due to theoretical stimulation of uterine contractions, and in breastfeeding mothers, it may sometime causes gastrointestinal distress in the nursing infant

DOSES AND ADMINISTRATION

Alpha hydroxy acid and Aloe vera Dose have not yet been identified

Vitamin E

Dosages in clinical trials range from 400 to 1,600 units/day. The established safe upper limit is 1,000 mg/day (1,500 units/day), but due to findings from meta-analyses, a lower safe dosage of 150 to 200 units/day has been suggested

INDICATIONS AND USAGE

Rejuvenates the skin by encouraging the shading of old and dead skin cells. Reduces the number of superficial wrinkles. Improves skin texture and tone. Unblocks and cleanses the pores. It is indicated in acne management or adjuvant treatment in acne management.

CONTRAINDICATIONS

Alpha hydroxy acid Contraindications have not yet been identified

Aloe vera: Contraindicated in cases of known allergy to plants in the liliaceae family

Vitamin E: Contraindications have not yet been identified

WARNINGS AND PRECAUTION

Alpha hydroxy acid: Have not yet been identified This may increase skin's sensitivity to the sun and particularly the possibility of sunburn.

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DRUG INTERACTION

Alpha Hydroxy Acids We currently have no information for alpha hydroxy acids interactions

Vitamin E

Vitamin E supplements have the potential to interact with several types of medications. A few examples are provided below. People taking these and other medications on a regular basis should discuss their vitamin E intakes with their healthcare providers

Anticoagulant and antiplatelet medications

Vitamin E can inhibit platelet aggregation and antagonize vitamin K-dependent clotting factors. As a result, taking large doses with anticoagulant or antiplatelet medications, such as warfarin, can increase the risk of bleeding, especially in conjunction with low vitamin K intake. The amounts of supplemental vitamin E needed to produce clinically significant effects are unknown but probably exceed 400 IU/day

Simvastatin and niacin

Some people take vitamin E supplements with other antioxidants, such as vitamin C, selenium, and beta-carotene. This collection of antioxidant ingredients blunted the rise in high-density lipoprotein (HDL) cholesterol levels, especially levels of HDL2, the most cardioprotective HDL component, among people treated with a combination of simvastatin and niacin

Chemotherapy and radiotherapy

Oncologists generally advise against the use of antioxidant supplements during cancer chemotherapy or radiotherapy because they might reduce the effectiveness of these therapies by inhibiting cellular oxidative damage in cancerous cells. Although a systematic review of randomized controlled trials has called this concern into question, further research is needed to evaluate the potential risks and benefits of concurrent antioxidant supplementation with conventional therapies for cancer.

Aloe vera

Interactions:

Application of aloe to skin may increase the absorption of steroid creams such as hydrocortisone. It reduces the effectiveness and may increases the adverse effects of digoxin and digitoxin, due to its potassium lowering effect. Combined use of Aloe vera and furosemide may increase the risk of potassium depletion. It decreases the blood sugar levels and thus may interact with oral hypoglycemic drugs and insulin.

Thus, though Aloe vera has wide spectrum of the properties and uses, some of them could be myths and some of them could be real magic. In future, controlled studies are required to prove the effectiveness of Aloe vera under various conditions.

ADVERSE EVENT

Alpha hydroxy acid No specific warnings and precaution identified for this.

Aloe vera

Topical: It may cause redness, burning, stinging sensation and rarely generalized dermatitis in sensitive individuals. Allergic reactions are mostly due to anthraquinones, such as aloin and barbaloin. It is best to apply it to a small area first to test for possible allergic reaction. Oral: Abdominal cramps, diarrhea, red urine, hepatitis, dependency or worsening of constipation. Prolonged use has been reported to increase the risk of colorectal cancer. Laxative effect may cause electrolyte imbalances (low potassium levels).

Vitamin E

Meta-analyses of trials investigating high-dose vitamin E supplementation have found evidence of harm. Low-dose vitamin E supplementation (150 mg/day) does not appear to have any serious adverse reactions. High doses of vitamin E may prolong bleeding time.

OVERDOSAGE

Alpha hydroxy acid and Aloe vera Overdose have not yet been identified

Vitamin E

Research has not found any adverse effects from consuming vitamin E in food. However, high doses of alpha-tocopherol supplements can cause hemorrhage and interrupt blood coagulation in animals, and in vitro data suggest that high doses inhibit platelet aggregation.

Two clinical trials have found an increased risk of hemorrhagic stroke in participants taking alphatocopherol; one trial included Finnish male smokers who consumed 50 mg/day for an average of 6 years and the other trial involved a large group of male physicians in the United States who consumed 400 IU every other day for 8 years. Because the majority of physicians in the latter study were also taking aspirin, this finding could indicate that vitamin E has a tendency to cause bleeding

The FNB has established ULs for vitamin E based on the potential for hemorrhagic effects. The ULs apply to all forms of supplemental alpha-tocopherol, including the eight stereoisomers present in synthetic vitamin E. Doses of up to 1,000 mg/day (1,500 IU/day of the natural form or 1,100 IU/day of the synthetic form) in adults appear to be safe, although the data are limited and based on small groups of people taking at least 2,000 IU for a few weeks or months. Long-term intakes above the UL increase the risk of adverse health effects. Vitamin E ULs for infants have not been established.

Directions for use

Squeeze out required quantity of Ahaglow gel on palm & crush millicapsules. Work up lather and massage gently on your wet face and neck with an upward circular motion. Rinse off with clear water and pat your face dry. For best results use twice a day.

Expiry date

Do not use later than the date of expiry

Storage Store at a temperature not exceeding 25°C, Do not Freeze.

Presentation Available in 20 gm, 50 gm, 100 gm Plastic tube.

MARKETED BY

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IN/AHAGLOW/OCT-15/01/PI