



A Review on: Moisturizing Creams for Face and body for the Dry Skin

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ABSTRACT:

Moisturizing creams play a crucial role in maintaining skin hydration and overall well-being. This review evaluates the efficacy and safety of a range of moisturizing creams designed for both facial and body application. Moisturizers rank among the most frequently used products in the cosmetic sector, widely acknowledged for their capacity to soften the skin. They are particularly beneficial in addressing dry skin, which can result in discomfort, tightness, itching, stinging, and tingling sensations. The aim of this review is to examine existing literature on the history, ingredients, characteristics, applications, and functions of moisturizers, while also emphasizing their components, benefits, and potential drawbacks. The results suggest that moisturizing creams improve skin hydration, elasticity, and texture, while also mitigating dryness and irritation. From a cosmetic standpoint, moisturizers enhance the smoothness of the skin's surface by increasing the water content in the stratum corneum, thereby achieving their primary objective of moisturizing and sustaining normal skin pH levels. Ceramides are recognized for their outstanding moisturizing properties. However, differences in formulation, pH levels, and individual skin types may affect the efficacy of these products.

Keywords: Itch relief, Antimicrobial, Anti-aging, Moisturizing Cream, Dry skin Antipruritic.

• Introduction:

Moisturizers are commonly utilized for both normal and dry skin types. Dry skin is a prevalent issue affecting millions globally, leading to discomfort and impairing the skin's barrier function. Incorporating facial moisturization into a skincare regimen is essential for maintaining healthy skin. The benefits of moisturizers include hydration, as they help maintain skin's moisture and flexibility; protection, as they form a barrier against irritants and environmental factors; anti-aging properties, as they can diminish the visibility of fine lines and wrinkles; and skin tone improvement, as they assist in evening out complexion and concealing imperfections. Additionally, regular moisturizing can help avert skin conditions such as acne, dermatitis, and psoriasis, while also enhancing skin texture and stimulating collagen production, which is vital for preserving skin elasticity. When selecting a moisturizer, it is important to take into account your skin type and texture.

Ingredients: Seek moisturizers that are mild and non-irritating, while steering clear of possible allergens and fragrances.

Moisturizing the face plays a crucial role in safeguarding the skin's barrier against irritation. The application of moisturizers is widely recognized for its effectiveness in diminishing fine lines, enhancing skin smoothness, and providing hydration, all of which can positively influence a patient's social interactions, psychological well-being, and overall quality of life. Furthermore, individuals with either normal skin or those experiencing dry skin conditions can derive significant advantages from the appropriate use of moisturizers.

The use of these formulations can enhance the moisture levels in the stratum corneum, thereby delivering their primary function of hydration while also preserving the skin's normal pH balance. Additionally, moisturizers may provide several other beneficial effects, including anti-inflammatory properties through the inhibition of cyclooxygenase activity, antimitotic effects, antipruritic benefits by reducing cytokine levels, photoprotective capabilities, and antimicrobial action. While moisturizing creams are effective in promoting skin health, selecting the appropriate product can be a daunting task.

THE FOUR TYPES OF MOISTURIZERS:

1. Emollients
2. Humectants
3. Occlusives
4. Ceramides

1. Emollients :Emollients are agents that hydrate and soften the skin, frequently utilized in the management of dry, itchy, or scaly dermatological conditions. These components in skincare formulations work by reducing the rate of water evaporation, thereby enhancing skin softness.

some examples of emollients : 1.Petroleum jelly 2.Mineral oil 3.Glycerin 4.Beeswax, almond oil, and rosewater: Cocoa butter: A modern emollient



Marketed product: B&B EMOLLIENT CREAM

2.Humectants:

A humectant is a compound that attracts moisture to the skin, potentially sourcing it from the underlying layers. Common humectants consist of components like glycerin, urea, and hyaluronic acid.

Examples of humectants : glycerin, salicylic acid, hyaluronic acid, honey, lactic acid,



Marketed product: Cetaphil Cream



3. Occlusives : Occlusives are skincare components that form a protective layer on the skin, aiding in moisture retention. They are particularly beneficial for addressing conditions such as dryness, itchiness, or flakiness, making them ideal for individuals with eczema or severely dry skin. For optimal results, it is recommended to apply occlusives during the nighttime, allowing them sufficient time to penetrate the skin effectively.



Some examples of Occlusives include :

Vaseline:

A petroleum jelly that creates a barrier on the skin to prevent moisture evaporation and maintain skin hydration.

Beeswax :

A moisturizing and hypoallergenic component that forms a protective barrier on the skin, effectively locking in hydration.



Marketed product: Vaseline

Marketed product: Beeswax

4 .Ceramides: Ceramides play a crucial role in binding skin cells tightly within the outermost layer of the skin.

• the best sources of ceramides :

Plant oils utilized in skincare that are recognized as excellent sources of ceramides and essential fatty acids comprise:

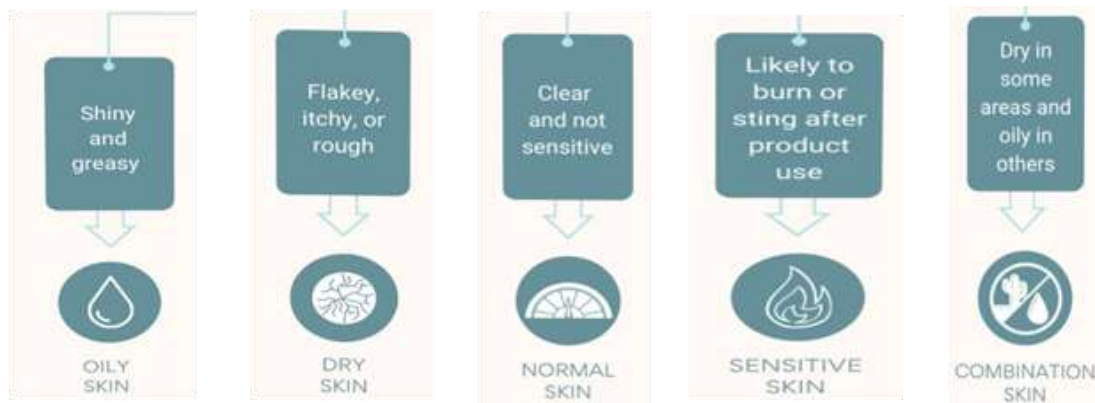
- Jojoba Oil
- Sunflower Oil.
- Grapeseed Oil.
- Sunflower Oil.



Occlusives , Emollients & Humectants Moisturizers.

- What's your skin type.

•YOUR SKIN IS •



Dry Skin :

The condition arises when the skin experiences excessive loss of moisture and natural oils. It can impact individuals of all ages and may be triggered by various factors, including.

Environment:

Adverse weather conditions, such as cold temperatures and high winds, or environments with low humidity, can lead to dry skin.

Soaps and detergents:

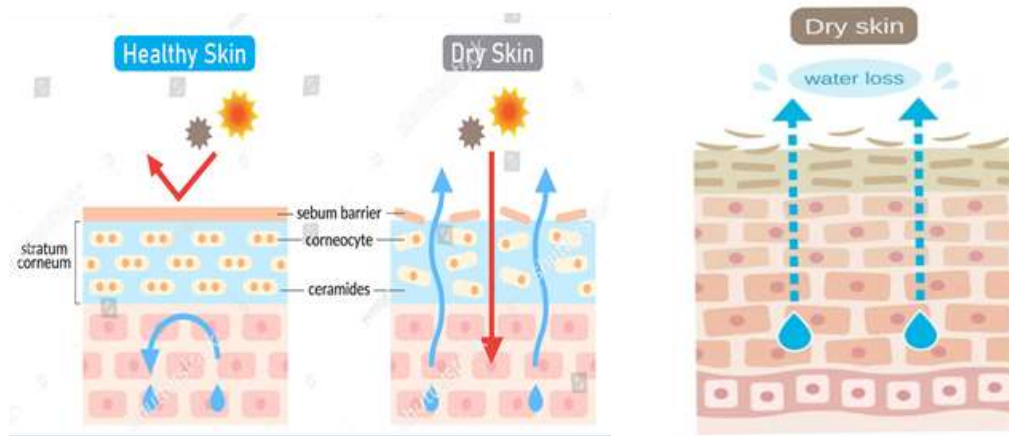
Numerous soaps, detergents, and shampoos are designed to eliminate oils, which may contribute to skin dryness.

Indicators of dry skin include:

- Scaling, flaking, or peeling of the skin.
- A rough texture of the skin.
- A sensation of tightness, particularly following bathing.
- Itching sensations.
- Fissures in the skin that may result in bleeding.

Moisturizers, including petroleum jelly or hydrating oils, can effectively treat dry skin.

You can treat dry skin at home by using moisturizers.



• Marketed product Moisturizing Cream Face & Body :



The following are key active pharmaceutical ingredients (APIs) frequently included in moisturizing creams.

1. Hyaluronic Acid (HA)
2. Glycerin
3. Sorbitol
4. Urea
5. Hydroxyethyl Urea

Emollients:

1. Dimethicone
2. Cyclomethicone
3. Mineral Oil
4. Petrolatum
5. Isopropyl Palmitate

Occlusives:

1. Beeswax
2. Lanolin
3. Paraffin wax
4. Zinc oxide
5. Dimethicone Cross polymer

Antioxidants:

1. Vitamin E (Tocopherol)
2. Vitamin C (Ascorbic Acid)
3. Ferulic Acid
4. Green Tea Extract
5. Grape Seed Extract

Skin-Conditioning Agents:

1. Ceramides
2. Niacinamide
3. Panthenol (Vitamin B5)
4. Glycine
5. Alanine

Moisturizing Factors:

1. Hydrating Complex (e.g., Hyaluronic Acid, Glycerin)
2. Aquaporin-3
3. Sodium PCA
4. Sodium Lactate
5. Glycosaminoglycan

Preservatives:

1. Phenoxyethanol
2. Ethylhexylglycerin
3. Sodium Benzoate
4. Potassium Sorbate
5. Formaldehyde-releasing agents (e.g., DMDM Hydantoin)

pH Adjusters:

1. Triethanolamine (TEA)
2. Sodium Hydroxide
3. Citric Acid
4. Lactic Acid
5. Glycolic Acid

Other Ingredients:

1. Fragrances
2. Dyes (e.g., artificial colors)
3. Thickeners (e.g., Carbomer)
4. Emulsifiers (e.g., Cetearyl Alcohol)

1. Common active components found in moisturizers include various categories of emollients, humectants, occlusives, and exfoliants. Emollients can be classified into several types: fatty emollients such as octyl stearate, jojoba oil, propylene glycol, castor oil, and glyceryl stearate; dry emollients including isopropyl Palmitate, decyl oleate, and isostearyl alcohol; protective emollients like isopropyl isostearate and diisopropyl dilinoleate; and astringent emollients such as octyl octanoate, cyclomethicone, isopropyl myristate, and dimethicone. Humectants consist of alpha hydroxy acids, including lactic acid and glycolic acid, as well as glycerin, sodium pyrrolidine carboxylic acid (PCA), allantoin, honey, panthenol, propylene glycol, butylene glycol,

PEG, hyaluronic acid, aluminum lactate, sodium lactate, urea, gelatin, and sorbitol. Occlusives are represented by hydrocarbons like mineral oil, petrolatum, caprylic/capric triglyceride, paraffin, and squalene; fatty alcohols such as stearyl alcohol, cetyl alcohol, and lanolin; fatty acids including stearic acid and lanolin acid; polyhydric alcohols like propylene glycol; vegetable waxes such as candelilla and carnauba; phospholipids like lecithin; sterols such as cholesterol; and wax esters including lanolin, beeswax, and stearyl stearate. Exfoliants include lactic acid, urea, stearic acid, olive oil, emulsifying wax, malic acid, and ceramides.

• Oil phase:

Grape seed oil

Stearic acid

Emulsifying wax

• Water phase:

Distilled water

Vegetable glycerin

Xanthan gum clear

• Cooling phase:

Vitamin E

Cucumber extract

Perfume oil

Methods of Preparation:

Moisturizers can be classified into two types: oil in water (o/w) moisturizers and water in oil (w/o) moisturizers, depending on the characteristics of the dispersed phase. Creams can either be categorized as oil in water (o/w) or water in oil (w/o).

Uses and Application:

Moisturizers serve multiple beneficial purposes. Research indicates that they have biological effects that validate their application in medical contexts. Numerous moisturizers inhibit cyclooxygenase activity, which in turn suppresses the formation of inflammatory proteinoids, resulting in a soothing effect on irritated skin and contributing to their anti-inflammatory properties. Moisturizers based on mineral oil exhibit a mild antimitotic effect on the epidermis, making them particularly effective for inflammatory skin conditions such as psoriasis, which is characterized by heightened epidermal mitotic activity. Emollients alleviate itching by obstructing the production of cytokines. Furthermore, the cooling sensation produced by the evaporation of water from the skin after the application of water-based moisturizers enhances their antipruritic effects. Additionally, moisturizers often incorporate sunscreens with varying levels of sun protection, providing supplementary photoprotective benefits. They also possess antimicrobial and wound-healing capabilities. The hydration of the skin, along with its friction, scaling, and mechanical properties, is influenced by the application of moisturizers. Following a single use, a series of changes occur that reflect the specific formulation of the moisturizer. Initial effects are typically associated with the water content of the moisturizer, leading to increased evaporation from the skin's surface, a reduction in temperature, and enhanced skin softness. Glycerol, for instance, may contribute to reinforcing these effects. Moisturizers are frequently utilized, as adequate moisture is essential for dry skin, which can be effectively addressed through their application.

Ingredients for dry skin

1. Salicylic acid

2. Fragrances

3. Hyaluronic acid

4. Glycerin

INGREDIENTS:

The best ingredients for the moisturizing cream

1. Ceramides,

2. Glycerin,

3. Hyaluronic acid, Lactic acid, Silicones

Face Creams:

1. Creams formulated with hyaluronic acid offer a notable enhancement in hydration levels, achieving an improvement of 70-80%.
2. Creams containing glycerin contribute to increased skin elasticity, with a reported enhancement of 50-60%.
3. Creams abundant in antioxidants are effective in diminishing the appearance of fine lines and wrinkles, with a reduction rate of 40-50%.

The primary functions of hand and body creams include:

- Creating a protective oily barrier for the skin.
- Maintaining a smooth texture without leaving a greasy residue.
- Ensuring ease of application.

Body Creams:

1. Ceramide-based creams: improved skin barrier function (60-70%)
2. Emollient-rich creams: reduced dryness and irritation (50-60%)
3. Natural ingredient-based creams: enhanced skin texture (40-50%)

Safety and Adverse Effects:

1. Skin irritation (5-10%)
2. Allergic reactions (2-5%)
3. Comedogenicity (acne-prone skin)

Certain chemicals can lead to skin issues such as redness, dryness, and cracking upon contact. These substances are referred to as irritants. Common irritants include fiberglass, soaps, oils or cutting fluids, and solvents.

Symptoms of dry skin include skin:

1. Cracked.
2. rough
3. tight
4. Itchy

Discussion:

Moisturizing creams play a crucial role in preserving skin health. The effectiveness and safety of these products depend on their specific ingredients and formulations. It is important to choose products based on individual skin types and concerns.

Conclusion:

Moisturizers serve a dual purpose for both healthy and compromised skin, effectively connecting the realms of medicine and consumer products. Individuals who consistently use moisturizers may experience contact dermatitis, frequently triggered by preservatives or fragrances found in numerous commercial formulations. By gaining insight into the advantages and possible disadvantages of various ingredients, both consumers and healthcare practitioners can make well-informed decisions.

Recommendations:

1. Select creams that contain hyaluronic acid, glycerin, or ceramides.
2. Take into account specific skin types and concerns.
3. Seek out products that are pH-balanced and hypoallergenic.

Future Directions:

1. Examine the long-term impacts of utilizing moisturizing creams.

2. Create customized formulations for moisturizing creams.

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