

Importance of moisturizers in skin

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Received: 3 Sep 2019

Accepted: 16 Nov 2019

Skin is the largest organ of the body and weighs more than 5 kg in an average adult¹. One of its important functions is the barrier function, disruption of it leads to increase in transepidermal water loss (TEWL). Most of the moisturizers decrease TEWL, thereby improving its appearance by keeping the skin hydrated, and making it smooth and soft².

Moisturizers can be classified into three main groups: Emollients, Humectants, and Occlusives³.

- Emollients are basically lipids, which help the skin to maintain its smoothness and softness by filling the gaps between the cells of stratum corneum. Some examples of emollients are cholesterol, squalene, and fatty acids⁴.
- Humectants are moisturizers, which attract water to the epidermis and its examples are glycerine, urea, alpha hydroxy acids and hyaluronic acid³.
- Occlusive moisturizers contain oil and wax, which physically block TEWL by creating hydrophobic barrier⁵. Mineral oil, petroleum jelly, beeswax, silicones, zinc oxide are its component.

Why should we apply moisturizers?

The cells of epidermis are replaced continuously and in this process, due to various environmental and other factors like exposure to chemicals, microorganisms etc, it loses its ability to repair damage, thus, making it look dull, dry and lusterless⁶. Application of moisturizers helps to repair the epidermis and makes it soft, smooth and healthy. Dryness is a feature of many dermatological

diseases like eczemas, atopic dermatitis, xerosis, ichthyosis, psoriasis and so on.

Atopic dermatitis (AD) is a chronic, inflammatory skin disease, characterized by intense pruritus. To repair the damaged skin in such patients, frequent application of moisturizers can help reduce outbreaks, as it provides an occlusive barrier, retain moisture of epidermis and protect it from irritants⁷. Xerosis is another common condition, especially in elderly, which is one of the most common causes of pruritus. Squalene is a natural emollient and is a component of sebaceous gland, whose production starts to decrease significantly after the age of thirty, thus leading to xerosis⁴.

Therefore, it is very important to make a habit of using moisturizers regularly as we age.

Who should apply moisturizer?

Studies have shown that more than 90% of women apply moisturizers everyday of their life⁸ but irrespective of age and gender, everybody should apply moisturizers. For routine skin care, the choice of moisturizer is an emollient, whereas for ichthyotic skin, humectants would be most suitable and for conditions like atopic dermatitis, xerosis and prevention of contact dermatitis, occlusive moisturizers are indicated⁴.

There are various other benefits of moisturizers. They have been shown to be useful in wound healing, skin inflammation and proliferation, reactive oxidative stress, skin aging and skin cancer⁹. Hence, moisturizers are very important for us, as it keeps the skin smooth and soft, and also helps to prevent many dermatological diseases.

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