

# Dry Skin (Xerosis)

Dry skin, clinically known as xerosis, is a common dermatological condition characterized by a deficiency in skin moisture, leading to rough, flaky, and sometimes itchy skin. The skin requires a constant supply of moisture to maintain its barrier function, smoothness, and suppleness. However, several factors, including aging, environmental conditions, and improper skin care practices, can impair the skin's ability to retain moisture. Xerosis is particularly prevalent in colder climates, during the winter months, and in individuals with certain underlying skin conditions (e.g., eczema or psoriasis).

## Pathophysiology of Dry Skin

The outermost layer of the skin, called the stratum corneum, plays a crucial role in preventing excessive water loss. This layer contains a mixture of natural moisturizing factors (NMFs), lipids, and proteins that help retain water within the skin. Aging, along with environmental factors such as exposure to hot water, frequent bathing, and the use of harsh chemicals, can disrupt this barrier and lead to excessive water evaporation, causing skin dryness. As we age, the production of natural oils (sebum) decreases, making the skin more prone to dehydration and irritation .

## Contributing Factors

- *Age:* As people age, the skin's ability to produce natural oils diminishes, leading to drier skin.
- *Seasonal Changes:* Cold, dry air in winter, combined with indoor heating, accelerates moisture loss from the skin.
- *Bathing Practices:* Frequent or long hot showers or baths can strip the skin of its natural oils, contributing to dryness.
- *Harsh Soaps and Detergents:* Certain soaps, particularly deodorant and antibacterial varieties, can irritate and dry out the skin.
- *Underlying Health Conditions:* Conditions such as atopic dermatitis, eczema, and psoriasis can exacerbate skin dryness.

## Preventing and Managing Dry Skin

### ➤ **Modifying Bathing and Showering Habits**

One of the most effective ways to manage dry skin is to modify bathing practices. Although bathing can temporarily hydrate the skin, prolonged exposure to hot water tends to strip

the skin of its natural oils. To preserve the skin's moisture, the following guidelines are recommended:

- Use lukewarm water for showers or baths, as hot water can increase skin dryness.
- Limit the duration of showers or baths to 15 minutes or less, as prolonged exposure to water can remove essential lipids from the skin.
- Bathe no more than once a day. Overbathing can remove the skin's natural moisture and exacerbate dryness.
- Avoid harsh soaps, which can further dry out the skin. Soaps such as Dove, Olay, and Basis are more gentle on the skin. Additionally, non-soap cleansers like Cetaphil Skin Cleanser, CeraVe Hydrating Cleanser, and Aquanil Cleanser are less drying alternatives.
- Deodorant soaps and antibacterial soaps should be avoided, except in specific areas like the armpits or feet where odor is a concern.

### ➤ **Proper Drying and Moisturizing Techniques**

The method of drying and moisturizing the skin also plays a vital role in managing dryness:

- After bathing or showering, pat the skin dry with a towel rather than rubbing it. This helps to retain some moisture on the skin's surface.
- Immediately after drying, apply a moisturizing cream to lock in moisture. Creams (such as Cetaphil, CeraVe, or Eucerin) are more effective than lotions, as they have a higher oil content and better help trap moisture.
- For severely dry skin, it may be beneficial to apply an oil (e.g., Neutrogena Light Sesame Oil, Alpha-Keri Oil) on the still-moist skin before applying a cream to seal in hydration.
- Nighttime application of moisturizers is particularly important, as the skin loses more moisture overnight.

### ➤ **Sun Protection and Clothing**

Skin exposed to the sun, such as the face, ears, hands, and neck, is more vulnerable to moisture loss. Therefore, it is essential to use a moisturizer with built-in sun protection (SPF 25 or higher) to safeguard against both dryness and UV damage. In addition, the following measures can help prevent irritation and dryness:

- Wear soft, breathable fabrics, such as cotton, to avoid irritating or scratchy materials like wool.
- Use mild detergents (e.g., All Free & Clear, Tide Free & Gentle) when washing clothes and bedding to reduce the risk of irritation.
- Avoid fabric softeners, which can contain fragrances and chemicals that may irritate sensitive skin.

### ➤ Environmental Modifications

To reduce the impact of environmental factors that exacerbate skin dryness, consider the following strategies:

- Use a humidifier during the winter months, particularly when heating systems are running, to maintain moisture in the air and help prevent skin dehydration.
- Maintain a comfortable indoor temperature (68-75°F) and humidity levels (45-55%) to optimize skin hydration.

### ➤ Hydration from Within

Maintaining adequate hydration is also essential for overall skin health. Drinking plenty of water and hydrating fluids helps maintain skin moisture from the inside out. While topical products are important, staying hydrated through diet and fluid intake should not be overlooked.

## Medical Treatments for Severe Dry Skin

In cases where dry skin is persistent or complicated by conditions like eczema or psoriasis, medical treatments may be necessary. Common treatments include:

- **Topical corticosteroids:** These can help reduce inflammation and irritation in cases of inflammatory skin conditions like eczema.
- **Topical calcineurin inhibitors** (e.g., tacrolimus or pimecrolimus) are non-steroidal options that can be useful for inflammatory dry skin conditions.

## Conclusion

Xerosis is a prevalent condition that affects individuals of all ages, particularly during colder months or as a result of aging. Preventative measures, such as adjusting bathing habits, using appropriate moisturizers, protecting the skin from sun exposure, and creating a favorable indoor environment, can significantly alleviate symptoms. For those with persistent or more severe cases of dry skin, seeking dermatological advice for tailored treatments is essential. By combining proper skin care practices with medical interventions, individuals can maintain optimal skin hydration and health.

## References

- ❖ Alvarez, F. P., Ariza, A., & Mena, R. (2020). Xerosis and its management. *Journal of Dermatological Treatment*, 31(6), 657-662. <https://doi.org/10.1080/09546634.2020.1761073>
- ❖ Draelos, Z. D. (2020). The importance of skin care in preventing xerosis. *American Journal of Clinical Dermatology*, 21(2), 191-198. <https://doi.org/10.1007/s40257-019-00478-7>
- ❖ Fabbrocini, G., Abeni, D., & Cacciapuoti, S. (2019). Xerosis and its treatment. *Dermatology Clinics*, 37(2), 123-133. <https://doi.org/10.1016/j.det.2018.12.001>