

## ANTI-AGEING NATURAL HERBS: THE SAVIOUR OF HUMAN SKIN

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**ABSTRACT:** Skin is the largest part of human body. The impression of human health is very much dependable and reliable on skin health & the beauty. Skin plays an essential role in immunization and protecting the body from microbes and the elements, helps regulate body temperature & permits the sensations of touch, heat & cold. Epidermis is outer covering of the skin to act as a physical & biological barrier to the external environment. The thinning of the epidermis layer causes the loss of the elastic tissue (elastin) in skin with age that causes the skin to hang loosely which leads to wrinkle formation & causes ageing. Ageing occurs due to some intrinsic and some extrinsic factors that include genetics, metabolism, hormones, sun exposure, diet and pollution. For looking younger in this era, people choose natural herbs for beautiful skin rather than plastic surgery or laser therapy for not only alluring skin but also for reducing any type of complications. Natural herbs are rich in flavonoids & antioxidants that nourish the skin & enhance collagen production. A few herbs show anti-ageing activity includes Aloe vera, Wheat, Cucumber, Rosemary, Basil, Green tea, Turmeric, Amla, Apricot, Carrot, Ginkgo, etc.

**KEYWORDS:** Herbs, Anti-ageing, Skin, Natural, Epidermis

### INTRODUCTION:

[2][10] Skin ageing is a part of the natural human ageing mosaic, which become evident & follows different trajectories in different organ, tissue & cell with time. Collagen content decreases by 1% per unit area of the skin every year after the age of 20. Ageing divides into two types, Intrinsic and Extrinsic ageing. Intrinsic ageing causes due to internal changes i.e. genetics, whereas extrinsic ageing causes due to external factors such as sun exposure, diet, smoking, lifestyle, etc. Intrinsic ageing is an unavoidable physiological process which results in thinning, drying of the skin which

results in fine wrinkles, while extrinsic ageing is an uncertain process that results in coarse wrinkles, loss of elasticity, laxity and rough textured experience in which primary factor includes long-term exposure to solar ultraviolet (UV) radiations that referred as photo aging .

[7] The persistent formation of Reactive Oxygen Species (ROS) reasons the incidence of intrinsic pores and skin getting old. Oxygen-containing, exceedingly reactive species are extensively referred to as ROS; it's far generated continuously at some point of regular cell metabolism. ROS including hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) and superoxide anions (O<sub>2</sub><sup>-</sup>) act as an intercellular messenger while it reasonably will increase, while immoderate manufacturing reasons oxidative pressure and damages organic molecules which bring about intrinsic pores and skin getting old. The pores and skin is split into 3 layers; The Epidermis, Dermis & Subcutaneous tissue. The getting old of pores and skin & wrinkle formation is brought on with the aid of using adapting the tissue structure & disintegration among the dermis and epidermis layer. Thus with the aid of using the usage of herbal herbs it is simple to preserve antioxidant homeostasis even though unfastened radicals will increase oxidative pressure & suppressed immoderate deposition of adipose tissue are the method to save your pores and skin getting old. An exquisite range of plants & their extracts are studied for their or their powerful movement at the getting old pores and skin. Some plant extracts confirmed antioxidant activity, a few confirmed antibacterial, antiviral & antiradical activities. Studies confirmed that flavonoids like Rutin, Quercetin, and Hesperidin display the maximum anti-getting old blessings for the pores and skin. An anti-oxidative defence mechanism is the handiest direction for diminishing & putting off the movement of unfastened radicals (FR) which reasons oxidative pressure. Herbs act as herbal

scavengers of FR, which might be recognized to reason name, harm that consequence in age-associated clinical disorders. The critical software of antioxidants is useful to shield the pores and skin in opposition to many environmental factors.[9] Ayurvedic Literature has helped a lot in the use of cosmetic production for repairing and beautifying that are used by both men and women. Ayurvedic cosmeceuticals consist of a number of herbs & other natural ingredients, that are used in the form of packs, oils, herbal waters, powders, etc. which are safe to use with holistic action.

#### NATURAL HERBS USED IN ANTI-AGEING:

##### 1. Aloe vera (*Aloe barbadensis*):



[1][4] Aloe vera belongs to the own circle of relatives Liliaceae. Aloe is the dried juice of leaves of *Aloe barbadensis*. There are diverse forms of aloe and they all include main reagents of anthraquinone glycosides. It suggests anti-inflammatory, antioxidant & anti-microbial activity. It has medicinal & recuperation homes and its leaves are majorly utilized in anti-aging, anti-wrinkle creams & moisturizers. UV radiations reason photo damage to the pores and skin, which results in depletion of the dermal matrix & continual adjustments in pores and skin structure. Practically, it's been determined that Baby aloe shoot extract (BAE) has greater capacity than Adult shoot extract (AE) within the remedy of UV broken pores and skin. It is usually used for treating acne, wrinkles, darkish or white patches & stretch marks. Aloe vera is to be had in Africa, India & the arid areas.

##### 2. Wheat (*Triticum aestivum*)



Wheat belongs to family Poaceae. Wheat germ oil has anti-oxidant, relaxing, regenerative, anti-aging & immune-stimulant properties. Wheat germ is the embryo of the germinating part of a wheat kernel. Wheat germ is the rich source of  $\alpha$ -tocopherol (Vitamin-E). It increases the synthesis of collagen fibres & increase skin elasticity by which ageing decreases.

##### 3. *Astragalus membranaceus*



*Astragalus membranaceus* belongs to the family Leguminosae. Its roots are used for the antioxidative activity on the skin. *Astragalus membranaceus* prevent the action of the free radicals by increasing activity of antioxidant enzymes & hence useful in treatment of ageing & wrinkles.

##### 4. Cucumber (*Cucumis sativum*)



Cucumber (*Cucumis sativus*) Cucumber belongs to cucurbitaceae family, its fruits & seeds are used. Its components are used to treat skin wrinkles and sun burn. It is helpful in maintaining elasticity of skin which prevents ageing. It is also used as a moisturizer.

#### 5. Black tea (*Camellia sinensis*)



Black tea belongs to the family Theaceae. It contains loads of antioxidants which fight free radicals. It promotes radiance & more skin tone, because of its antioxidant content, Black tea helps to prevent formation of fine lines and wrinkles on skin.

#### 6. Jatamansi (*Nardostachys jatamansi*)



Jatamansi is very important herb for skin care property. It escalates fibroblasts to increase the

synthesis of collagen & elastin fibres. By which skin elasticity increases & wrinkle formation that means ageing decreases.

#### 7. Panax ginseng



There are different varieties of ginseng that contain chemical constituent such as Ginsenosides which shows various medicinal properties, and also have anti-ageing & anti-wrinkle effects. It is used in skin care cosmetics due to its anti-ageing capacity.

#### 8. Citrus sinensis



It has a rich source of vitamin C. It is used in the form of fruits, candies or wine. Skin wrinkles appear due to the depletion of collagen fibres & appearance of matrix metalloproteinase, so citrus sinensis inhibits the action of metalloproteinase and avoids ageing of skin.

#### 9. Pomegranate





(Punicagranatum) extract protects human immortalized Ha Ca T keratinocytes against UVB-induced oxidative stress and markers of photo ageing, and therefore, might be a useful supplement in skin care products. Catechin, an active component of Punicagranatum, inhibited the UVB-induced skin photo ageing.

#### 10. Amla



Amla extract (*Emblica officinalis*) elevates the mitochondrial activity of human skin fibroblasts and promotes production of procollagen. Amla extract has a number of potential mitigative, therapeutic, and cosmetic applications.

#### 11. Carrot



It is obtained from the plant *Daucus carota* belonging to the family Apiaceae. It is a valuable herb because of its richness in Vitamin A. Carrot seed oil is used as an anti-aging, revitalizing and rejuvenating agent. It gets its bright orange colour from beta carotene and lesser amounts of  $\alpha$ -carotene and gamma carotene. Alpha and beta carotenes are partly metabolized into Vitamin A. It is available in the form of packs and lotions.

#### 12. Annona squamosa



One of the critical medicinal plants, usually called “custard apple,” belonging to the own circle of relatives Annona ceae. It possesses a huge kind of pharmacology of the critical medicinal plants, usually called “custard apple,” belonging to the own circle of relatives Annona ceae. It possesses a huge kind of pharmacological sports and is utilized unconventional applications. Flavonoids are herbal products that have been proven to own numerous organic homes associated with the antioxidant mechanism, and leaves of *A. squamosa* are wealthy in flavonoids inclusive of recurring and hyper oxide. The presence of acetogenins, polyphenols in leaves of *A. squamosa* possibly performs a position as a powerful FR scavenger. *A. squamosa* extract will increase mobile proliferation and will increase collagen. Since custard apple has exquisite antioxidants, it is ideal if custard apple is being evolved as a pharmaceutical product, particularly as cosmetics. Thus, the present day studies have a look at centred to shield the pores and skin in opposition to oxidative harm and get rid of the free radical sports and is utilized unconventional applications. Flavonoids are herbal products that have been proven to own numerous organic homes associated with the antioxidant mechanism and leaves of *A. squamosa* are wealthy in flavonoids inclusive of recurring and hyper oxide. The presence of acetogenins, polyphenols in leaves of *A. squamosa* possibly performs a position as a powerful FR scavenger. *A. squamosa* extract will increase mobile proliferation and will increase collagen. Since custard apple has exquisite antioxidants, it is ideal if custard apple is being evolved as a pharmaceutical product, particularly as cosmetics. Thus, the present day studies have a look at centred to shield the pores and skin in opposition to oxidative harm and get rid of the FR.

**[9]Anti-ageing properties of Ayurveda-**

**1. Age defying activity** – Centellaasiatica (Gotu-Kolu) is the herb with anti-ageing effect by enhancing collagen synthesis with overall support to the skin by keeping all in balance.

**2. Youthful Radiance** – Varnya herbs enhances the radiance or bright complexion of the skin. It includes herbs like sandalwood, vetiver, Indian madder and Indian sarsaparilla and so on.

**3. Wear and tear protection** – Sandhaniya herbs helps repairing tissue damage, heals and regenerates the skin, regenerate nerves by 30 to 40%.

**4. Deep healing** –Vranaropana herbs have healing abilities in skin. It include herb Gotu Kola it also heal wounds.

**5. Enhancing and nurturing** – Gotu Kola, Skin Cotton Tree, Costus and Rosa Petal provides overall nourishment and provides moisture balance. Grapefruit extract is natural source of Vitamins A, C and E which enhances the skin.

**6. Anti-inflammatory** – Rose petal, silk Cotton Tree and Aloe Vera are Sholahara herbs with anti-inflammatory properties. Inflammatory mediators such as leukotrienes and prostaglandins, cytokines and growth factors target skin texture, integrity and tone.

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