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Natural Remedies for Skin and Hair: Review



Sadhana More*; Roshni Chaudhari; Varsha Dhole; Rahul A. Gupta; Smita Takarkhede.

Ideal College of Pharmacy and Research, Bhal, P.O.Dwarli, Haji Malang Road, Ambernath East, Maharashtra 421306. India.

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ABSTRACT

Pharmaceutical industry having great possible and contingency for Saundaryaprasadak category (herbal cosmetic) development in future. Natural beauty is blessing and cosmetics help in presenting and increasing the beauty and personality aspects of human beings. Saundarya prasadak are the preparation, which represent cosmetic base correlate with known Ayurveda, Siddha and Unani (ASU) drugs active ingredient (which reference are readily available in schedule 1st book of Drug and cosmetic act 1940 and rule 1945). In traditional era people were used to various lepa, Alepa, Pralepa, Udavartan, Prakshalan etc for Saundaryaprasadak karma. Natural herbs help in preserving and enhancing the beauty and personality of human beings. An herb is a plant or plant extract, including leaves, bark, berries, roots, gums, seeds, stems and flowers which are favour with nourishing and healing elements. Natural cosmetic is general term applied to all preparation and external conditioning and beautifying the body. Herbal cosmetics are the preparations, which represent cosmetic with active associated bioactive ingredients pharmaceuticals. The uses of phytochemicals from a variety of botanicals have dual function like they serve as cosmetics for a care of body and its parts and the botanical ingredients present influence biological functions of skin and provide nutrients necessary for healthy skin or hair.

INTRODUCTION

The word cosmetic was derived from the Greek word "kosmtikos" meaning having the power, arrange, skill in decorating. The origin of cosmetics forms a continuous narrative throughout the history of man as they developed. The man in prehistoric times 3000 BC used colours for decoration to attract the animals that he wished to hunt and also the man survived attack from the enemy by colouring his skin and adorned his body for protection to provoke fear in an enemy (whether man or animal). The origin of cosmetics were associated with hunting, fighting, religion and superstition and later associated with medicine. The term Cosmeceuticals was first used by Raymond Reed founding member of US Society of Cosmetics Chemist in 1961. He actually used the word to brief the active and science based cosmetics. The above term was further used by Dr. Albert Kligman in the year 1984 to refer the substances that have both cosmetic and therapeutic benefits.

Cosmeceuticals are cosmetic pharmaceutical hybrids intended to enhance health and beauty through ingredients that influence the skin's biological texture and function. Cosmetics typically claim to improve skin tone, texture, and radiance, while reducing wrinkling. Cosmeceuticals are the fastest-growing segment of the natural personal care industry. A cosmeceutical's "intended use" - gleaned from the labelling, advertising, promotional materials – determines the regulatory fate of cosmeceutical as a cosmetic or drug. In general, vitamins, herbs, various oils, and botanical extracts may be used in cosmetics, but the manufacturer may not claim that these products penetrate beyond the skin's surface layers or that they have drug like or therapeutic effects.

Advantages of Herbal Cosmetics over Synthetic

Herbal cosmetics are the modern trend in the field of beauty and fashion. These agents are gaining popularity as nowadays most women prefer natural products over chemicals for their personal care to enhance their beauty as these products supply the body with nutrients and enhance health and provide satisfaction as these are free from synthetic chemicals and have relatively less side-effects compared to the synthetic cosmetics.

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Following are some of the advantages of using natural cosmetics which make them a better choice over synthetic ones:

- 1) **Natural products:** The name itself suggests that herbal cosmetics are natural and free from all the harmful synthetic chemicals which otherwise may prove to be toxic to the skin. Instead of traditional synthetic products different plant parts and plant extracts are used in these products, e.g. aloe-vera gel and coconut oil. They also consist of natural nutrients like Vitamin E that keeps skin healthy, glowing and beautiful. For example, Aloe vera is a herbal plant species belonging to liliaceae family and is naturally and easily available.
- 2) **Safe to use:** Compared to other beauty products, natural cosmetics are safe to use. They are hypo-allergenic and tested and proven by dermatologists to be safe to use anytime, anywhere. Since they are made of natural ingredients, people don't have to worry about getting skin rashes or experience skin itchiness.
- 3) Compatible with all skin types: Natural cosmetics are suitable for all skin types. No matter if you are dark or fair, you will find natural cosmetics like foundation, eye shadow, and lipstick which are appropriate irrespective of your skin tone. Women with oily or sensitive skin can also use them and never have to worry about degrading their skin condition. Coal tar-derived colors are used extensively in cosmetics, Coal tar is recognized as a human carcinogen and the main concern with individual coal tar a color (whether produced from coal tar or synthetically) is they can cause cancer. But natural colors that are obtained from herbs are safer.
- 4) Wide selection to choose from: Natural cosmetics may still be a new type in the beauty industry but they already offer a variety of beauty products for all makeup crazy people out there to choose from. One will find a variety of foundation, eye shadow, lipstick, blush, mascara, concealer and many more which are all naturally formulated. Furthermore, one will find locally made natural cosmetics or those made by famous designers worldwide. There exist a large variety of herbal extracts, to name a few *Andrographis paniculata* (Kalmegh), *Asparagus racemosus* (Shatawari), *Boswellia serrata* (Salai Guggal), Asphalt (Shilajit) etc.
- 5) **Fits your budget:** Natural cosmetics are not that expensive. In fact, some of these products are more affordable than synthetic ones. They are offered at discounted prices and are sold for a cheap price during sales. Just need to survey enough to look for great deals. An estimate of WHO demonstrates about 80% of world population depends on natural products

for their health care, because of side effects inflicted and rising cost of modern medicine. World Health Organization currently recommends and encourages traditional herbal cures in natural health care programs as these drugs are easily available at low cost and are comparatively safe.

- 6) **Not tested on animals:** Some cosmetics are initially tested on animals to ensure that they are safe and effective to use for human. However, natural cosmetics need not be tested on animals. These natural formulations are tested by experts in laboratories using state of the art equipment with no animals involved.
- 7) **No side effects:** The synthetic beauty products can irritate your skin, and cause pimples. They might block your pores and make your skin dry or oily. With natural cosmetics, one need not worry about these. The natural ingredients used assure no side effects; one can apply them anytime, anywhere. For example, herbal cosmetics are free from parabens that are the most widely used preservative in cosmetics and can penetrate the skin and are suspected of interfering with hormone function (endocrine disruption).

Plants for Skin and Hair

Dry Skin Treatment:

a) Coconut oil: Coconut oil comes from the fruit or seed of the coconut palm tree *Cocos nucifera*, family Arecaceae. The melting point of coconut oil is 24 to 25 °C (75-76 °F) and thus it can be used easily in both liquid and solid forms and is often used in cooking and baking. Coconut oil is excellent as a skin moisturizer and softener. A study shows that extra virgin coconut oil is effective and safe when used as a moisturizer, with absence of adverse reactions. A study found that coconut oil helped prevent protein loss from the wet combing of hair when used for fourteen hours.



Figure No. 1

b) Sunflower oil: It is the non-volatile oil expressed from sunflower seeds obtained from *Helianthus annuus*, family Asteraceae. Sunflower oil contains lecithin, tocopherols, carotenoids and waxes. In cosmetics, it has smoothing properties and is considered noncomedogenic.



Figure No. 2

c) Aloe: A native of southern Africa, the aloe vera plant has fleshy spiny-toothed leaves and red or yellow flowers. It is an ingredient in many cosmetics because it heals moisturizes, and softens skin. Simply cut one of the aloe vera leaves to easily extract the soothing gel.



Figure No. 3

Anti-Aging Treatment:

a) Golden Root: *Rhodiola rosea* (Roseroot, Aaron's rod), as shown in figure is a plant in the Crassulaceae family that grows in cold regions of the world. The Rhodiola root has long been used in the traditional medical systems in Europe and Asia to increase an organism's resistance to physical stress currently; it is widely thought to have antioxidative properties.



Figure No. 4

b) Carrot: It is obtained from the plant *Daucus carota* belonging to family Apiaceae. It is a valuable herb since ages as it is rich natural source of Vitamin A along with other essential vitamins. Carrot seed oil is indicated for anti-aging, revitalizing and rejuvenating. As it promotes the formation of new cells and helps in reducing wrinkles. It acts as Natural toner and rejuvenator for the skin.



Figure No. 5

c) Ginkgo: Ginkgo comes from the ginkgo tree, as shown in figure, *Ginkgo biloba* belongs to family Ginkgoaceae, which grows to a huge size. It is best known, as a circulatory tonic, in particular for strengthening the tiny little capillaries to all the organs, but especially to the brain. The capillaries become more flexible and as a result, more oxygen is delivered to the brain and eyes (to protect against degenerative eye diseases like macular degeneration), so important as we age. Ginkgo also protects the nervous system and fights oxidation.



Figure No. 6

Skin Protection:

a) Green tea: The tea plant has been cultivated in Asia for thousands of years. Green tea is tea made solely with the leaves of *Camellia sinensis* belonging to family Theaceae. The 4 major polyphenolic catechins present in green tea leaves are (2)-epicatechin (EC), EGC, (2)-EC-3-gallate, and EGCG, which is the most abundant. It was found that green tea extracts or an individual green tea polyphenol (GTPP), especially epigallocatechin (EGC)-3-gallate (EGCG), inhibited two-stage chemical carcinogenesis (*e.g.*, induced by 7,12-dimethylbenz(a)anthracene [DMBA] and 12-O-tetra decanoylphorbol 13-acetate [TPA]) and

photo-carcinogenesis (induced by UVB). It is a premiere skin protectant. It protects against direct damage to the cell and moderates inflammation. The catechins in green tea are some 20 times stronger in their antioxidant powers than even Vitamin E.



Figure No. 7

b) Calendula: Calendula officinalis is reported to have a remarkable antioxidant activity, anti-inflammatory activity and wound healing activity. A previous study demonstrated that the essential oil of Calendula consists mainly of α -thujene, α -pinene, 1,8-Cineole, dihydrotagetone and T-muurolol. Calendula in suspension or in tincture is used topically to treat acne, reducing inflammation, controlling bleeding and soothing irritated tissue. There is "limited evidence" that calendula cream or ointment is effective in treating radiation dermatitis.



Figure No. 8

c) Turmeric: Turmeric is used in many celebrations of Hindus. Especially in Hindu wedding brides would rub with turmeric on their bodies for glowing look. New born babies also rubbed with turmeric on their forehead for good luck. Traditionally women rub turmeric

on their cheeks to produce a natural golden glow. It is a deep yellow-to-orange powder that comes reduce the number of Ultraviolet B (UVB)-induced sunburn cells in mice.



Figure No. 9

Dandruff Treatment:

a) Neem: Neem or Margosa is a botanical relative of mahogany. It belongs to the family Meliaceae. The Latinized name of Neem *Azadirachta indica*-is derived from the Persian. Azad=Free, dirakht=Tree, i-Hind=of Indian Origin. The common treatment for dandruff is Neem as it produces antifungal, antibacterial, pain-relieving, and anti- compounds that would treat dandruff.



Figure No. 10

b) Henna: Henna comes from the plant *Lawsonia inermis* family Lythraceae, which contain a dye molecule called Lawsone, which when processed produces Henna powder. Besides lawsone, other constituents present are gallic acid, glucose, mannitol, fats, resin (2%), mucilage and traces of an alkaloid. Leaves yield hennatannic acid and an olive oil green resin, soluble in ether and alcohol. Lawsone isolated from the leaves of *L. inermis* has shown significant antifungal antibiotic effect.



Figure No. 11

c) Shikakai: Acacia concinna Linn. (Leguminosae) is a medicinal plant that grows in tropical rainforests of Southern Asia. The fruits of this plant are used for washing hair, for improving hair growth, as an expectorant, emetic, and purgative. The powder of Acacia concinna Linn. shows the presence of saponins, alkaloids, sugar, tannin, flavanoids, anthraquinone glycosides.



Figure No. 12

Hair Care:

a) Amla: Amla is obtained from the plant *Emblica officinalis*, Family Euphorbiaceae. Amla is rich in Vitamin C, tannins and minerals such as phosphorus, iron and calcium which provides nutrition to hair and also causes darkening of hair.



Figure No. 13

- **b)** Coconut Oil: This oil obtained from the dried solid part of the endospasm of the coconut-Cocos nucifera, family Palmea. It is white or pearl- white unctuous mass in winter and colourless in summer.
- **c) Almond Oil:** The almond oil is obtained from *Prunus dulcis*. It proves to be very nourishing and softens and strengthens the hair. The almond oil also proves to be a very good cleansing agent.



Figure No. 14

d) Eucalyptus Oil: Eucalyptus oil is the generic name for distilled oil from the leaf of Eucalyptus, a genus of the Plant family Myrtaceae. Eucalyptus oil can help to get rid of dandruff, which in turn can help to promote healthy growth of hair.



Figure No. 15

e) Rose Oil: The well-known essential oil is probably rose oil, produced from the petals of *Rosa damascena* and *Rosa centifolia*, family Rosaceae. Steam-distilled rose oil is known as "rose otto" while the solvent extracted product is known as "rose absolute". It is used more commonly in perfumery. The key flavour compounds that contribute to the distinctive scent of rose oil are beta-damascenone, beta-damascone, beta-ionone, and oxide.



Figure No. 16

- f) Sunflower Oil: It is the non-volatile oil extracted from sunflower seeds obtained from *Helianthus annuus*, family Asteraceae. Sunflower oil contains lecithin, tocopherols, carotenoids and waxes. It has smoothing properties and is considered non-comedogenic. A simple yet cost-effective oil, well tried and tested for generations in a wide variety of emulsions formulated for face and body Products.
- **g**) **Hibiscus:** Hibiscus consists of calcium, phosphorus, iron, Vitamin B₁, Riboflavin, Niacin and Vitamin C, used to stimulate thicker hair growth and prevents premature graying of hair.

Hibiscus plants are rich in amino acids, antioxidants, and oligopeptides that help in reducing fine lines and wrinkles from the skin, doing an anti-aging effect. Also, the leaves and flowers

are good for *hair care*. The flowers are used in the preparation of many skin and hair nourishment products. Hibiscus leaf is a natural hair conditioner, as it contains 'mucilage polysaccharides.' Take 15-20 leaves, and boil them. Apply the water to your hair for two weeks for reduced hair fall and increase shine.



Figure No. 17

Antioxidants: Antioxidants either synthetic or natural can be effective in preventing free radical formation by scavenging them or promoting their decomposition and suppressing such disorders. Currently, there is a growing interest toward natural antioxidants of herbal resources.

Tamarind: Tamarind or *Tamarindus indica* L. of the Fabaceae, subfamily Caesalpinioideae consists of amino acids, fatty acids and minerals of tamarind plant parts. The most distinguished characteristic of tamarind is its sweet acidic taste due to tartaric acid. Besides being a rich source of sugars, tamarind fruit is also an excellent source of Vitamin B and contain minerals, exhibit high antioxidant capacity that appear to be associated with a high phenolic content, and thus can be an important food source.



Figure No. 18

Vitamin C: Vitamin C is necessary for the hydroxylation of proline, procollagen, and lysine. Vitamin C improves the changes caused by photo damage. Vitamin C has been used

effectively to stimulate collagen repair, thus removing some of the effects of photo-aging on skin.

Vitamin E: (Alpha-tocopherol) is the major lipophilic antioxidant in plasma membranes and tissues. The term Vitamin E collectively refers to 30 naturally occurring molecules (4 tocopherols and 4 tocotrienols), all of which exhibit Vitamin E activity.

Its major role is generally considered to be the arrest of chain propagation and lipid peroxidation by scavenging lipid peroxyl radicals, hence protecting the cell membrane from destruction.

CONCLUSION

Herbal cosmetics are prepared, using permissible cosmetic ingredients to form the base in which one or more herbal ingredients are used to treat different skin ailments and for beautification. The chemical formulation of all these cosmetic products includes addition of various natural additives like waxes, oils natural color, natural fragrances and parts of plants like leaves, etc. The Cosmeceuticals are agents that lie somewhere between pure cosmetics and pure drug methods. The cosmetic products are the best option to reduce skin problems such as hyperpigmentation, skin wrinkling, skin aging and rough skin texture etc. The demand of herbal cosmetic is rapidly expanding. The advantages of herbal cosmetics are lower cost, side effects free, environmental friendly, safe to use etc. Also has a great future ahead as compared to synthetic cosmetics. Proper regulation of these herbs and standardization will lead to tremendous and significant growth in herbal cosmetics field.

The ability to desire the right cosmetics for you depends on accurate ingredient knowledge, body Prakriti assessment, personal needs, customer perception about product, benchmark product. Quality control for ability and safety of herbal cosmetic products is of predominant importance. So quality control test must be carried out for herbal cosmetics. It is assumed to be safe for longer periods of time.

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