

REVIEW ON COSMETIC SCIENCE (HAIR TONIC)

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ABSTRACT

The purpose of the review is to elucidate the basic knowledge related to makeup science. The Greek term "kosmeticos," which means to embellish, is where the word "cosmetics" originates. Since time, substances used to modify appearance or status fall outside the purview of cosmetics. People want to look beautiful, and medicines have been around for as long as societies and groups have.

Herbal beauty products are defined as ingredients made from a range of medicinal plants that impact skin functions and supply the vitamins and minerals required for healthy hair and skin. Hair beauty products, such as henna, coloring, and smoothing therapies, are an effective way to increase the willingness of patients to undergo hair loss and hairline therapy..

KEYWORDS: Key Herbal shampoo, hair tonics, hair straighteners, tresses, hairstyle products.

INTRODUCTION

Medicines called cosmetics are used to improve the appearance or smell of the body. It includes: hair color, permanent waves, colored contact lenses, lotions, chemicals, scents, lip gloss, nail polish, and facial features. makeup. "Make-up" is a term used to describe some types of cosmetics, mainly colorful items meant to change the customer's image.

Hair

Fur's intricate shape gives it unusual physical as well as chemical characteristics. extremely intricate construction made up of several architectural components that work together as a single entity. The central region, the cerebral cortex, with the outermost layer of skin are the main three layers of a person's hair bulb. The medulla root is present in coarse hair, including thick eyebrows, but lacking in the young people's hair that is thin. It also appears in hair that is graying. Asian hair has a larger cortical than Caucasian hair.^[1]

The uppermost layer can become crucial in forehead cracking because it provides a region of toughness that allows cracks to propagate along the direction of the fiber. The outermost layer is watertight, like the interior sheets, & is made up of small scales known as cell layers.^[2] The epidermis layers' direction plus form produce the variation in contact action in keratin. The epidermis in Asian hair is 6–8 scales thick; it is somewhat thinner in Caucasians but significantly thinner in African hair. African hair has a lower cell level, which makes it more vulnerable to breaking. The fat layer which covers the thin protein barrier known as the epicuticle is made up of free oils and 18-methyl groups eicosanoic alcohol. Under the cuticle cell membranes are three levels: Layer A, layer cuticle or layer B and inner cuticle. Highly linked proteins, primarily

cysteine as are present in all three layers.^[3] The initial one has the highest protein cystine content, while the last one has a small amount. The cerebral cortex consists of long, thin filaments. Small particles are spindle-like fibers composed of collagen and extremely organized fibrillar subunits called tiny fibers. These additionally exist in cortical cells. Antibody that is full of cystines and forms crystals within a matrix. The arrangement of the macro fibrilares in a hexagonal shape.^[4]

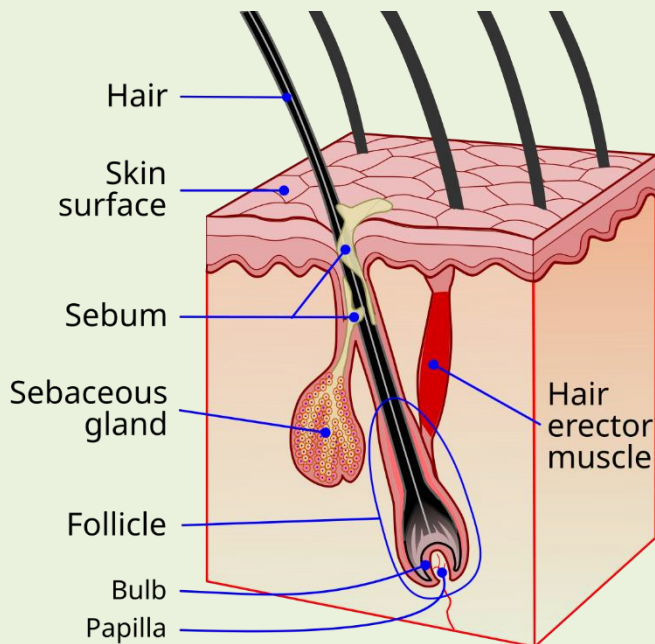


Fig.1. Stucture of human skin

Stress: Although stress and physical stress are not the same thing, stress can still cause hair loss in some people. Such as separation, old age, death of a loved one. Hair tips that combine meditation, yoga, and meditation to reduce stress and anxiety can help.^[5]

Food habits: The least prevalent cause of balding is a vitamin deficiency. Low vitamin B levels and insufficient mineral intake are typical causes of hair loss. It happens when a person's diet is deficient in nutrients and their food is unhealthy.

Protein storage: A protein shortage is often the reason for hair loss. Should you be deficient in protein?

Products with chemicals or the wrong product: Using the wrong hair product is one of the typical reasons for hair loss. Using products that maintain the health of your hair and stop hair loss is always a smart idea. For example, If your scalp is broken or damaged, shampoos and conditioners will not help your problem. Try detergents specifically designed to help us prevent narrow hair thinning.

Heredity: Genetic variation is an important cause of hair loss. Hair thinning can affect either men and women in a way which follows a certain pattern. Many genes have been found that cause hair loss^[6]

REASON FOR HAIR LOSS

Herbal hair oil: Hair, one of the most important parts of the body, affects the entire appearance of the person^[7]. Hair care products are formulated to cleanse, change hair texture, change hair color, revitalize hair stress, condition hair and ensure healthy hair.^[8] Hair care products are divided into two categories: hair care and hair tools. Hair tonics are herbal hair oils. Oil-based herbal extracts are used in the making of these products. Hair oil is a hair care product used to treat hair loss, hair loss, hair replacement and hair loss.

The advantage are as follows:^[9]

- It gives good results for the hair. Vegetable oils contain vitamins and micronutrients that support your hair
- Hair oil helps prevent hair loss and frizz. The ends of your hair need special care, and vegetable oils care for them throughout the nutrition process.
- Regular use of hair oil or pomade can treat the problem of premature graying hair.
- Keep your scalp moist.
- Promote hair growth.
- Continue to prevent dandruff.
- Give off a bright light.
- Get rid of depression.

Treatment of hair loss

Hair loss can be upsetting and have a negative effect on a patient's quality of life. Patients who have diffuse or patchy thinning hair may benefit most from seeing their family doctors initially. A dermatologist is the most qualified individual to assess alopecia with scarring. Your family physician can diagnose and treat alopecia areata, which is this particular type of alopecia. Androgenetic minoxidil is a professionally diagnosed treatment for alopecia. One can distinguish Alopecia areata by the characteristic patches of hair loss. Systemic treatment is what's needed. Unexpected alopecia known as telogen effluvium is non-inflammatory and non-scarring. Physical or emotional stress is the cause. Normally, hair regrows after the triggering factor is eliminated. In sequence^[10]

Factors affecting hair growth

Relaxation, drowsiness

The climate affects anagen as well.

Genes, and exercise

Minerals and vitamins have an impact on hair growth.

a. A simple workout program helps maintain

b. Routines that are healthy for hair^[11]

Cosmetic Reactions with Hair

In decreasing order of frequency, the most frequent reactions to chemicals used in cosmetics are as follows: Quaternium-15, parabens, and formaldehyde

Short-contact cosmetics typically don't irritate skin or trigger allergies when worn. Van Lerberghe and Baeck described swelling of the eyelids. The day before, the patient underwent hair straightening surgery using INOAR Moroccan Hair Treatment., which contained formaldehyde and was bought by her hairdresser in Morocco.^[12]

Treatment for hair falls

One way to deal with hair loss is using hair loss treatments:^[13] A medication examination is required when a patient enters with hair loss in order to rule out nutritional deficiencies such as anemia, thyroid issues, or PCOS. It's probable that in order to verify this, blood tests will be necessary. Any presenting medical issues must be treated as part of the treatment plan; in this instance, a prompt visit to your dermatologist will be helpful. Under a doctor's supervision.^[14]

2.1 Herbal products

Many include tea bags, pills, tablets, liquids and powders.^[15] Herbs and herbs include black cohosh, echinacea, garlic, ginkgo, saw palmetto and St. John's wort Below is a description of some herbal products. 2.1.1 Materials/Ingredients:^[16]

Table No 1: Composition of Natural Herbs and Quantity

Ingredients	Quantity
Soap nuts	25g(1/3)cup
Dried gooseberry	25g(1/3)cup
Dried shikakai	25g(1/3)cup
Alovera	½ cup (64g)
Tulsi leaves	½ cup (64g)
Hibiscus	½ cup (64g)



Fig.2.Ayurveda herbs.

Best Herbs for tresses Growth for Natural Hair: ^[17] Rose petals, hibiscus, lavender, ginseng, and aloe vera. Due to its many health benefits, Green Tea, a famous herb in China that is popular for many diseases, including hair loss. The herbs used for hair growth are depicted .

A few common herbs are used in hair cosmetic:

Brahmi

Brahmi is used in Ayurveda to treat and prevent hair loss.¹⁸ Head massage using Brahmi oil increases blood circulation in the scalp and strengthens hair follicles. Brahmi oil is used to treat dry, flaky skin and dandruff. Used as powder in a facial mask or oil, Brahmi reduces premature graying, hair loss, promotes hair growth, brightens and heals the scalp scalp..



Fig.2.Brahmi**Table No:2**

Scientific name	Bacopa monnieri
Species	Water Hyssop
Family	Scrophulariaceae
Genus	Water hyssop

Role

Supports the development of hair

Prevents Damaged Ends

Hair Grows thicker

Serves as a Natural Humidifier

Aids in Avoiding Dandruff

reduces hair loss

Castor oil

An ancient cure to stop hair loss or promote hair growth is castor oil. This is as a result of castor oil's capacity to enhance blood flow and circulation.^[19-20] It has antibacterial and Figure 2. anti-inflammatory qualities. The hair-nourishing qualities of castor oil include ricin and ricinoleic acid, which have anti-fungal capabilities . It is one of the few natural ingredients that can stimulate hair growth, repair split ends, moisturize the hair and scalp, add shine, prevent hair loss or breakage, make the hair thicker, grow faster and longer, and prevent dryness and dandruff. Oil: Unrefined extra virgin castor oil is ideal for healthy hair.



Fig. 3.castor oil

Table No:3

Scientific Name	Ricinus communis
Genus	Ricinus
Family	Euphorbiaceae
Kingdom	Plantae

Role :

Treats Damaged Hair

Nourishing Hair

Roots Hair Loss

Encourages Growth of Hair

Coconut oil

Using coconut oil on my hair has grown on me! I've heard my mother say, " Oil is nourishment for my hair. Coconut oil is a good choice for those suffering from pitta issues as it has cooling properties and is rich in minerals, lauric acid, vitamins E and K, and other nutrients.



Fig.4 coconut oil

Table No:4

Botanical Name	Cocos nucifera
Kingdom	Plantae
Order	Arecales
Family	Arecaceae
Genus	LCocos
Species	nucifera

Role

Seals hair
moisturizes hair.
adds a shine to hair

Aloe vera

Maintaining the pH balance of the hair can be facilitated by regularly using Aloe Vera gel. Additionally, it will help to stimulate the growth of hair follicles and open clogged scalp pores. restores and thickens the hair follicles

Vitamins A, C and E are found in aloe vera. These three vitamins promote cell growth and shiny hair by aiding cell death. Aloe vera gel also contains folic acid and vitamin B12. These two elements work together to protect the hair.



Fig.5. Aloevera

Table No:5

Botanical Name	Aloe barbadensis miller
Species	Vera
Family	Asphodelaceae (Liliaceae)
Genus	aloe
Kingdom	Plantae

Role

Healing from scalp irritation
calms the scalp
extra oil and grime from the scalp
revitalizes the scalp's damaged skin cells
restores harm to hair caused by UV radiation

Lavender



Fig.6. lavender

Among the herbs most commonly used to encourage hair growth and lessen baldness is lavender. Anti-inflammatory, anti-microbial, and antibacterial qualities can be found in lavender angustifolia oil. Enhances the circulation on the scalp, fortifies the growth of new hair, and aids in controlling the natural oil production of the scalp.^[21] Lavender oil can also act as an antiseptic and can be used for bacterial infections, including mosquitoes, gnats, and lice. Lavender essential oil has antibacterial and antifungal properties that can protect your scalp from infections.

Table No:6

Scientific Name	Lavandula Angustifolia
Order	Lamials
Family	Lamiaceae
Kingdom	Plantae

Role

encourage the growth of hair keep your hair from falling and give it a wonderful smell. Minimize loss of hair & The loss Boost Scalp Health Status and Hydration Hair Improvement Glowing and Lustrous Dandruff Diminish Broken ends and breakage of hair Boost Hair and Increase Blood Flow to the Scalp

Hibiscus



Fig.7.Hibiscus

Hibiscus is a superfood that is high in vitamins and antioxidants that support better scalp and hair health overall. Dandruff, which can obstruct normal hair development, is another condition for which it works wonders

Table No: 7

Botanical name	Rosa-sinensis
Kingdom	Plantae
Order	Malvales
Family	Malvaceae
Genus	Hibiscus

Role

prevents hair loss Avoid becoming prematurely gray. Add thickness and strengthen hair Handle dandruff a natural sheen to hair Hair gets moisturized and becomes softer and shinier. Enhances Thickness and Promotes Hair Growth.

Henna

Stylist had hair treatment done with formaldehyde in Morocco. Check for formaldehyde and non-formaldehyde components using field testing. Red henna is made by drying and powdering the thornless leaves of Lawson.. People have traditionally colored their skin, hair, and nails with

henna. Due to the usage of Red henna and Lawson, its main ingredient, there have been very few occurrences of adverse contact dermatitis.^[22]

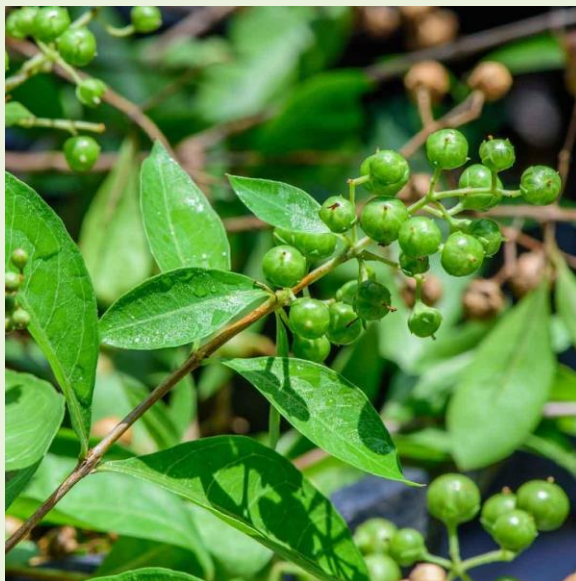


Fig.8.Henna

Table No:8

Scientific Name	Lawsonia inermis
Family	(Lythraceae
Genus	Lawsonia
Kingdom	Plantae

Role

Pure henna treatments color your hair without doing any damage to it.

It will improve and moisturize your hair.

It gives each hair branch more brightness.

It gets rid of lice, hair loss, and promotes skin issues.

shades exquisitely and covers gray hairs.



Fig.9. Amla

Amla

Indian gooseberry purifies the blood and contributes to the natural color of the hair by preventing premature graying of the hair. It has antifungal and antiviral properties. Amla oil is rich in vitamin E and is a good conditioner, eliminating frizz while making hair soft and shiny. Amla and lemon are known to nourish the hair from within. A mixture containing freshly extracted lemon and amla juice acts as a great tonic.

Table No:9

Scientific Name	Phyllanthus emblica
Order	Malpighiales
Species	emblica
Genus	Phyllanthus
Family	Euphorbiaceae
Kingdom	Plantae

Role

minimizes loss of hair and lessens hair fall.

aids in the dandruff treatment.
keeps hair from prematurely going gray.
soothes inflamed or itching scalps.
handmade amla recipes that promote hair development.

Shikakai



Fig .10. Shikakai

Because of its high saponin concentration, shikakai is a common ingredient in shampoos and conditioners. This all-natural agent that foams keeps the surroundings around the hair healthy while gently cleaning the scalp. Additionally, this fruit for hairs antifungal and antibacterial qualities soothe and calm an inflamed or itching scalp.

Being a naturally occurring surfactant that makes the hair smoother and more shiny while cleaning hair follicles and eliminating grease.

A medical herb called shikakai protects rough scalp, manages dandruff, and leaves hair lustrous and silky.^[23]

Table No :10

Scientific Name	Acacia concinna
Family	Fabaceae
Species	Concinna
Genus	Acacia
Kingdom	Plantae

Role

Supports hair growth,

controls hair loss, prevents dandruff, adds elasticity and shine to lifeless hair. Shikakai is used in many shampoos and conditioners due to its rich saponin content.

This natural protectant gently cleans the scalp Get healthy hair.^[24]

It is necessary to eliminate shampoo:

One of the products we frequently buy is shampoo. We get into the shower, lather up and rinse. However, if you have had hair or scalp problems before, you know that the type of shampoo you use is important. Here are 10 reasons why you should wash your hair: Some of these are not just for your hair. Shampoo that will keep your scalp clean Your scalp may get parched as a result. Shampoo can aid in hair loss. Cleaning your hair lowers cortisol levels. They are capable of cleaning carpet and chrome. Shampoo has the ability to clean brushes. People are drawn to shampoo that is natural and organic.^[25]

Optimal characteristics of shampoo:

Eliminate any dirt.

Easily eliminated minimal toxicity

glossy and silky

excellent biodegradability

Not irritated

Make froth^[26]

Conditioners

The main purpose of care is to give your hair controllability, shine and protection. This can be added to shampoo and then used as lotion and cleanser. Procter & Gamble employed silicone (dimethicone) droplets in a surfactant mixture to create "2 in 1" shampoos and conditioners back in 1987. These are perfect for people with dry, damaged, or chemically treated hair, as well as for people who wish to shampoo their hair daily.

Static electricity can be eliminated and the hydrophobicity of the fibers restored with conditioner. Depending on its ability to penetrate the surface, the conditioner may reach the internal region of the cortex or the cuticle surface. The larger ones have an impact on the cuticle. molecules that are poor in molecular

The purposes of hair conditioners

Bring back the hydrophobicity Close the cuticle.nFrizz and friction should be avoided or reduced. Neutralize the negative.^[27]

Shampoo and conditioner

Developing a healthy hair washing routine is essential for both the short- and long-term health of your hair. ^[28]

Making the perfect hairstyle also involves selecting the right shampoo and conditioner for your particular hair type.

Daily hair care. You should consider the performance of the ingredients in each hair care product.

Define which option is best for you. In this article we will look at some of the most popular and unknown shampoos and conditioners.^[29]

Usually, conditioner is applied after shampooing hair. Shampoo, on the other hand, is designed especially to remove hair products, dead skin cells, and sweat. As mentioned before, a shampoo can only get rid of debris, oil, and product buildup. Put on the shampoo.

Applications of herbal cosmetics.

They have no adverse side effects and don't cause an allergic reaction.

Natural cosmetics are safer to use than conventional beauty products.

All skin types can use herbal cosmetics.^[30] that is, appropriate for all skin types

The cost of herbal cosmetics is not too high.

They blend in with skin and hair with ease.

When compared to synthetic cosmetics, they are incredibly effective in small quantities.

Accessible and abundant in a wide range and amount.

CONCLUSION:

For more information on hair products, hair growth, hair care products, and hair herbs, check out these reviews.goods, cosmetics for hair care, shampoo and conditioner combinations, and shampoo alone. The significance of using herbs for hair is explained in the article. The multibillion dollar ethnic hair care market has already expanded due to the popularity of natural hairstyles. There are several concerns and issues around hygiene when it comes to hair maintenance, all the while minimizing related expenses and satisfying consumer demand. Various herbal substances are utilized to produce herbal hair cosmetics, which are used to treat hair fall.

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