# Cosmeceuticals and Alternative Therapies for Rosacea

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Rosacea is a skin condition mediated by a proinflammatory predisposition on the skin. A cosmeceutical approach supports the stable microbiome of the skin to maintain the health of the skin barrier. Herein, a regimen including cleansers, barrier repair creams, supplements, and antioxidants is provided, as well as alternative therapies.

#### What do your patients need to know?

Vascular instability associated with rosacea is exacerbated by triggers such as sunlight, hot drinks, spicy foods, stress, and rapid changing weather, which make patients flush and blush, increase the appearance of telangiectasia, and disrupt the normal skin barrier. Because the patients feel on fire, an anti-inflammatory approach is indicated. The regimen I recommend includes mild cleansers, barrier repair creams and supplements, antioxidants (topical and oral), and sun protection, all without parabens and harsh chemicals. I always recommend a product that I dispense at the office and another one of similar effectiveness that can be found over-the-counter.

## What are your go-to treatments?

Cleansing is indispensable to maintain the normal flow in and out of the skin. I recommend mild cleansers without potentially sensitizing agents such as propylene glycol or parabens. It also should have calming agents (eg, fruit extracts) that remove the contaminants from the skin surface without stripping the important layers of lipids that constitute the barrier of the skin as well as ingredients (eg, prebiotics) that promote the healthy skin biome. Selenium in thermal spring water has free radical scavenging and anti-inflammatory properties as well as protection against heavy metals.

After cleansing, I recommend a product to repair, maintain, and improve the barrier of the skin. A healthy skin barrier has an equal ratio of cholesterol, ceramides, and free fatty acids, the building blocks of the skin. In a barrier repair cream I look for ingredients that stop and prevent damaging inflammation, improve the skin's natural ability to repair and heal (eg, niacinamide), and protect against environmental insults. It should contain petrolatum and/or dimethicone to form a protective barrier on the skin to seal in moisture. Oral niacinamide should be taken as a photoprotective agent. Oral supplementation (500 mg twice daily) is effective in reducing skin cancer. Because UV light is a trigger factor, oral photoprotection is recommended.

Topical antioxidants also are important. Free radical formation has been documented even in photoprotected skin. These free radicals have been implicated in skin cancer development and metalloproteinase production and are triggers of rosacea. As a result, I advise my patients to apply topical encapsulated vitamin C every night. The encapsulated form prevents oxidation of the product before application. In addition, I recommend oral vitamin C (1 g daily) and vitamin E (400 U daily).

For sun protection I recommend sunblocks with titanium dioxide and zinc oxide for total UVA and UVB protection. If the patient has a darker skin type, sun protection should contain iron oxide. Chemical agents can cause irritation, photocontact dermatitis, and exacerbation of rosacea symptoms. Daily application of sun protection with reapplication every 2 hours is reinforced.

### What holistic therapies do you recommend?

Stress reduction activities, including yoga, relaxation, massages, and meditation, can help. Oral consumption of trigger factors is discouraged. Antioxidant green tea is recommended instead of caffeinated beverages.

#### SUGGESTED READINGS

- Baldwin HE, Bathia ND, Friedman A, et al. The role of cutaneous microbiota harmony in maintaining functional skin barrier. *J Drugs Dermatol.* 2017;16:12-18.
- Celerier P, Richard A, Litoux P, et al. Modulatory effects of selenium and strontium salts on keratinocyte-derived inflammatory cytokines. *Arch Dermatol Res.* 1995;287:680-682.
- Chen AC, Martin AJ, Choy B, et al. A phase 3 randomized trial of nicotinamide for skin cancer chemoprevention. *N Engl J Med.* 2015;373:1618-1626.

Jones D. Reactive oxygen species and rosacea. Cutis. 2004;74(suppl 3):17-20.

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