

A REVIEW ON MOISTURIZING HERBAL CREAM

**K. Vijay Kumar^{1*}, G. Naga Raju¹, B. Pooja², T. Kavya³, M. Yuktha Sri⁴, G. Navya⁵,
K. Eswaricharanya⁶, G. Mamatha⁷, U. Madhu⁸ and T. Karthik⁹**

^{1*}M. Pharm Pharmaceutical Analysis, Assistant Professor of Dhanavanthari Institute of Pharmaceutical Sciences, Sujatha Nagar, Kothagudem.

¹Principal of Dhanavanthari Institute of Pharmaceutical Sciences, Sujatha Nagar, Kothagudem.

^{2,3,4,5,6,7,8,9}BPharm(4th year Students) of Dhanavanthari Institute of Pharmaceutical Sciences, Sujatha Nagar, Kothagudem.

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***Corresponding Author**

K. Vijay Kumar

M. Pharm Pharmaceutical
Analysis, Assistant
Professor of Dhanavanthari
Institute of Pharmaceutical
Sciences, Sujatha Nagar,
Kothagudem.

ABSTRACT

The present study of Moisturizing herbal cream is based on the Semi solid dosage forms that are usually applied topically on skin are called creams. The main aim of this research work is to prepare herbal cream with anti-blemish and anti-oxidant properties using herbal extracts. The herbal extracts used in this preparation are Lycopene, Tulsi, and Aloe vera gel. This herbal cream was prepared using slab technique. The formulated cream is evaluated for various parameters like pH, stability, consistency and its viscosity. This research endeavours to formulate and evaluate a multipurpose herbal cream utilizing renowned botanical extracts of Aloe Vera, Turmeric, and Neem, each recognized for their multifaceted medicinal properties. The rationale behind the selection of specific herbs and natural components is emphasized, drawing attention to their historical uses and documented therapeutic properties. A comprehensive account of formulating the cream with Aloe Vera, turmeric, and neem oil to achieve ideal texture and

durability is provided. The evaluation of the cream's efficacy and safety will provide valuable insights into its potential applications in skin care and topical treatments. Analysing the effectiveness and safety of the cream will offer valuable information about its potential uses in skin care and topical therapies.

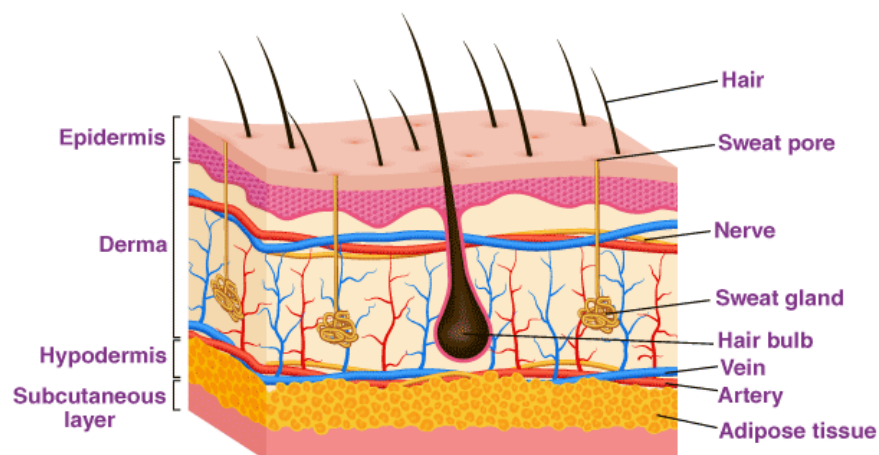
KEYWORDS: Aloe barbadense (gel), Azadirachta indica (Neem), Ocimum tenuiflorum/Ocimum sanctum (Tulsi), Herbal cosmetic, Multipurpose cream.

INTRODUCTION

The demand of cosmetics due to the vacuity of herbal cosmetics is adding generally. Herbal phrasings are entering further attention in public because of their high- quality parcels and lower side goods. It also provides the skin with necessary nutrients and needed humidity. The herbal cream is principally water in oil painting type of conflation. The natural constituents chosen for medication of herbal cream are turmeric, aloe-vera and neem. Turmeric is an Asian ornamental useful to conduct a golden radiance to the complexion. It also provides anti-inflammatory and antiseptic property. Creams are semi-solid medications containing one or further medicinal agents dissolved or dispersed in either water- in- oil painting conflation or an oil painting- in- water conflation or in another type of water- washable base. Cream can be classified as oil painting in water and water in oil painting conflation. It's applied on face or superficial part of skin and its advantage is to remain for a longer duration of time on point of operation. The main function of a skin cream is to give protection from different environmental conditions, rainfall and give a soothing effect to the skin. The general types of creams are cold, sanctification, evaporating, foundation, massage, night, hand and body creams. Aloe vera, Neem and Turmeric, these three herbal constituents are used in our medication. Aloe vera acts as Anti-ageing, anti-inflammatory. Neem is used to promote crack mending, relieves skin blankness, itching and greenishness and it's also used to reduce saturation.

Physiology of human skin

Dermis: The dermis is the layer of skin located beneath the outer layer (Epidermis). It is made of connective tissue that has a lot of collagen and elastic fibres. This layer contains blood vessels, nerves, hair follicles, and glands like sweat and oil glands. The dermis gives the skin strength and flexibility. It mainly has three types of cells: fibroblasts, macrophages, and mast cells. Below the dermis, there is a layer of loose tissue (Areolar tissue) and different amounts of fat (Adipose tissue).



Epidermis

The epidermis is the outer layer of the skin made mostly of cells called keratinocytes. It protects the body from the environment, helps control water loss, and contains immune cells. There are no blood vessels or nerve endings in the epidermis, but the deeper layers get oxygen and nutrients from the fluid in the dermis below, which is then removed as lymph.

Subcutaneous

Subcutaneous glands, also called subcutaneous adipose tissue or hypodermis, are found just under the skin's outer layer (the dermis). They are made up of fat cells and help keep the body warm, store energy, and provide cushioning. In areas where different types of skin meet, like the lips, eyelids, nipples, labia minora, and glans penis, there are sebaceous glands that work on their own and release oil (sebum) directly onto the skin's surface.

Cream

An oil and water emulsion that is semi solid is referred to as cream. Oil-in-water (O/W) creams consist of tiny oil droplets scattered throughout a continuous water phase, while water in-oil (W/O) creams are made up of tiny water droplets scattered throughout a continuous oily phase. Because water-in-oil creams create an oily barrier that prevents water loss from the stratum corneum, the skin's outermost layer, they are also more moisturising. In everyday skincare routines, creams are essential because they give advantages that protect the skin from external stresses, assist maintain skin health, and provide the desired aesthetic impact.

Types of creams

They are divided into two types.

Oil in water (O/W): Creams consisting of small oil droplets dispersed in a continuous phase, and an emulsion in which the oil is dispersed in the form of droplets through the water phase is called oil in- water (O/W) emulsion.

Water in oil (O/W): -Creams consisting of small water droplets dispersed in a continuous oil a step If the dispersed phase is water and the dispersion medium is oil, the emulsion is water-in- oil (W/O) type.

Classification of cream: - Types of creams according to function, characteristic properties and type of emulsion: Make-up cream (o/w emulsion):

- 1) a) Vanishing creams. b) Foundation creams.
- 2) Cleansing cream, cleansing milk, Cleansing lotion (w/o emulsion).
- 3) Winter cream (w/o emulsion): - Cold cream or moisturizing creams.
- 4) All-purpose cream and general creams.
- 5) Night cream and massage creams.
- 6) Skin protective cream
- 7) Hand and body cream.



List of Herbal Excipients and Their roles

Ingredients	Therapeutic use
Aloe vera gel	Anti-ageing, anti-inflammatory, moisturizer, reduce acne
Tulsi	Antibacterial, adds glow to the face.
Neem	Promote wound healing, relieves skin dryness, itching
	And redness.
Bees wax	Emulsifying agent, stabilizer and gives thickness to the
	Cream.
Liquid paraffin	Lubricating agent
Borax	Alkaline agent which reacts with emulsifying agent to
	Form soap.
Methylparaben	Preservative.
Rose oil	Fragrance ^[6] .

Moisturizing cream

Moisturizing cream is the water in oil emulsion. Moisturizing cream gives the prolong contact time in the site of application as compared to the other semisolid dosage form or formulation. They give elegance to skin and it is not that much greasy. Due to the oil phase, it gives an emolliences to skin. The function of the moisturizing cream is for restoring moisture to dry skin, it allows to eliminate the waste materials from the pores and also cools the body. It is easily water washable and easy to wash away. They are non-irritating when applied on the skin.

Ideal characteristics of moisturizer

It should not be irritating and poisonous.

It should be non-inflammatory and non-allergic.

It should be easy to spread over the skin and give pleasant feeling during application.

It should able to leave the skin feeling soft rather than sticky.^[7].

Mechanism of action

Our Herbal Moisturizing Cream works to rejuvenate and nourish the skin using natural ingredients like aloe veraneem, cucumber, Tulsi. These herbs soothe irritation and redness while protecting the skin from environmental damage with their antioxidants. The cream also contains humectants like glycerines and hyaluronic acid, which draw moisture from the air and keep it locked in, ensuring long-lasting hydration. This strengthens the skin's moisture barrier, making it more resilient and supple. Emollients such as shea butter and natural oils like rosehip and jojoba oil create a protective layer on the skin, preventing moisture loss and improving texture. Together, these ingredients address various skin concerns by replenishing moisture, enhancing elasticity, and softening the skin.^[9] Overall, our Herbal Moisturizing Cream offers a complete solution for achieving healthy, glowing Skin showcasing our commitment to quality skincare and helping people feel confident in their natural beauty.^[8, 9].

Uses of moisturizers

Moisturizers have several important uses. They keep the skin hydrated, protect it by locking in moisture, and help soothe dry or irritated skin. Here are some common uses for moisturizers.

Hydration: They add water to the skin to prevent dryness.

Barrier protection: They create a layer on the skin that keeps moisture in and stops it from drying out.

Skin Soothing: Some moisturizers have calming ingredients like aloe vera or chamomile that help relieve irritation.^[10]

Advantages

1. The main advantage of herbal moisturizer is that it enhances the SkinDryness without any sideeffects.
2. It reduces the further chances of skin problems.
3. This moisturizer helps to fight wrinkles.
4. Less greasy compared to other ointments
5. Moisturizing help your skin stay young.
6. With small quantity they are very effective as compared to synthetic cosmetics.

Disadvantages

1. Herbal drugs have slower effects as compare to Allopathic dosages form Also it requires long term therapy.
2. Manufacturing process are time consuming and complicated.
3. Most of herbal drugs are not easily available.
4. They are difficult to hide taste and Odor.

Aloe vera

Aloe vera is a succulent plant species of the genus Aloe. It is widely distributed, and is considered an invasive species in many world regions.



Scientific classification

Kingdom: Plantae

Class: Tracheophytes, Angiosperms, Monocots

Order: Asparaguses

Family: Asphodelaceae

Subfamily: Aphidoidea

Genus: Aloe

Synonyms: Aloe barbadense Mill. Aloebarmadense var. chinensis Haw. Aloe chinensis (Haw.) Baker Aloe elongata Murray

An evergreen perennial, it originates from the Arabian Peninsula, but grows wild in tropical, semi-tropical, and arid climates around the world. It is cultivated for commercial products, mainly as a topical treatment used over centuries.^[12]

Benefits of aloe-vera for face

- Its anti-inflammatory properties can reduce pain, swelling, and soreness of wounds or injuries
- It has a cooling effect on rashes or sunburns• It supports the production and release of collagen
- Help in keeping your face healthy and gives you a natural shine
- Aloe-vera is rich in moisturizing properties it helps in removing dead cells
- Prevent or reduce wrinkles and dark spots of your face^[13].

Neem

Neem or Margosa is a botanical cousin of mahogany. It belongs to the family *Meliaceae*. The latinized name of Neem – *Azadirachta indica* – is derived from the Persian.



Benefits of neem

- Keep the skin healthy and glowing
- Neem has anti-bacterial properties which get rid of pimples
- Neem lightens and blurs the scars left behind by acne

- Neem is anti-inflammatory in nature with fatty acids and glycosides
- Neem is rich in anti-oxidant and vitamin E that reduce wrinkles
- Fatty acids and vitamin E in neem nourish the skin
- Help soothe eczema.
- Treat acne^[14].

Tulsi

Turmeric and curcumin can help improve skin issues like blemishes, redness, and uneven skin tone. Some studies suggest that using turmeric on the skin can reduce dark spots and discoloration.^[15]



Roles

- Anti-inflammatory
- Anti-oxidant
- Anti-microbial
- Anti-ageing^[15]

Benefits of tulsi leaf

- Natural immunity booster
- Reduce stress and blood pressure
- Good for skin health
- Useful in kidney stone
- Fight acne
- Helping anti-aging
- Control blood glucose level
- Prevent kidney stone
- Reduce stress

- Prevent acne
- It used to the anti-inflammatory properties
- Control acne^[16]

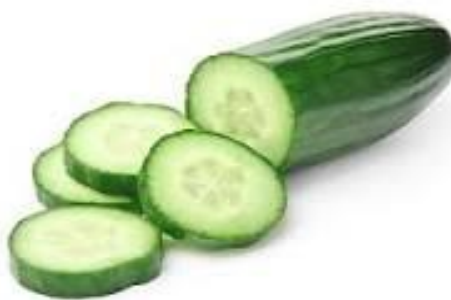
Benefits of turmeric in health

- Natural anti-inflammatory compound
- Improve heart health and prevent against Alzheimer's and cancer
- Powerful antioxidant
- Treat and prevent diabetes
- Improve skin health
- Treats depression
- Cures acne
- Reduce dark circles
- Could help psoriasis eczema
- Clears the skin
- Helps wound healing
- Promotes weight loss^[15,16].



Cucumber

Cucumber, (*Cucumis sativus*), creeping plant of the gourd family. (*Cucurbitaceae*), widely cultivated for its edible fruit. The nutritional value of the cucumber is low. Cucumber effectively conditions skin because of its rich composition of polysaccharides. Cucumber is an excellent base when combined with powerful moisturizing ingredients.^[17]

**Health benefits of cucumbers**

Increases hydration. Drinking water every day is crucial for your health.

Strengthens bones. Cucumbers are high in vitamin K — a big bonus for bone health.

Promotes gut health, Helps manage blood sugar and weight, protects against cancer, Improves heart health.^[18]

Borax

Borax is a naturally occurring ore that has a wide range of applications in various fields such as metallurgy, ceramics, medicine, and detergents. It interacts with boric acid or its derivatives, particularly with saccharides, and plays a crucial role in stabilizing compounds.^[19]

Beeswax

Beeswax has historical uses. Using Beeswax is a complex chemical mixture secreted by the abdominal wax glands of honeybees. Beeswax has a vehicle for drugs, slow-release medium for drugs and as an emulsion and foundation for cosmetics. Beeswax is added to skin care products and has an ant comedogenic properties.^[20]

Liquid paraffin

Liquid paraffin, a mineral oil, is a critical component in the pharmaceutical industry due to its chemical stability and safety. It is predominantly composed of saturated hydrocarbons, which contribute to its inert and non-reactive nature.

Methyl paraben

Methylparaben (Methyl paraben) one of the parabens, is a preservative.^[19,20]

Rose oil

Conventional production of rose oil extracted from flowers is performed in two steps. The first step consists of solvent extraction, which yields an intermediate product called 'rose concrete'. It is mainly composed of fragrance-related substances, but also contains large quantities of paraffins, fatty acids, fatty acid methyl esters, di- and tri-terpene compounds and pigments. In the second step, the concrete is postprocessed by hydro distillation to obtain a volatile oil containing the most important rose fragrance components.^[21]

CONCLUSION

Herbal ingredients were used in the formulation are effective herbal moisturizing that met all required pharmaceutical standards. The potential of aloe vera to reduce skin pigmentation and moisturize skin has been further examined in light of the study's findings. It was discovered that aloe vera extract hydrates skin more effectively and works well as a moisturizer. The cream doesn't cost a lot because it was made with straightforward products and methods. Aloe vera's potential to moisten skin was examined in the study Natural moisturizing aloe vera assists in making dry skin warmer and more comfortable. The study investigated the antimicrobial and skin-nourishing properties of neem and aloe vera in herbal moisturizing cream formulation. Results revealed that the combination of neem and aloe vera extracts exhibited potent antimicrobial activity against a range of pathogens, making it an effective solution for maintaining skin hygiene. Additionally, the inclusion of these natural ingredients contributed to the nourishment and hydration of the skin, offering benefits beyond simple cleansing. The use of neem and aloe vera in skincare due to their antibacterial, antifungal, and anti-inflammatory properties which include healing wounds, antioxidants antiviral in nature, antibacterial, antiviral, and anti-inflammatory effects.

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