

A REVIEW ON HERBS "TRENDS IN SKIN CARE FORMULATION"

Musarrat¹, Ritika Sharma², Muskan³, Dr. Rajesh Gupta⁴

Sri Sai College of Pharmacy, Badhani-Pathankot, India

ABSTRACT:

Human skin is regarded as the first line of protection and a barrier against the majority of infections that affect humans that are transmitted through the skin. A healthy body begins with a healthy skin. Skin cancers, eczema, herpes infection, fungal infection, anti-aging, itching, anti-inflammatory, pemphigus vulgaris, trauma, psoriasis, rashes, skin pigmentation, acne, major and small wound infections are important skin disorders affecting humans that are slowly becoming a burden on health care. Herbal creams offer a wide range of applications, including cosmetic reasons such as cleansing, beautifying, altering appearance, nourishing, moisturising, and so on, as well as skin protection against bacterial, fungal infections, UV radiation, toxic foreign particles, and so on. The history of creams, types of cream, selection criteria of herbs, their benefits and drawbacks, ingredients, and some common cream parameters are discussed in this article, which aids in the treatment of skin infections and diseases and provides protection at a relatively lower cost with fewer side effects. Creams are easily applied to any part of the body. It is simple for people of all ages to use cream.

Keywords: Cosmetics, Skin Care, Herbal Cream, Multi-purpose effect

INTRODUCTION:

The word "cosmetic" derives from the Greek "kosm tikos," which denotes strength, organisation, and decorating expertise. Beginning in the 1990s, cosmetic producers changed the meaning of the term "cosmeceuticals" to describe over-the-counter skin care products that claim therapeutic advantages by utilising plant-based active substances including alpha-hydroxyl acid, retinoic acid, ascorbic acid, and coenzyme. A number of plants and herbs were employed to make cosmetics by the Ayurveda science for both beauty and weather protection. The Drug and Cosmetic Act defines that cosmetics as items are meant to be rubbed, poured, sprinkled, sprayed, inserted into, or otherwise applied to the human body or any portion of it for

washing, beautifying, enhancing attractiveness, or changing the appearance."^[4] The cosmetic is not covered by the pre-drug licence.^[5] These active ingredients perform a variety of tasks, including enhancing skin suppleness, avoiding collagen deterioration, shielding against UV rays, and slowing down the ageing process of the skin by reducing wrinkles.^[6] These are the plant-based cosmetics that have cosmetic effects. Herbal cosmetics are referred to as such because of its mild effect and nontoxic makeup.^[7]

Cream is a semisolid emulsion that is either oil in water (o/w) or a water in oil (w/o) emulsion intended for exterior application. The two types of creams are oil in water and water in oil emulsion.^[8] Because it is applied to the topmost or most superficial

layer of skin, it may potentially persist at the application site for longer.^[9] There are many different types of creams, including hand, body, cleaning, foundation, sleep, and disappearing creams.^[10]

Cosmetics for the skin: -

Creams

Night cream with emollients

Skin care and hand cream

Foundation cream-vanishing cream

Cream in liquid form

Miscellaneous cream

Lotions for cosmetics

Hand sanitizer

Skin-toners and refreshers

Lotions with astringent properties

Bleaching and freckle lotions

Medicated lotion

After-shave lotions

Deodorants

Sunscreen

Make-up application

Face powder variations

Toilet paper

Lipstick [11]

Variety of cream for the skin: -

Herbal Creams: These are preparations used to improve the appearance of humans. It addresses skin conditions and moisturises, nourishes, and lightens the skin.

Cold Creams: They are emulsions in which fat predominates, but when applied to the skin, they have a cooling effect, like almond oil.

Vanishing Creams: Because they disappear when applied to the skin, foundation creams such as rose oil are also known as disappearing creams.

Cleansing creams: The water-in-oil emulsion melts at body temperature and spreads effortlessly when applied to the skin.^[12]

SKIN:

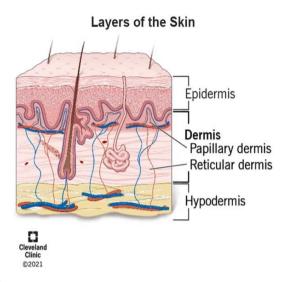


Figure No. 1: Skin

The skin is the largest organ in the human body. Human skin is regarded as the first line of defence and a barrier against the majority of infections that affect humans that are transmitted through the skin. A healthy skin encourages a healthy body, which can be attained by using modern, allopathic, and natural therapies. Skin cancers, eczema, herpes infection, fungal infection, anti-aging, itching, insect bites, pemphigus vulgaris, trauma, psoriasis, athlete's foot infections, rashes, skin pigmentation, acne, major and minor wound infections are major skin ailments affecting humans that are slowly becoming a burden on health care. [13] The skin protects us from pathogens and the elements, helps regulate body temperature, and gives us the ability to feel touch, heat, and cold. The three primary layers of skin are the epidermis, dermis, and hypodermis.[14]

The Epidermis: It is the first and thickest layer of the skin. It acts as a barrier to keep bacteria out. The epidermis continuously regenerates new skin. It contains melanin, the pigment that gives skin its colour.^[15]

The Dermis: It is the second and top layer of the skin. It contains connective tissues, collagen, and fibres. It maintains skin's flexibility. Sebaceous glands, hair follicles, and sweat glands through skin pores and dermal sweat make up this substance.^[16]

The Hypodermis: It is the third and thickest layer of the skin. It is additionally known as subcutaneous. Adipose tissue makes up this structure. When

you fall or are in an accident, fat in the hypodermis protects your muscles and bones from injury.^[17]

Selection criteria for ingredients in herbal cream: -

Gel shouldn't irritate the skin and shouldn't include an excessive amount of dry gel.

The ability to give long-lasting skin care by penetrating the skin's layer and should be easily washable.

It should be reasonably priced to buy.

It should come from a natural source.

It should be non-greasy as compared to ointment. [18]

Benefits of herbal cream: -

It is used to lighten the spots on skin.

It provides additional sun protection.

It delivers glowing skin and having fewer side effects.

It prevent from harmful rays and agents.

It acts as an astringent and provides cooling sensation. [19]

Drawbacks of herbal cream: -

- 1. The effect of herbal cream is more gradual.
- 2.It also necessitates long-term therapy in allopathic dosage type.
- 3. They have powerful flavours that are difficult to disguise.
- 4.The production process is time-consuming and complex, and skin reactions such as itching, peeling, irritation, reddening, and so on are possible.
- 5.Everyone who wants to boost the moisture of their skin will benefit from this product because cold cream is designed to moisturise the skin topically.^[20]

Steps for choosing herbs for cosmetic: -

Choosing of well-drained soil

Sowing of seeds indoors

 \downarrow

Planting of herbs outside In sunny area

 \downarrow

Take well care of herbs

 \downarrow

Provide suitable pesticide

 \downarrow

After full development of plant, cutting is to be done

 \downarrow

Separate all the parts

 \downarrow

Finally sent it to the manufacturing process for cosmetic preparation. [21]

Table No. 1: - The functions of herbal components and excipients^[22]

Ingredients used in herbal skin cream: - Aloe vera gel, neem, tulsi, amla powder, beeswax, borax, methyl paraben, rose oil and liquid paraffin.



SR. NO.	MATERI- AL(S)	ROLE OF PHAR- MACOLOGY
1.	Aloe Vera Gel	Reduces acne and pimples, moisturiser, anti-inflammatory, anti-aging, cleansing.
2.	Neem	Reduce inflammation and irritation, treat ringworm, treat psori- asis, soothe dry skin, antibacterial, astrin- gent, and wound heal- ing.
3.	Tulsi	Nutritious, antibacterial, and imparts a healthy glow to the skin.
4.	Amla Po <mark>wde</mark> r	Antioxidants and cleaning.
5.	Bees Wax	Stabilising the emulsion and providing the cream thickness.
6.	Liquid Paraf- fin	Lubricating agent.
7.	Borax	Alkaline substance when combined with an emulsifying sub- stance which produces soap.
8.	Methyl <mark>Par</mark> a- be <mark>n</mark>	Pr <mark>eser</mark> vative.
9.	Rose <mark>Oil</mark>	Flavouring ingredient and fragrance.

Criteria for estimation of Creams:-

Colour: Visual inspection allowed for the observation of the cream's colour.

Odour: It was discovered that cream has a distinct smell.

State: The condition of the cream was visually inspected.

Irritancy test: On the left dorsal surface, mark a 1 cm2 region. After that, the cream was administered to that area, and the duration was recorded. Thereafter it is examined for irritancy for a period of up to 24 hours, and reported.

Washability test: Applying a little amount of cream to the hand and then washing it with tap water served as the washability test.^[23]

Spreadibility test: When two slides were put under a specific amount of pressure, the spreadability was determined by how long it took for the cream to move out from between them. The time required to separate the two slides decreases with improved spreadability. The glass slides were taken in two sets of standard size. On top of another slide, the formulation was then positioned. The cream between the two slides was then uniformly pressed to form a thin layer when a weight or other specified load was placed on the upper slide. The weight was then taken off, and the slides had any extra formulation scraped off of them. The weight that was tied to the upper slide gave it the freedom to fall off on its own. It was noted how long it took the upper slide to detach.

Smear test: The type of film or smear that developed on the skin after applying the cream was examined. [24]

Phase separation: The phase of the prepared cream is monitored for 24 hours while it is maintained in a firmly covered container at room temperature and out of the sun.

After feel: The amount of residue left behind after applying the predetermined amount of cream and the emollient's slipperiness were both deemed satisfactory.

pH: Take 50 ml of distilled water and mix it with 0.5 g of cream. Then, using a digital pH metre, check the pH.^[25]

CONCLUSION:

On the basis of other reviews, we conclude that by utilising Aloe Vera gel, Neem, Tulsi, and Amla, it is demonstrated that the cream has a multipurpose impact and that all of these herbal constituents have significantly diverse activities. The produced herbal cream has the best qualities and has nutritional value while using less chemicals to protect the skin from a variety of skin disorders. As only basic materials and procedures were used to make the cream, it is also reasonably priced. The herbal cosmetic mixture can be utilised to provide a barrier to protect skin and is safe to use. Herbal Cosmetics having certain advantages over there synthetic cosmetics as follows:

- 1. They are cheap in cost.
- 2. They are easily available in the market.
- 3. They are least toxic and also having least or no adverse effects.

So from all the study of Herbal Cosmetics we can conclude that "The Herbal Cosmetics are the most significant alternative for the synthetic cosmetics".

REFERENCES:

Davkhar SS et al., "Formulation and Evaluation of Multipurpose Herbal Cream", Sys Rev Pharm, 2023; 14(1): 23-28.

Draelos ZD et al., Topical Anti-inflammatory agents, Cosmetic Dermatol, 2003; 16(10): 41-42.

Larsson, S.C., Bergkvist, L., Naslund I., Rutegård J., Wolk A., "Vitamin A, retinol, and carotenoids and the risk of gastric cancer: a prospective cohort study", J. Clin. Nutr, 2007; 85(2): 497–503.

Vishwakarma Bharat, Dwivedi Sumeet, Dubey Kushagra, and Joshi Hemant "Formulation and evaluation of herbal lipstick", International Journal of Drug Discovery and Herbal Research, 2011; 1(1): 18-19.

MV Vishvanathan, PM Unnikrishnan, Kalsuko Komatsu, Hirotoshi Fushimi, "A brief introduction to Ayurvedic system of medicine and some of its problems", Indian J Traditional Knowledge, 2003; 2: 159-69.

Rousseaux CG and Schachter H, Regulatory issues concerning the safety, efficacy and quality of herbal remedies. Birth Defects Res. B, Dev Reprod Toxicol, 2003; 68(6): 505-510.

Aslam MN, Lansky EP, Varani J. "Pomegranate as a cosmeceutical source: pomegranate fractions promote proliferation and procollagen synthesis and inhibit matrix metalloproteinase-1 production in human skin cells", J. Ethnopharmacol, 2006; 103: 311-318.

Tournas JA, Lin FH, Burch JA, et al., "Ubiquinone, idebenone, and kinetin provide ineffective photoprotection to skin when compared to a topical antioxidant combination of vitamins C and E with ferulic acid", J Invest Dermatol, 2006; 126: 1185-1187. Craig WJ., "Health-promoting properties of common herbs", Am J Clin Nutr, 1999; 70: 491S-499S. Tinku Kumar, Md Shamshir Alam, Rohit Malik, Girendra Kumar Gautam, & Saurabh Nimesh, "Cosmeceutical Current Review of Herbal Plants

Used for Skin Diseases and Related Problems in India: An Overview".

Saudagar R. B. et al., "Review on herbal cosmetics", WJPR, 2019; 7(7): 573-591.

Talal A., Feda M, "Plants used in cosmetics", Phytotherapy research, 2003; 17(9): 987 – 1000.

Bina Gidwani, Sagar Sahu, Tanesh Sahu, Tarun Patel, "Skin creams as drug delivery system", J Pharm Biol Sci, 2016; 4(5): 149-154.

Sk Uddandu Saheb, Aduri Prakash Reddy, K Rajitha, B Sravani, B Vanitha. "Formulation and evaluation of cream from naturally containing plant extracts", World J Pharm Pharm Sci, 2018; 7: 851-62.

Harry RG et al., "In: Modern Cosmeticology [online]", Chemical Pub. Co., 1962; 1.

Navindgikar N, Kamalapurkar KA, Chavan PS., "Formulation and evaluation of multipurpose herbal cream", Int J Curr Pharm Res, 2020; 12(3): 25-30.

N. R. Patel, H. U. Momin, R.L. Dhumal, K, L. Mohite, "Preparation and evaluation of multipurpose herbal cream", Adv Pharm Life sci Res, 2017; 5(1): 27-32.

Davinder Kumar, Gajendra Rajora, Om Parkash, Himanshu, Mamta Antil, Virender Kumar, International Journal of Advanced Scientific Research, 2016; 1(4): 36-41.

Navindgikar et al., "Formulation and evaluation of multipurpose cream", Int J Curr Pharm Res, 2020; 12(3): 25-30.

Singh et al., "Formulation and Evaluation of Multipurpose Herbal Cream", World Journal of Pharmaceutical Research, 2022; 11(6): 798-805.

Mali AS, Karekar P, Yadav A.V, "Formulation and Evaluation of Multipurpose Herbal Cream", International Journal of Science and Research, 2015; 4 (11): 1495-1498.

Gupta N et al., "Formulation and Evaluation of Herbal Cream", International Journal of Science and Research, 2015.

Rignall A et al., "Formulation and Evaluation of Multipurpose cream", International Journal of Science and Research, 2017.

Ashara K et al., "Cosmeceutical review on herbal cream", World Journal of Pharmaceutical Research, 2013

Chandrashekhar B. Badwaik, Updesh B. Lade, Tikesh Agarwal, Prachi Barsagade, "Formulation and Evaluation of Herbal Face Cream", International Journal of Pharmaceutical Research and Applications, 2022; 7(1): 955-960.