

FORMULATION AND EVALUATION OF HERBAL MOISTURIZING CREAM

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ABSTRACT

*Herbal moisturizers have become popular due to the increasing demand for safe, organic skin care products. This study focuses on the development and evaluation of herbal moisturizers containing turmeric (*Curcuma longa*), which is known for its antibacterial, anti-inflammatory, and antioxidant properties. Turmeric extract is mixed with beeswax, coconut oil, and aloe vera gel to create an oil-in-water lotion that increases skin protection and hydration. and measure its pH, viscosity, contamination, and microbial load. A group of volunteers conducted a test to evaluate the product's texture, absorbency, and overall acceptability. Research results show that the pH value of turmeric-based cream is stable between 5.5 and 6.5, which is beneficial to the consistency of the skin. Spread ability and viscosity are determined within permissible limits to ensure a simple application process. Most studies reported positive sensation properties and improved skin hydration, this shows that users are very satisfied with the sensory test. The findings reveal that turmeric-based herbal moisturizer is an effective skin care product that has the potential to replace traditional moisturizers. This is a combination of turmeric's health benefits. More research is recommended to understand its long-term benefits and beneficial effects on skin health.*

Keywords: *Herbal moisturizer, Turmeric (*Curcuma longa*), Skincare formulation, Anti-inflammatory properties, Natural ingredients, Skin hydration.*

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INTRODUCTION

Our Rich Turmeric Herbal Moisturizer harnesses the power of nature to nourish and rejuvenate your skin. This cream combines the benefits of turmeric, known for its benefits and beauty for thousands of years, with the ancient knowledge of Ayurveda. ^[1] It is the famous gold type. Curcumin is a molecule that provides properties and is effective in reducing skin inflammation and oxidative stress. Turmeric is the best ingredient in moisturizer because of its moisturizing, protective and healing properties. ^[2] With the help of botanical extracts and natural emollients, this cream locks moisture deep into the skin, leaving skin well-hydrated, smooth and radiant. Even the most sensitive skin can benefit from this favorite product due to its soothing ingredients ^[3]. Cool and calming effect. The synergistic effect of these ingredients increases the skin's elasticity and natural radiance. Our fragrance Turmeric Moisturizer offers a solution for a variety of uses, including eliminating dry skin, achieving radiant skin, or simply giving yourself some self-care time. ^[4] Use age-old techniques for beautiful, beautiful skin that lets your inner beauty shine. ^[5] Turmeric, whose scientific name is *Curcuma longa*, has received widespread attention for its many health benefits, including its anti-inflammatory, anti-inflammatory and anti-inflammatory properties. ^[6] These skin health benefits can be achieved by adding turmeric to a moisturizer. ^[7] Prepare a paste using turmeric extract that not only moisturizes the skin but also solves many skin problems such as dryness, irritation and infection. ^[8] Appropriate components must be used in the process. ^[9] The main ingredients that support skin hydration, barrier function and hydration are occlusives, humectants and emollients. Natural oils and botanicals can be added to the mixture to provide additional nourishment and protection to the skin. ^[10] Viscosity measurements, stability studies in various storage locations, comparison of skin samples, and pH measurements are a few examples of these techniques ^[11]. Additionally, clinical studies can be conducted to evaluate the effectiveness of moisturizing, moisturizing the skin, and its beneficial effects on skin problems. ^[12]

BENEFITS OF HERBAL MOISTURIZING CREAM

Deep Hydration

Provides long-lasting moisture to keep skin soft and supple. ^[13]

Anti-Inflammatory

Reduces skin redness, swelling, and irritation due to turmeric's natural properties

Antioxidant Protection

Fights free radicals and prevents premature aging.

Enhanced Radiance

Improves skin tone and texture for a natural, healthy glow. ^[14]

Healing Properties

The antimicrobial properties of turmeric help to treat acne and small cuts on the skin.

Kind to Skin

Owing to its natural composition, it is suitable for all skin types, especially sensitive skin.

Natural Ingredients: Built on the strength of natural extracts, free of harsh chemicals. ^[15]

Non-Greasy Formula

This formula absorbs rapidly and doesn't leave a greasy aftertaste, making it ideal for regular use. ^[16]

Maintains Skin's Firmness and Elasticity

Assists in preserving the skin's elasticity.

Calming Effect: This soothing effect gives a cooling sensation to sensitive skin^[17]

ADVANTAGES

Natural substances tend to be kinder and less irritating.^[18]

Maintains moisture balance by deeply hydrating the skin.

Packed with antioxidants that minimize aging signs.

Calms and soothes inflamed or sensitive skin.

Ecologically benign and enduring.^[19]

DETAILS ABOUT HERBAL MOISTURIZING CREAM

Herbal moisturizers use botanical compounds to hydrate, nourish and renew the skin, providing a natural, holistic approach to skin care.^[20] To provide hydration and improve skin health, this cream is formulated with a blend of herbal extracts, essential oils and natural emollients.

Known for its warming and moisturizing properties, aloe vera forms the basis of herbal moisturizers. Aloe vera is rich in vitamins, minerals and antioxidants that help moisturize skin, reduce inflammation and speed healing. Due to its gel-like consistency, it creates a barrier that protects the skin surface, retains moisture and reduces water loss.^[21]

Chamomile is known for its anti-inflammatory and soothing properties and is another commonly used ingredient in herbal cosmetics^[22]. Chamomile extract may help relieve conditions such as rosacea and eczema by reducing redness and soothing the skin. All skin types, especially sensitive and delicate skin, can benefit from its nature.

Marigold produces calendula, which is a gift for its rejuvenating and rejuvenating properties. The anti-inflammatory properties in calendula extract soothe and heal dry, damaged skin. Due to its antiseptic properties, it can be used to treat minor cuts, scrapes and insect bites.^[23]

Rich and nourishing, shea butter is a wonderful natural emollient. Because of its high vitamin and fatty acid content, it leaves the skin feeling smooth and soft and remains hydrated for a long time. Additionally, shea butter has antioxidants that shield the skin from outside aggressors and early aging.^[24]

Herbal moisturizing lotions also frequently contain coconut oil and jojoba oil. Because of its deep hydration and antibacterial properties, coconut oil is useful in healing rough, dry skin and avoiding bacterial infections. Oily and acne-prone skin types can benefit from jojoba oil because it mimics the skin's natural sebum and balances oil production.^[25]

MATERIAL & METHODOLOGY

Research and Ingredient Selection

Pick hydrating herbs like aloe vera, calendula, chamomile, or lavender. Examine their attributes and advantages.^[26]

Base Ingredients

Pick an ingredient to use as the foundation of your cream, such as almond, coconut, shea, or cocoa butter. They operate as transporters for the plant extracts and offer moisturizing qualities.^[27]

Herbal Property Extraction

Take the good qualities out of the herbs you've selected. Several techniques, such as infusion—soaking herbs in water or oil—decoction—boiling plants—or the use of essential oils— can be used to accomplish this.^[28]

Formulation

Mix the herbal extracts with the base ingredients in the right amounts. To combine oil and water components, emulsifiers (such as lecithin or beeswax) could be required.^[29]

Consistency and Texture

Melt and thoroughly mix the base components to adjust the consistency and texture. For this, a double boiler will work well.^[30]

Preservation

If you want your cream to last longer on the store, add natural preservatives like vitamin E oil or rosemary antioxidant extract.

Testing

Examine the cream's efficacy, aroma, and consistency. Make changes as necessary.

Packaging

To prevent light deterioration, keep your cream sealed in dark glass jars or other airtight containers.^[31]

Labeling

Include usage directions and an ingredient list on the label of your cream

Safety

Make sure your product is safe to use by implementing excellent manufacturing processes and carrying out patch tests.^[32]

EXPERIMENTAL WORK

Selection of herbal ingredients.

Formulation development.^[33]

Preparation of cream batch.

Physical evaluation.

Scale up production.

FORMULATION TABLE

Sr No.	Ingredients	Quantity	Category
1	Turmeric	2.7gm	Antiseptic
2	Aloe Vera	2.8ml	moisturizer
3	Tulsi	1.7gm	Antibacterial
4	Neem	0.9gm	Soothing agent
5	Bees wax	5.45gm	Emulsifying agent
6	Liquid paraffin	18.1ml	Lubricating agent
7	Borax	0.36gm	Alkaline agent
8	Methyl paraben	0.03gm	Preservative
9	Distilled water	Q.S	Vehicle
10	Rose water	Q.S	Fragrance

Table No.1: Formulation Table

EVALUATION TESTS

Irritancy

Draw a 1 cm² mark on the dorsal surface of the left hand. After applying the cream to that location, the time was recorded. ^[34] Subsequently, it is observed for signs of irritation, erythema, and edema for a maximum of 24 hours before being reported.

Washability

The hand was given a light coating of cream and then rinsed with tap water.

pH

Using a pH paper, the 0.5 g of cream was dissolved in 50 ml of distilled water.

Viscosity

25 °C using a Brooke field viscometer with spindle number 63 spinning at 2.5 RPM.

RESULT

Sr No.	Test	Observation
1	Color	Pale yellow
2	Odor	Pleasant
3	Irritancy	Nonirritant
4	Washability	Easily washable

Table No.2: Result

DISCUSSIONS

The study found that the prepared herbal moisturizing cream considerably increased the hydration of the skin and barrier function, which are consistent with the capabilities of its primary constituents, aloe vera, and shea butter, to do so. Participants expressed excellent satisfaction with the cream's texture and absorption, noticing increases in smoothness and tenderness without suffering any unwanted effects.

These findings correspond with earlier studies on the advantages of herbal compounds in cosmetics. However, the study's tiny sample size and short duration restrict the generalizability of the findings. Future research should include a bigger, more varied population and longer study periods to validate these findings and investigate the beneficial interactions of the herbal ingredients. The herbal moisturizing lotion has shown to be a more effective and safe solution to conventional moisturizers.

CONCLUSIONS

Turmeric Herbal Moisturizer has many health benefits and is a great addition to any skin care routine. This cream solves many skin problems and provides deep moisturization thanks to its natural ingredients, especially turmeric. Calms irritated skin.

The curcumin in turmeric helps fight acne-causing bacteria, reduce redness and inflammation, while promoting healthy, glowing skin. It is one of the causes of premature aging. Curcumin found in turmeric helps reduce redness and inflammation, clears acne and promotes healthy skin, causes premature aging.

The cream provides long-lasting moisturization without making the face oily or heavy, this is especially important for people with dry or dehydrated skin. benefits. Herbal moisturizing cream typically emphasizes its benefits and effectiveness. Herbal moisturizers are praised for their natural ingredients, which can provide hydration and nourishment without harsh chemicals. They are often suitable for sensitive skin and offer a gentle, soothing effect. However, individual results may vary, and it's essential to choose products tailored to your specific skin type and needs. Always conduct a patch test before full application and consult with a dermatologist if you have any concerns or allergies.

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