

A REVIEW ON HERBAL VANISHING CREAM

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ABSTRACT

The goal of this exploratory study was to create and estimate an evaporating herbal cream. Herbal creams have various benefits over conventional lotions. Mature creams, made from synthetic drugs, provide more fairness to the face. However, they might cause irritation and other adverse effects. Herbal creams are free of adverse effects, resulting in a more even skin tone. Herbal evaporating cream offers distinct benefits over decorative evaporating creams. Herbal evaporating cream has no negative effects and is made accordingly. Herbal vanishing creams are becoming increasingly popular as people strive for healthy, acne-free, and naturally glowing skin. Skin is the body's largest organ, with three layers: epidermis, dermis, and subcutis. It contains hair, nails, sebaceous glands, sweat glands, and apocrine glands. Skin problems can be caused by a variety of factors, including genetics, stress, alcohol consumption, and environmental factors.

1.INTRODUCTION:

Nowadays, plant extracts are utilized in cosmetics to enhance beauty and attractiveness. Herbal cosmetics are classed by dosage type (e.g. creams, powders, soaps, solutions) and application area (e.g. skin, hair, nails, teeth, mouth). Creams are semisolid emulsions used for applying to the skin or mucous membrane. A vanishing cream is a low-fat moisturizer that completely absorbs into the skin. It softens the skin and leaves nothing behind. Vanishing creams are oil-in-water emulsions with an aqueous phase. (1) Cream can be water miscible and readily washable or thick and sticky, depending on the water-to-grease ratio. This is one of the most commonly administered topical medications. Patients prefer the less greasy, sloppy, and sticky formula. Traditional medical systems were responsible for global healthcare before the introduction of allopathic medicine. The system's utilization of contemporary biology and chemistry for research and treatment quickly gained acceptance among users, and it today dominates the healthcare industry. Traditional polyherbal medicines are becoming more popular due to their perceived safety compared to current single-molecule pharmaceuticals used in allopathic medicine, which can have serious side effects. (2)

The biggest organ in the body is the skin. Skin is the outermost layer of the body. The outermost layer of skin is called the epidermis, and the layer underneath it is called the dermis. The dermis contains a network of blood vessels, sebaceous glands, hair follicles, and sweat glands. The fatty subcutaneous tissues are located below the dermis. (3)

Due to its distinct flavor, scent, and other health-promoting qualities, tea is the beverage that is drunk the most throughout the world. According to reports, tea comprises about 4,000 bioactive components, of which polyphenols make up one third. These polyphenols consist of several hydroxyl groups bound to benzene rings. Typically The polyphenols are either flavonoids or non-flavonoids, however flavonoids make up the majority of tea's chemicals. The primary active ingredients in tea are catechins, often known as polyphenols. Oxidative damages in the environment pose a significant risk to all living things. These damages are caused by an increase in the generation of free radicals. These radicals can originate from endogenous sources like inflammation or external sources like radiation, pollution, and cigarette smoke. When radicals have an unpaired electron, they often react with other molecules to capture the electron, which sets off a chain reaction. Radiation damage affects almost all kinds of organs and tissues, albeit the degree of damage varies. Researchers are paying close attention to plant secondary metabolites in an effort to counteract these degenerative disorders. Reactive oxygen species (ROS) such as singlet oxygen, hydroxyl radical, superoxide radical, nitric oxide, peroxy nitrite, and nitrogen dioxide can be trapped by tea preparations. This can help reduce damage to proteins, lipid membranes, and nucleic acid in systems without cells. (4)

Herbal cosmetics are very popular on the market and are frequently utilized in skin care routines. Herbal cosmetic products are commonly applied topically and include a variety of creams, such as multifunctional, cold cream, and

disappearing cream. When applied, the emulsion employed in cold cream recipes has a chilling effect and is frequently w/o rather than o/w, as in disappearing creams. Cream is defined as semisolid externally applied emulsions of the water in oil (w/o) or oil in water (o/w) type. There are two types of cream: oil in water and water in oil emulsion. Staying longer at the application site is its main purpose. (5)

Herbal creams have been made from a range of plants, each with a function. For example, Aloe vera is well-known for its anti-inflammatory and moisturizing properties; *Medicago sativa* is used as an exfoliant; *Amygdalus communis* is used as a cleanser; *Cucumis sativus* is used in palliative preparations; *Lavendula officinalis* is useful for treating acne and pimples because of its antiseptic qualities; and CL, also referred to as turmeric, is often used as a complexion enhancer in Indian spices. The polyphenols known as curcumimoids, which give turmeric its yellow hue, are found in it. One of the curcumimoids' constituents, curcumin, is a food coloring agent. There are two forms of it: enol and keto, with the enol form being more stable.(6)

Herbal extracts are utilized in cosmetic products these days to enhance attractiveness and beauty. Herbal cosmetics are divided into categories based on the dosage form (cream, powder, soaps, solutions, etc.) and the body area or organ they are intended for (cosmetics for the skin, hair, nails, teeth, and mouth, for example). Creams are emulsions that are semisolid and are meant to be applied to the skin or mucous membranes. A vanishing cream is a low-fat moisturizer that absorbs into the skin. It leaves no trace as it softens skin. O/w emulsion-based therapies with an oil and water phase are known as disappearing creams. Cream might be thick and sticky or water miscible and easily removed, depending on the ratio of water to grease. Up until the introduction of the allopathic medical system, the traditional medical systems, which have developed over ages, have been in charge of ensuring global healthcare security.

Due to its utilization of contemporary biology and chemistry for both diagnosis and therapy, the latter system gained rapid user acceptance and currently has a dominant position in the medical field. Despite this, traditional preparations—which are typically polyherbal—are becoming more and more popular due to the widespread belief that they are safe, whereas newer, single-molecule medications used in the allopathic system can have serious side effects. The body's first line of protection against exposure to the outside world is the skin. The skin is where ageing indications are most noticeable. While aging skin does not pose a hazard to an individual, it might negatively impact their psychological well-being. Skin contact with the environment plays a major role in the majority of premature aging, either directly or indirectly. It is well known that one of the main contributing factors to the genesis of the gradual, undesirable alterations in the look of the skin is sun exposure. Because ultraviolet light produces too many reactive oxygen species, photochemoprotective drugs can stop the harmful effects of UV radiation on skin.(7)

LAYER OF SKIN:

EPIDERMIS:

The stratified squamous epithelium, which is the outermost layer of skin and has an average thickness of 0.2 mm, is a constantly renewing layer that covers the whole exterior surface of the body. The following layers make up the epidermal layer. (a) Stratum corneum: This is the skin's outermost layer, commonly known as the horny layer. The barrier that limits the flow of chemicals both inward and outward is known as the rate-limiting barrier. The horny layer's ability to act as a barrier depends heavily on its constituent parts: On a dry weight basis, there are 75–80% proteins, 5–15% lipids, and 510% ondansetron material. (b) Stratum lucidum: This layer of the epidermis is smooth and appears transparent. It is situated directly above the stratum granulosum and under the stratum corneum. (8)

DERMIS:

A fibrous filamentous connective tissue system in an unformed state. The dermis gives the skin its suppleness, elasticity, and tensile strength. It binds water, guards against mechanical injury, controls body temperature, and stimulates the senses. (9)

Underneath the subcutaneous and epidermal layers of skin is the dermis, the underlying layer. The cellular and cellular structure consists of dermal cells, hair follicles, blood vessels, nerves, fibrous and amorphous connective tissue, and receptors, even though it encompasses a greater region of skin. The dermal papillae are responsible for the large

surface area of the dermis. Numerous cell types, including multifunctional immune system cells like mast cells and macrophages, are found in the dermis. (10)

HYPODERMIS:

Between skin and the body's underlying tissues, such as muscles and bones, is a layer called the hypodermis. The hypodermis is an area that stores fat and is well comprised of vascular, free areolar, connective tissue, and adipose tissue. (11)

This layer provides both mechanical protection and nutritional assistance in response to the altered temperature. A medication intended for transdermal administration must enter the body through all three layers and participate in systemic circulation. Adipose tissue, fibroblast, fat cells, microphages, and blood vessels are the cells that make up the hypodermis layer. Adipose and areolar tissue comprise the hypodermis layer. (12)

FUNCTION:

- ❖ Skin serves as internal and exterior environmental protection.
- ❖ It contains tissues and bodily fluids.
- ❖ It shields against environmental stimulants such as chemicals, light, radiation, heat, and cold.
- ❖ It facilitates the process of biological synthesis.
- ❖ It facilitates the metabolism and elimination of biochemical wastes.
- ❖ It assists in regulating blood pressure and preserving body warmth.
- ❖ Moreover, it functions as a buffer against mechanical shock.
- ❖ It aids in preventing moisture loss.
- ❖ It lessens the damaging effects of ultraviolet light.
- ❖ In addition, skin functions as a sensory organ (feels, touches, senses temperature).
- ❖ It aids in controlling body temperature.
- ❖ Additionally, skin functions as an immune organ, identifying infections, etc. (13)

DISEASES OF SKIN:

1. Vitiligo: This disorder causes patches of skin to lose their natural color and turn white. It is widespread, impacting around 1% of the global populace. Melanin, which is produced by cells called melanocytes, is the pigment that gives your skin its typical color.

2. Scabies: Human scabies mites are the source of this frequent, excruciating skin ailment. Though it can afflict anybody at any age, it most frequently strikes the young and old. Tiny parasites, hardly bigger than a pinhead, are the source of scabies. Scratchy markings and red, scaly patches make up the scabies rash; eventually, it may get infected and produce tiny pustules.

3. Rosacea: Rosacea is a common rash that often affects middle-aged people and appears on the center portion of the face. Constant redness on the cheeks, chin, forehead, and nose is the next sign after an inclination to flush quickly. Although the exact etiology of rosacea is unknown, many believe that the condition is caused by the blood vessels in the face skin that enlarge too readily.

4. Psoriasis: A prevalent skin condition that affects 2% of the population is psoriasis. It tends to come and go randomly and affects both men and women equally, regardless of age. It does not leave skin scars and is not contagious.

5. Skin cancer Cutaneous malignant: Melanoma is a kind of cancer that affects the skin's pigment cells. The prognosis is often favorable if it is treated quickly. It is not communicable. The Greek word "melas," which meaning "black," is where the word "melanoma" originates. The black substance called melanin is what gives skin its natural color.

6. Eczema (Atopic Eczema).

Atopic eczema is an inflammatory skin disorder. Atopic diseases, including eczema, asthma, seasonal rhinitis, and hay fever, sometimes have a hereditary foundation. Eczema refers to upper-layer skin abnormalities such as redness, blistering, oozing, crusting, scaling, thickening, and pigmentation. (14)

VANISHING CREAM:

Herbal extracts are employed in cosmetic formulations these days to enhance attractiveness and appearance. Herbal cosmetics are categorized by the dosage form (cream, powder, soaps, solutions, etc.) and the body area or organ they are intended for (cosmetics for skin, hair, nails, teeth, and mouth, for example). Semisolid emulsions meant for application to the skin or mucous membranes are called creams. Calling a low-fat moisturizer that melts onto the skin "vanishing cream" It leaves no trace after softening the skin. Disappearing cream. The o/w emulsion-based formulations on pages 313–318 of the American Journal of Ethnomedicine (ISSN: 2348-9502) comprise an aqueous phase and an oil phase. (15)

When applied topically, the cream spreads readily and vanishes quickly, giving the impression that it is disappearing cream. These o/w emulsions, often known as "vanishing creams," leave the skin with an almost undetectable layer after application. Because there is oil in the water emulsifier, the creams may be readily removed with water. (16)

Cream might be thick and sticky or water miscible and readily removed based on the ratio of water to grease. The majority of patients find it easier to use since it is less messy, greasy, and sticky. A vanishing cream is a low-fat moisturizer that absorbs into the skin. The primary function of herbal vanishing cream in a woman's cosmetic regimen is to hydrate. Vanishing simply means that after being absorbed by your skin, it "vanished" or "disappeared." The fundamental principles of cosmetic skin care may be found across the medical systems of Ayurveda, Homeopathy, Yajurveda, Rigveda, and Unani. These herbs ought to possess a wide range of qualities, such as antibacterial, antiseptic, anti-inflammatory, antiseborrheic, emollient, and antioxidant action. (17)

ADVANTAGES OF VANISHING CREAM:

- ❖ Compared to other dosage forms, they provide longer contact at the application site.
- ❖ It is readily water washable and causes no irritation when applied to skin.
- ❖ Through continuous drug intake, efficacy with a reduced daily dosage of medication can be attained.
- ❖ Safer delivery of drugs to designated locations.
- ❖ There is an enhanced physiological and pharmacological reaction.
- ❖ Compared to a buckle or nasal cavity, it offers a wider range of use.
- ❖ Treating fungal infections such as *Candida krusei*, *Candida albicans*, *Candida tropicalis*, *Cryptococcus neoformans*, and *Candida glabrata* is the primary goal of the research.
- ❖ Extended contact at the application site may result in different dosage forms.(18)

DISADVANTAGES OF VANISHING CREAM:

- ❖ Evaporating creams should not be used frequently
- ❖ They do not remove scars and should not be used as a complexing or Anita cream.
- ❖ They should be removed or washed off when not in use.
- ❖ Due to stability issues, they should be stored at recommended temperatures. (19)

TYPES OF SKIN CREAM:

There are two categories for them.

1. Oil painting-in-Water (O/W) creams: they consist of tiny drops of oil painting scattered throughout a continuous phase, and an oil painting-in-water (O/W) conflation is defined as a droplet-dispersed oil painting throughout the waterless phase.

2. Water-in-oil painting (W/O) creams: which consist of tiny water droplets scattered over a continuous, velvety stage. The conflation is of the water-in-oil painting (W/O) type where the dispersed phase is water and the dissipation medium is an oil painting. (20)

GENERAL CONSTITUENTS USED IN SKIN CREAMS

The basic materials used to make skin creams include.

1. Water is the primary ingredient in cream production. These are the cheapest and most fluent options. Water is

used in skin treatments to prevent other ingredients from dissolving. Creams are formulated with pure water that is devoid of toxins, additives, and germs.

2. Oil Painting, Fats, and Waxes Creams rely heavily on oils, fats, waxes, and their derivatives. Waxes work as emulsifiers, fats as thickeners, and oil paints as incensing or preservatives, depending on their role. Oil paintings might be mineral or glyceride based.

3. Mineral oil painting. Mineral oil painting contains hydrocarbons derived from petroleum oil painting. Mineral oil painting seldom elicits negative reactions and does not adhere to the skin's pores. This lightweight and cheap product promotes moisture retention and reduces water loss.

exemplifications There are three types of liquid paraffin: light, heavy, and liquid petroleum.

4 Colors Historically, colors were derived from natural sources like turmeric, saffron, and indigo. (21)

HERBAL PLANT USED IN SKIN CARE.

1. Pot Marigold:

Biological name: *Culendula officinalis*

Family: Compositae

Uses: It has wound healing properties and is used to manufacture skin-protecting oil.



2. Neem

Biological name: *Azadirachta indica*

Family: Meliaceae

Uses: Neem leaves used to treat skin diseases like eczema, psoriasis.



3. Nutmeg seed powder:

Biological Name: Myristica fragrans

Family: Myristicaceae

Uses: Anti-inflammatory properties will help reduce the sight of pimples. The stimulating properties will certainly wake up dead skin cells and help those no-so-fine lines around your mouth fade, curative properties that heal scars caused by everything from acne to sun spots.



4. Cinnamon Bark Powder:

Biological Name: Cinnamomum zeylanicum

Family: Lauraceae

Uses: Cinnamon bark can help enhance nitric oxide function, which causes increased blood flow and lower levels of inflammation.



5. Turmeric:

Biological Name: Curcuma longa

Family: Zingiberaceae

Uses: Prevents and heal dry skin, treat skin conditions such as eczema and acne, and retard the aging process. (22)



MATERIALS AND METHODS

Materials: All crude drugs were collected from IEC College of pharmacy Campus, Baddi. The plant material collected was identified and authenticated by Maneesh Banyal, Assistant professor, IEC College of pharmacy, Baddi.

Method of Preparation: Steps carried out in the preparation of vanishing herbal cream were as follows.

Preparation of alcoholic extract of crude drugs: All above mentioned powdered crude drugs of 5gms were taken into the conical flask and then 100ml. of ethanol was added to it, then the conical flask was capped with aluminum foil. Then this mixture was placed for maceration for 5 days.

Preparation of oil phase: Stearic acid (17%), potassium hydroxide (0.5%), sodium carbonate (0.5%) was taken into one porcelain dish and this mixture was melted at 70°C.

Preparation of aqueous phase: Alcoholic extract of crude drugs mentioned in step-1 (4.5%), Glycerin (6%), Water (71%) were taken into another porcelain dish and heated this mixture at 70°C.

Addition of aqueous phase to oil phase: The aqueous phase was added to the oil phase with continuous stirring at 70°C. Now, once the transfer was completed it was allowed to come at room temperature, all the while being stirred. Perfume (0.5%) was added at last just before the finished product was transferred to suitable container. Then cream was evaluated for various physical parameters. (21)

CREAM EVALUATION

The creams were evaluated for pH, density, spreadability, tube extrudability, and stability investigations. The active element content of the creams was determined using an HPLC system. In order to determine the safety and effectiveness of creams, primary skin vexation tests were carried out on experimental animals and healthy human subjects. [23]

1. pH determination: Using a digital pH cadence, 5 grams of cream were directly counted and then dispersed in 45 milliliters of water to get the suspense's pH at 27 degrees Celsius.[24]

2. Density: - At room temperature, 250C, the density of prepared evaporating creams was measured using a Brookfield Viscometer (Model- RVTP) equipped with a spindle type 7.[25]

3. Spreadability: The expression's capacity to spread determines how effective it is at correcting problems. Therefore, figuring out spreadability is really crucial. Therefore, the assessment of topical operation features, namely the extent to which the topical operation spreads to the skin on the affected corridor, depends critically on the determination of spreadability.[26]

4. Primary skin vexation test: -The animals identified for the first cutaneous vexation test were 1.5–2 kg imported rabbits (Clinical Ethical Consent No. AACP/IAEC/ P-38/2006). These animals were housed in Throughout the test period, they were given fresh food and water in separate coops. [27]

5. Primary Dermal vexation indicator (PDII) :- Dermal vexation is the result of skin damage that can be reversed by using a test substance on the skin for more than four hours.

Conclusion

The best qualities and nutritional value can be found in herbal cream, which uses less chemicals to shield the skin from a variety of skin issues. The cream is very inexpensive because it was made with basic materials and a basic technique. Herbal cosmetics are safe to use and can act as a skin-protecting barrier. It enhances skin tone, guards against damaging UV rays, and prevents skin problems because of the antibacterial and anti-inflammatory qualities of several herbs. Because natural medicines are thought to be safer and have less adverse effects than synthetic ones, they are more widely accepted. As a result, the benefits of using herbs in cosmetics have increased significantly for the personal care system, and the market for herbal cosmetics is growing. The potential of plant extracts for cosmetic applications is the main focus of the current study. The personal care system now uses cosmetics on a much larger scale. The application of bioactive substances in cosmetics affects the biological processes of skin and supplies the nutrients required for skin health. During the study period, the produced formulations demonstrated high consistency, good spreadability, and no signs of phase separation. Stability measures such as the formulations' visual appearance, degree of fluctuation during the research period, and aroma revealed no appreciable alterations.

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