

Skin Types

Understanding different skin types is essential for proper skincare. Each skin type has unique characteristics, causes, and management approaches. This presentation explores the five main skin types, their clinical correlations, skin barrier function, and the importance of skin hydration.



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Oily Skin: Characteristics

1 Excess Sebum Production

Leads to a shiny or greasy appearance, especially in the T-zone (forehead, nose, and chin).

2 Enlarged Pores

Often visible, particularly in areas with higher oil production.

3 Acne Prone

More susceptible to acne, blackheads, and whiteheads due to clogged pores.



Oily Skin: Causes and Management

Causes

- **Hormonal factors:** Androgens stimulate sebaceous glands, leading to increased oil production (common during puberty, menstruation, or pregnancy)
- **Genetics:** A family history of oily skin or acne
- **Environmental factors:** Humid climates can exacerbate oiliness
- **Skincare habits:** Over-cleansing or using harsh products can strip the skin, triggering rebound oil production

Management

- Use gentle, non-comedogenic cleansers to avoid over-drying
- Incorporate oil-free or lightweight moisturizers
- Use ingredients like salicylic acid (exfoliates pores) or niacinamide (regulates sebum production)
- Avoid heavy, occlusive products that can clog pores

Dry Skin: Characteristics



Rough Texture

Flaky or scaly texture that can feel rough to the touch.



Tightness

Feeling of tightness, especially after cleansing.



Fine Lines

Visible fine lines, cracks, or redness.



Irritation

Prone to itching and irritation.





Dry Skin: Causes and Management

Causes

- Reduced sebum production: Common in aging skin or due to genetic factors
- Environmental factors: Cold, dry weather or low humidity
- Skincare habits: Overuse of harsh soaps, alcohol-based products, or hot water
- Medical conditions: Eczema, psoriasis, or hypothyroidism

Management

- Use gentle, hydrating cleansers with a slightly acidic pH
- Apply humectants (e.g., glycerin, hyaluronic acid) to attract water
- Use occlusives (e.g., petrolatum, shea butter) to lock in moisture
- Avoid long, hot showers and harsh exfoliants



Combination Skin: Characteristics

Oily T-zone

Forehead, nose, and chin areas tend to be oilier than the rest of the face.

1

Enlarged Pores

Pores may appear larger in oily areas.

2

Dry Cheeks

Cheeks may be normal or dry, sometimes feeling tight or flaky.

3

Combination Skin: Causes and Management

1

Causes

Uneven distribution of sebaceous glands across the face.

2

Contributing Factors

Hormonal fluctuations or environmental factors can exacerbate combination skin.

3

Management

Use a gentle cleanser that balances oiliness without over-drying. Apply lightweight, non-comedogenic moisturizers. Use targeted treatments for oily areas (e.g., salicylic acid) and richer moisturizers for dry areas. Avoid over-exfoliating, as it can worsen dryness.





Sensitive Skin: Characteristics

Reactivity

Prone to redness, itching, burning, or stinging.

Triggers

Reacts to skincare products, environmental factors (e.g., wind, sun), or stress.

Underlying Conditions

May have underlying conditions like rosacea, eczema, or contact dermatitis.

Sensitive Skin: Causes and Management

Impaired Barrier

Allows irritants to penetrate more easily

Gentle Care

Use fragrance-free, hypoallergenic products



Genetic Factors

Some individuals have inherently sensitive skin

Product Reactions

Overuse of active ingredients can trigger sensitivity

Management also includes avoiding harsh exfoliants, alcohol, and essential oils. Incorporate soothing ingredients like ceramides, aloe vera, or centella asiatica. Always patch-test new products before full application.

Normal Skin: Characteristics and Management



Balanced Skin

Normal skin has balanced sebum production and hydration, with even texture and minimal imperfections.



Simple Routine

Maintain a simple routine: gentle cleanser, lightweight moisturizer, and sunscreen. Avoid overloading the skin with unnecessary products. Regular exfoliation (1–2 times per week) can help maintain a healthy glow.

Clinical Correlations: Oily and Dry Skin

Oily Skin Clinical Correlation

Patients with oily skin are more prone to acne vulgaris due to clogged pores and bacterial overgrowth. They may also develop seborrheic dermatitis, characterized by red, scaly patches in oily areas.



Dry Skin Clinical Correlation

Dry skin is often seen in patients with atopic dermatitis (eczema) or ichthyosis. It can also be a side effect of medications like retinoids or diuretics.



Clinical Correlations: Combination, Sensitive, and Normal Skin



1 Combination Skin

Patients with combination skin may struggle to find a balanced skincare routine. Over-treating oily areas can exacerbate dryness, while neglecting oily areas can lead to breakouts.



2 Sensitive Skin

Sensitive skin is common in conditions like rosacea, where the skin barrier is compromised, and blood vessels are more reactive. Patients may also experience contact dermatitis from allergens or irritants.

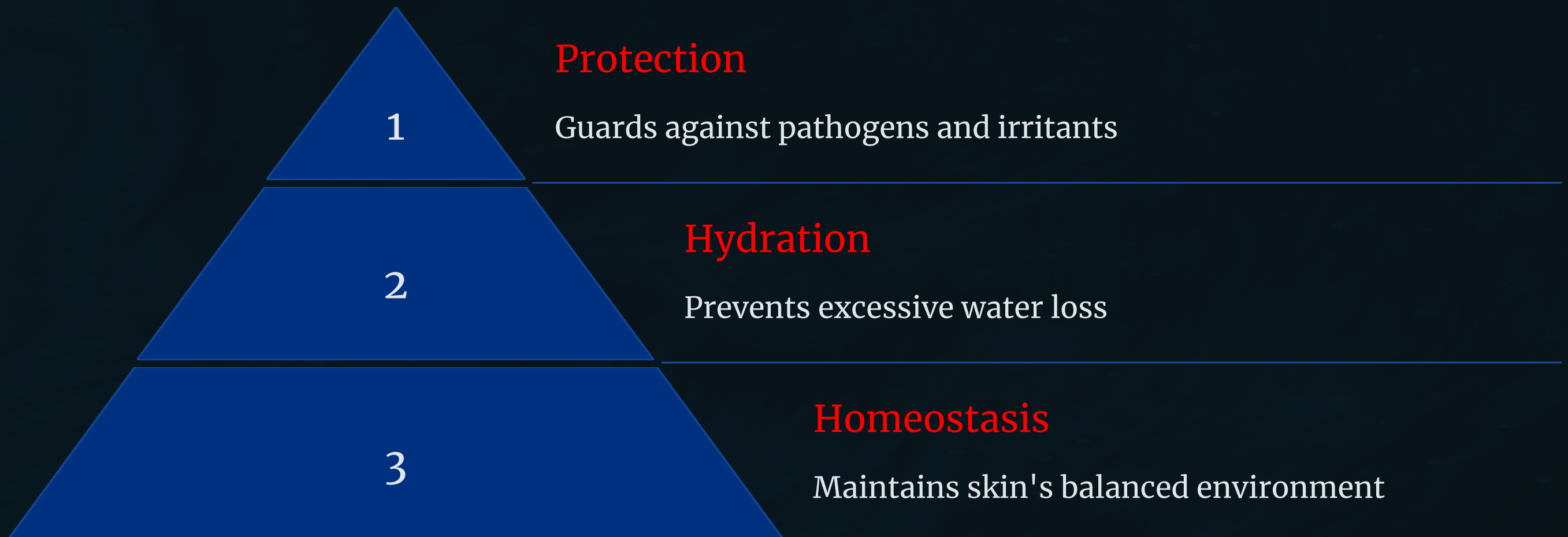


3 Normal Skin

While normal skin is less prone to dermatological issues, it still requires protection from environmental damage (e.g., UV radiation) to maintain its health.

Skin Barrier Function

The skin barrier is the outermost layer of the skin (stratum corneum) and is essential for protecting the body from external insults, preventing water loss, and maintaining homeostasis.



Acid Mantle

1

Composition

A thin film on the skin's surface composed of sebum, sweat, and natural moisturizing factors

2

Function

Maintains the skin's slightly acidic pH (4.5–5.5), which inhibits the growth of pathogens and supports enzymatic activity for barrier repair

3

Clinical Relevance

Disruption of the acid mantle (e.g., by alkaline soaps) can lead to dryness, irritation, and infections

pH of the Skin

Healthy Skin (pH 4.5–5.5)

The skin's pH is slightly acidic, which is crucial for barrier function and microbial defense.

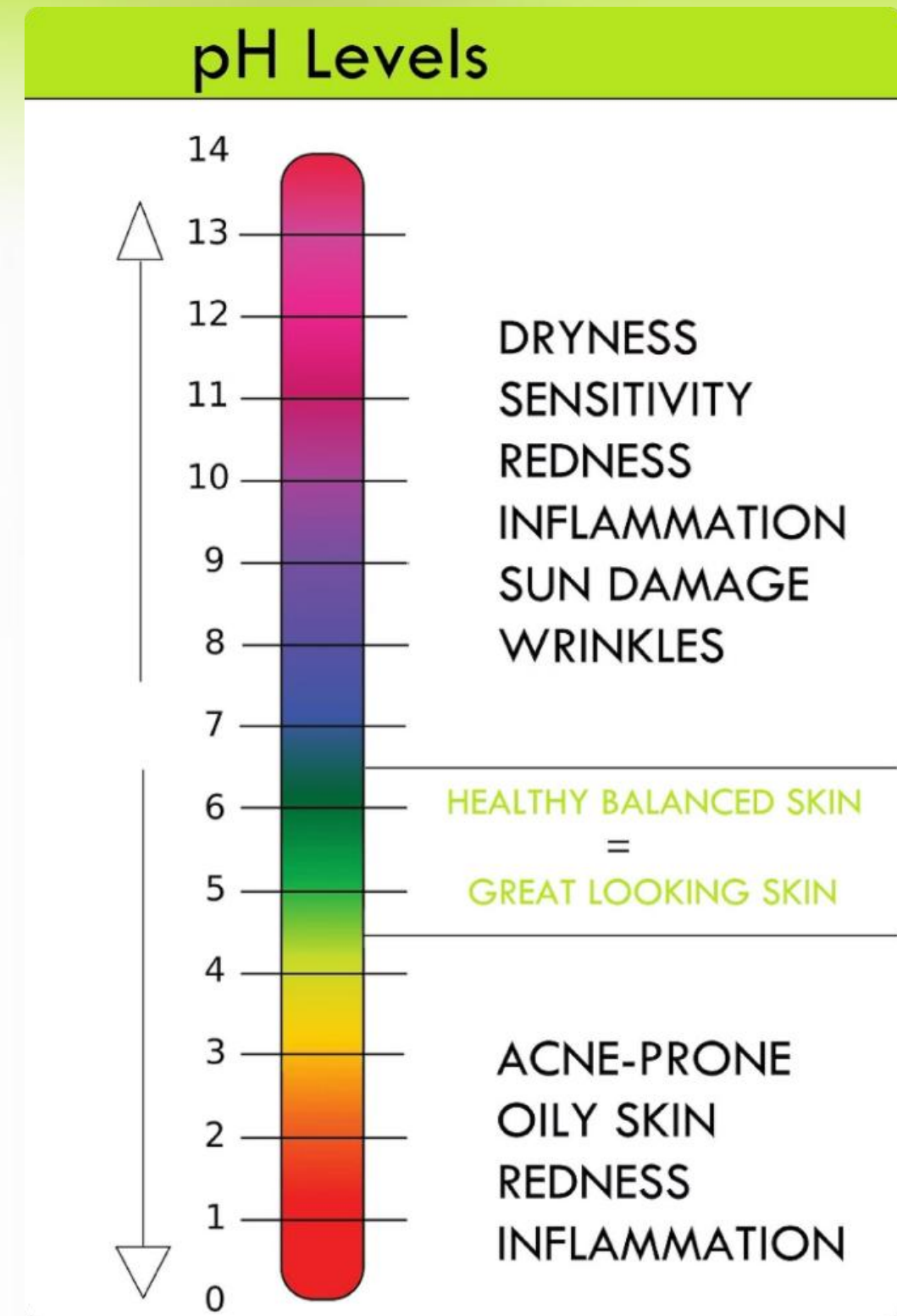
Neutral pH (7.0)

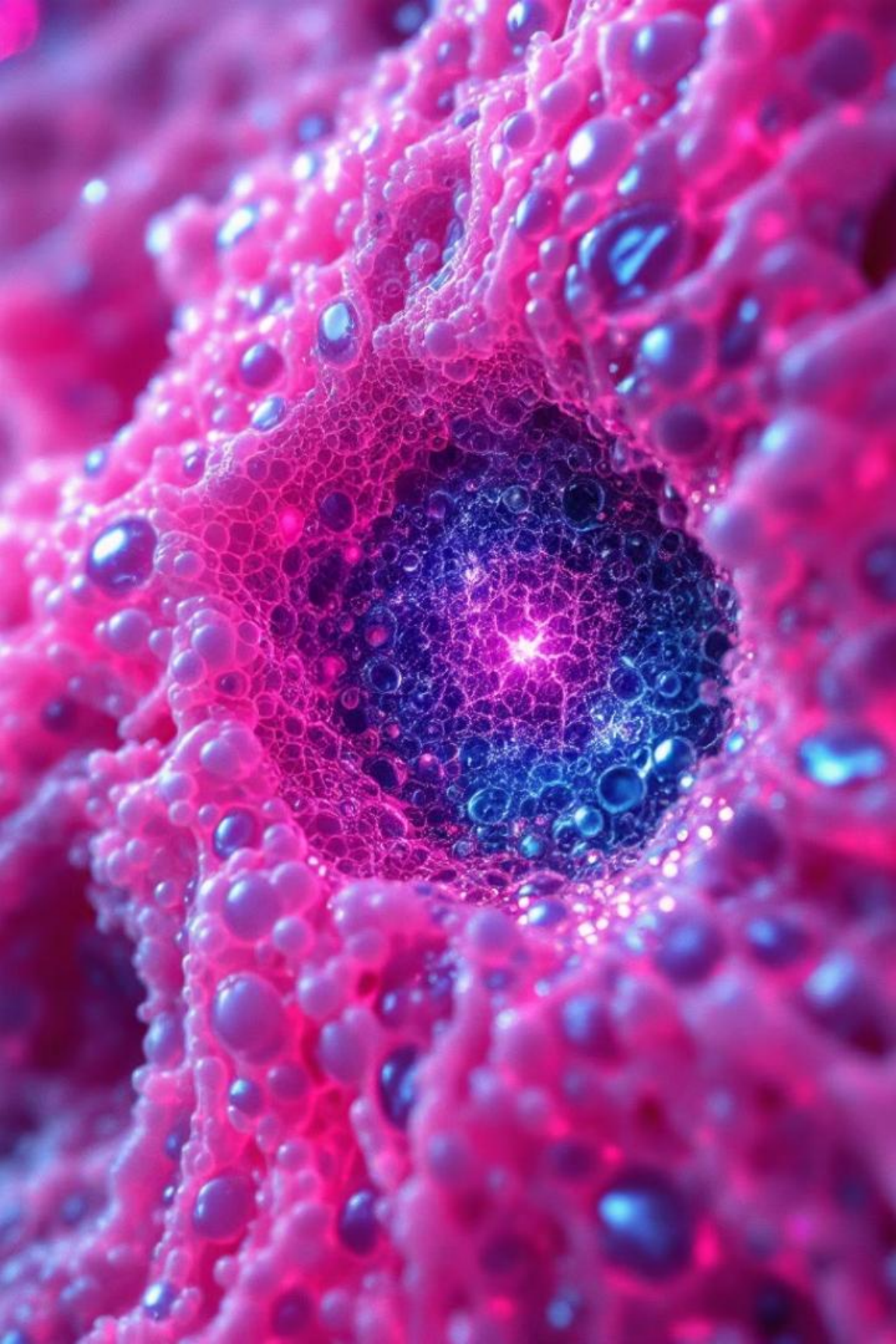
Represents the midpoint of the pH scale, higher than optimal skin pH.

Alkaline Products (pH 9+)

Alkaline pH can impair lipid synthesis, disrupt the microbiome, and increase susceptibility to irritants and allergens.

Clinical Relevance: Maintaining the skin's natural acidic pH is essential for preserving barrier function and preventing skin conditions.





Lipid Matrix

40%

Ceramides

25%

Cholesterol

25%

Free Fatty Acids

10%

Other Lipids

Composed of ceramides, cholesterol, and free fatty acids, the lipid matrix fills the spaces between corneocytes (skin cells) in the stratum corneum. Function: Prevents transepidermal water loss (TEWL) and maintains skin hydration. Clinical Relevance: Deficiencies in the lipid matrix (e.g., in eczema or aging skin) lead to a compromised barrier, dryness, and increased sensitivity.



Skin Hydration



Natural Moisturizing Factors (NMFs)

Amino acids, urea, and lactic acid that attract and retain water.



Lipid Matrix

Prevents water loss through the skin barrier.



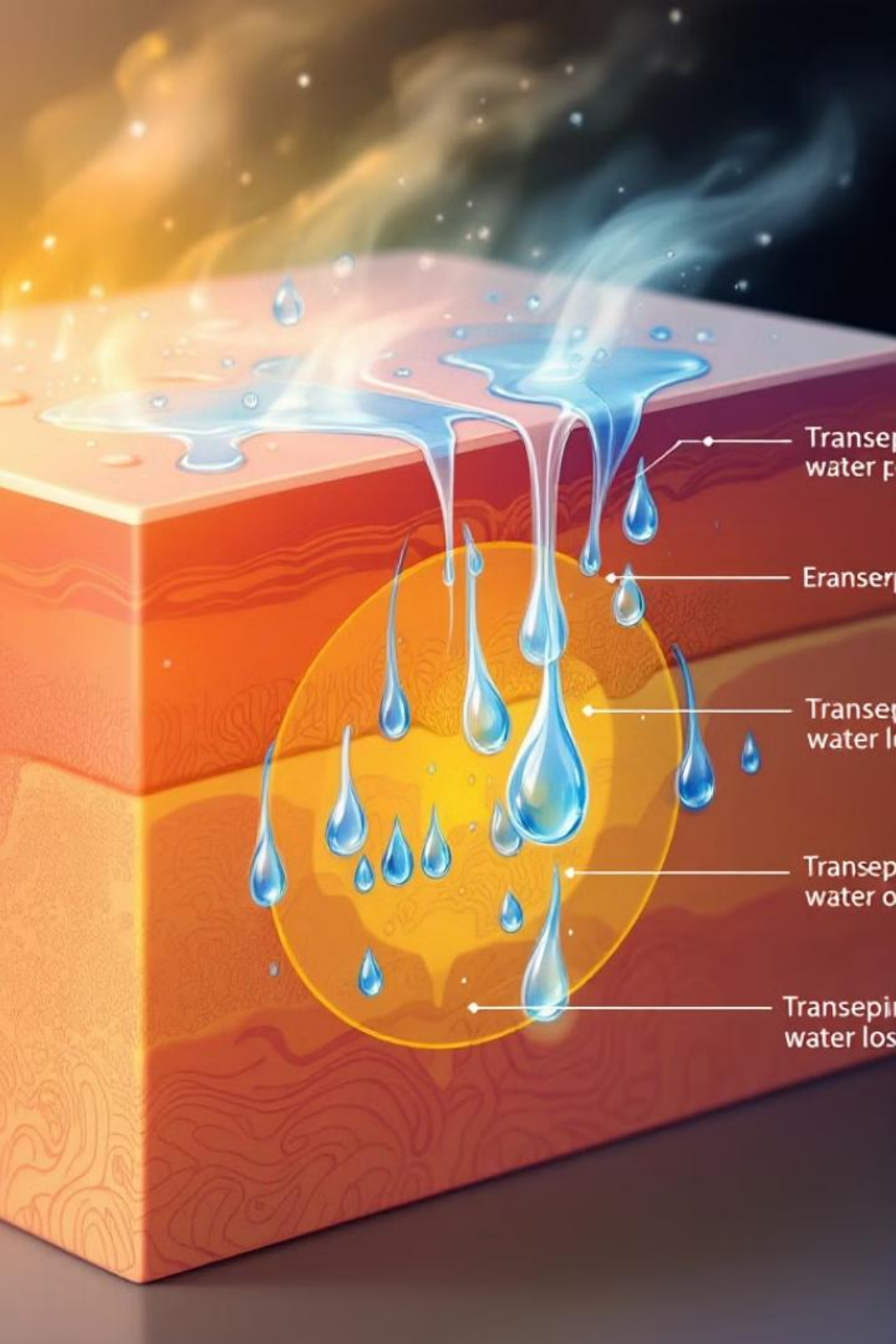
Aquaporins

Water channels in keratinocytes that regulate water movement.

Clinical Relevance: Dehydrated skin appears dull, flaky, and prone to irritation. Proper hydration improves skin elasticity and barrier function.

Transepidermal Water Loss (TEWL)

TEWL is the passive diffusion of water through the epidermis into the external environment.



1

Definition

Passive diffusion of water through the epidermis into the external environment

2

Influencing Factors

Environmental conditions (low humidity, high temperature), skin barrier integrity (damaged barrier increases TEWL), use of occlusive agents (e.g., petrolatum) reduces TEWL

3

Clinical Relevance

High TEWL is a marker of impaired barrier function, seen in conditions like eczema, psoriasis, and ichthyosis



Factors Influencing TEWL

Factor	Effect on TEWL	Clinical Implication
Low Humidity	Increases TEWL	Worsens dry skin conditions
High Temperature	Increases TEWL	Can exacerbate eczema flares
Damaged Barrier	Significantly increases TEWL	Common in eczema, psoriasis
Occlusive Agents	Decreases TEWL	Therapeutic in dry skin conditions

Comprehensive Skin Care Approach

A complete skincare routine follows a cyclical process where each step informs and supports the others.

1

Identify Skin Type

Determine whether skin is oily, dry, combination, sensitive, or normal

2

Address Barrier Function

Support the acid mantle and lipid matrix with appropriate products

3

Optimize Hydration

Use humectants and occlusives to maintain proper moisture levels

4

Monitor TEWL

Adjust routine based on environmental factors and skin condition

5

Clinical Correlation

Consider underlying conditions that may affect skin health

This integrated approach ensures that each aspect of skin health is addressed systematically and comprehensively.