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Dr. Shari Marchbein explains the importance of proper cleansing in a skin care routine



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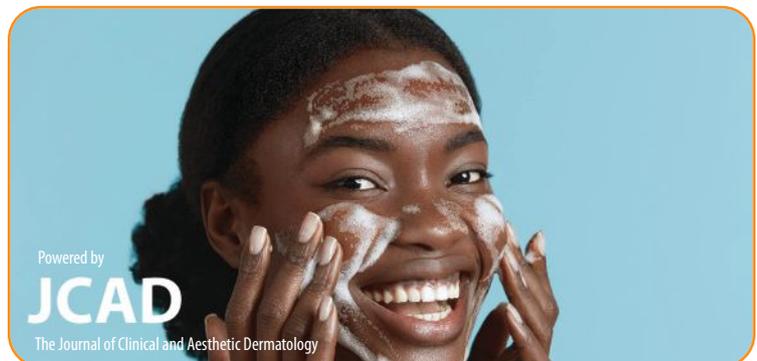
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EXPERT PERSPECTIVES



Shari Marchbein, MD, is Assistant Clinical Professor of Dermatology, New York University in New York, New York; Founder, Niche Dermatology

Dr. Marchbein explains the importance of proper cleansing in a skin care routine. She reviews the role of surfactants in cleansers, as well as advice on how to choose a gentle, effective cleanser.

Cleansers are products that solubilize and lift dirt, sebum, cosmetics, and different particular matter from the skin microorganism and exfoliated skin cells from the top surface. They can help improve skin appearance and also remove odor. We all know that leaving makeup on the skin and not cleansing it properly can make our pores appear larger and also break down collagen. Cleansing is one of the most important steps in any daily skin care routine. This goes for all of us, but it's especially true for those of us who have inherent skin barrier deficiencies or defects, such as acne, eczema, rosacea, and psoriasis, and gentle cleansing twice a day seems to be that sweet spot.

Cleansing is thousands of years old, and we first saw cleansing as pieces of bone or stone that were used to actually scrape the skin, similar to the physical exfoliation that we might think of today. The earliest mention of soap was in 2,000 BC.

The details of saponification, which is the actual process of making soap, were published in 1775. England had the first wrap bar soap in 1884. It then wasn't until World War II in 1948 that we saw the development of synthetic detergents (sydeths), which are often and widely used in different cleansers these days and are very gentle on the skin and better tolerated.

Cleansers are the first step in managing any dermatologic disease. I don't think any of us talk to our patients with eczema without saying, "Make sure that you're using a gentle cleanser, along with good moisturizing."

Over the past 20 years, there have been advanced formula facial cleansers that have

emerged in an explosion of cleansing technology. This has actually led to very high-quality, low-cost cleansers. Cleansing is the one place that I tell my patients don't splurge because you're using it to wash something and then you're rinsing it off.

For the most part, you really just want gentle skin care ingredients that are maintaining and supporting your skin barrier, not damaging it. Rather than using something that's really expensive and then washing off, use high-quality, low-cost cleansers, which are great at removing dirt, sebum, and makeup and and exfoliating skin.

We have these synthetics, or factions, that are less damaging to the skin and have less irritation, and then of course, there has been an emergence of cleansing products with new cleaning chemistry. So, why do we cleanse in the first place? We know that it's very important to remove dead skin, dirt, oil, cosmetics, pollution, sunscreen, all of these things, during the course of the day, but cleansing also preps our skin for more important things, like serums that we actually want to penetrate the skin and take action, such as vitamin C serum, and serums that help with discoloration.

It's really important that we can allow our moisturizers to sit properly on the skin. Then other topicals that we might use, such as treatments for acne or steroid creams for eczema, but also cleansing, provides a sort of psychological benefit of renewal rejuvenation.

Surfactants are surface-acting agents, and they're one of the most important ingredients that a cleanser can contain. Many environmental impurities and cosmetic products are not water soluble; that's why you can't just flash your face with water and think that you're going to clean your skin.

Surfactants are actually responsible for the cleansing properties of a cleanser. They emulsify and make fat-soluble products water-soluble, and then you can rinse with water. They also bind to



Watch the video of this presentation with Dr. Marchbein from Skincare Academy at <https://jcad.tv/skincare-academy-shari-marchbein-skin-cleansers/>

skin cells. They lower the surface tension on the skin. They solubilize and remove dirt and sebum, and then they exfoliate the stratum corneum.

Surfactant monomers form aggregates called micelles. Micelles have hydrophilic heads, which are soluble in water. The hydrophobic tails emulsify oil.

Now, what about cleansers and stratum corneum or skin barrier disruption? We know that cleansers use surfactants, which can be very irritating because they break things up and interact with the skin. They bind to keratin, and they denature stratum corneum proteins. They can cause swelling of keratin within the cornea sites. They reduce fatty acids and cholesterol levels. They reduce natural moisturizing factor (NMF) levels, allowing it to escape through the skin barrier, our brick and mortar, and they denature key shot and corneum enzymes. Surfactants penetrate through the stratum corneum—they get through that mortar—and this leads to inflammation, irritation, and oxidative damage.

Syndets and lipid-free cleansers are the least irritating cleansers because they disrupt the skin barrier to a lesser degree than other surfactants. Free surfactants come through the micelles, and this is our brick and mortar. This is our skin barrier, our stratum corneum. The cleanser surfactant monomers get through the mortar and penetrate the stratum corneum. This leads to impaired barrier, redness, inflammation, which we see as dryness and itching on the skin, oxidative stress, which makes patients uncomfortable, and some irritation as well.

This really can disrupt the skin barrier. So, we can see damage after even a single exposure to harsh surfactants. Less than one minute of stratum corneum exposure to surfactants can cause damage and removal of lipids, which are healthy fats that we actually need for our skin. Surfactants get between those bilayers, and they increase permeability, reduce lipids on the skin, disrupt the skin barrier, and cause irritation.

Cleanser pH is also important. The acid mantle on the skin surface is a thin film of sebum

that protects our skin from environmental contaminants. It's slightly acidic, with a pH of about five. It supports the natural skin flora, enzyme activity in the stratum corneum, and barrier function. However, harsh cleansers that strip sebum from the skin will disrupt the acid mantle, and therefore the skin barrier, so these are connected. Traditional cleansers, like true soaps, have an alkaline pH, and they interfere with the lipid bilayer function and skin repair mechanisms, whereas syndets with a more neutral pH that closely resembles natural skin pH are less irritating.

There are a few ways to minimize skin damage. We can compensate for damage during cleansing by providing moisturizing benefits and including ingredients, such as glycerin and hyaluronic acid, serums, dimethicone, and petrolatum. Then, you can cleanse without compromising the skin barrier by utilizing new cleansing techniques and synthetic surfactants.

Patients feel cleansers are an important part of an acne regimen. We know this for certain. Of 686 patients with acne that we surveyed, 70 percent of them actually use anti-acne cleansers that have ingredients such as salicylic acid or vent peroxide, and 66 percent use cleansers twice a day. Greater than 66 percent of patients with acne that we surveyed believe cleansers have a therapeutic benefit to acne, and you know what? They're right. Acne, in general, is an inherent skin barrier deficiency, defect, or dysfunction.

Also, a lot of the medications that we give our patients with acne, including retinoids, benzoyl peroxide, and so on, can be really irritating to the skin. Therefore, in order to tolerate those better, we need our gentle cleansers. We need our good moisturizers. An ideal cleanser for an acne probation is going to be noncomedogenic and nonirritating. If there are oils in it, they need to be noncomedogenic type oils.

The key takeaway here is that we don't need to spend a lot of money, and we can use gentle cleansers. **HT**

Meeting Highlights

American Academy of Dermatology Annual Meetings 2020 and 2021

<https://eposters.aad.org/>

The American Academy of Dermatology (AAD) Annual 2020 and 2021 Meetings provided researchers, physicians, and members of the industry with the opportunity to share and learn about the latest research in dermatology. Speaker and poster sessions presented data from cutting-edge research on multiple dermatological topics, including facial cleansers. Clinical evaluations of skin health across different populations, as well as discussions of current attitudes and knowledge on facial cleansers, were presented. Summaries of key poster presentations from the 2020 and 2021 AAD meetings are included here.

AAD 2020

The suitability of a polyacrylate cross polymer cleanser for sensitive skin. Surfactants within cleansers are effective at solubilizing and removing dirt and oil from the skin, and they provide a foaming experience that many consumers desire in a cleanser. However, surfactants can also penetrate and impair the skin barrier, leading to redness, irritation, and dryness. Recently developed hydrophobically modified polymeric (HMP) cleansers have been shown improve mildness of cleansers without compromising the removal of dirt, oil, makeup, and other substances from the skin. Snell et al assessed the cleaning and foaming efficacy, as well as skin barrier penetration and disruption, of HMP cleansers. The authors included 14 clinical studies, and use of additional therapies among study participants was permitted, such as alpha hydroxy acids (AHAs), beta hydroxy acids, poly hydroxy acids (PHAs), hexyl resorcinol, light therapy, benzoyl peroxide, and retinol, alongside HMP cleansers. The HMPs worked by binding to free surfactant micelles and monomers, forming HMP-surfactant complexes that prevented penetration and irritation of the stratum corneum. Among subjects using HMP cleansers as their primary

product, 272 had acne, 82 had normal skin, and 43 had sensitive, acne-prone skin. A total of 288 participants with normal skin and 150 with acne used HMP cleansers as an ancillary product. Overall, HMP cleansers were well tolerated among participants, even those with sensitive, acne-prone skin, and when used in combination with other therapies. HMP cleansers were effective at removing dirt, oil, and makeup from the skin. Additionally, HMP cleansers did not leave a heavy residue on the skin, and participants reported that their skin felt smooth, soft, and clean. They also reported that HMP cleansers did not cause over-drying of the skin.

Evaluation of the mildness potential of liquid cleansers. Various skin disorders, such as acne and psoriasis, are associated with alterations in the composition of the skin microbiome. Kirchner et al assessed the impact of six personal care cleansers on skin microbiome, physiology, and barrier. Patients cleansed the volar forearm at least once per day for four weeks. Eighty-nine female subjects completed the study, with an average of 15 participants in each treatment group. The products included two mild baby washes (Test Products A and B), two adult facial cleansers (Test Products C and D), a restoring cleanser (Test Product E), and a natural castile-based baby wash (Test Product F). The pH levels

ranged from 4 to 9, with the natural castile-based baby wash having the highest at about 9. After four weeks, all treatment groups maintained microbiome diversity. The use of the natural castile-based baby wash was associated with a significant increase in protease activity, skin pH, and transepidermal water loss (TEWL), as well as an increase in desquamation, thereby indicating that the use of this cleanser impaired the skin barrier. Therefore, it is important to use properly formulated skin cleansers that are gentle on the skin, although long-term studies should be conducted to further assess the impact of various personal care cleansers on the skin barrier.

A scoring method to assess the gentleness of cleansers. Here, Anwar et al evaluated the gentleness of skin cleansers through formulation, *ex-vivo* testing, and validated gentleness score. Comparing HMP and soap cleansers, in terms of formulation, both cleansers had mildness enhancing ingredients, such as glycerin and HMP, and do not contain allergens; however, the soap cleanser had a pH of 9, compared to the HMP cleanser's pH of 4.7, which more closely matches the pH of the acid mantle. The soap cleanser increased lipid content in the stratum corneum, indicating a deposition of fatty acids from this cleanser. The HMP cleanser was associated with a nonsignificant decrease in lipids. Use of Nile Red fluorescence showed that the HMP cleanser had significantly lower fluorescence and Nile Red stained less deeply through the stratum corneum, compared to the soap cleanser. Given the lower pH value and decreased surfactant penetration, the HMP cleanser was found to be gentler than the soap cleanser. Overall, the HMP cleanser was given a gentleness score of 5 out of 5, whereas the soap cleanser received a gentleness score of 3 out of 5. A consumer study wherein female

participants used the HMP cleanser for one week in the evenings further demonstrated the gentleness of the HMP cleanser. Seventy-six percent of participants reported that the cleanser was gentle enough for everyday use. Additionally, 73 percent reported that their skin did not feel tight after use, and 70 percent claimed the HMP cleanser felt less harsh than their current cleanser.

AAD 2021

Appropriateness of a novel, low pH, 2%-polyhydroxy acid facial cleanser for patients with dry and sensitive skin. Finding an effective cleanser that does not alter the moisture barrier of the skin can be difficult for individuals with dry and sensitive skin. Gluconolactone, a mild PHA, has been shown to have moisture retaining properties and enhance skin cell turnover, which could benefit individuals with dry and sensitive skin. Hussain et al evaluated the efficacy of a novel, low pH, 2% PHA facial cleanser in individuals with dry and sensitive skin. Thirty-five female participants used the 2% PHA cleanser twice daily for four weeks. Over 80 percent of these patients reported that their skin felt soft, smooth, and soothed

after using the 2% PHA cleanser, and over 94 percent reported that the cleanser remained gentle on their skin after four weeks of use. Visual improvements, such as skin appearing smoothed, soothed, and conditioned, were also observed. Investigator assessment suggested improvements in dryness/scaling and demonstrated no significant changes in erythema/edema from baseline. Patient tolerability assessments showed that there was no significant burning/stinging or itching, compared to baseline. Skin flaking and skin pH levels were also not significantly different from baseline, suggesting that the 2% PHA cleanser did not disrupt skin pH or cause dryness. In addition, *in vitro* testing found that 2% PHA cleanser did not impair the skin barrier or alter the skin microbiome.

Skin exfoliation with low concentrations of alpha hydroxy acids and poly hydroxy acids when incorporated into wash-off or leave-on products using a novel abbreviated model to measure cell turnover rate. AHAs, such as glycolic acid, and PHAs, such as gluconolactone, have been shown to enhance skin cell turnover rate. Edison et al measured stratum corneum replacement time in 2% glycolic acid and 2% gluconolactone cleansers and leave-on creams, as well as 1% lactobionic acid cream.

Each participant had a treated site and an untreated control site, and they applied the products twice daily for seven days. Cell turnover was evaluated through fluorescence staining of the stratum corneum. Compared to the untreated control, both cleansers demonstrated a significant increase in cell turnover from baseline on Days 3, 5, and 7. The time to 50 percent or greater reduction in fluorescence dye was 3.76 and 3.71 days for 2% glycolic acid and 2% gluconolactone cleansers, respectively, compared to 5.35 days for the untreated control; this difference was significant, and the faster time to reduction in fluorescence dye in the treatment cleansers indicated faster cell turnover. The three treatment creams demonstrated a significant increase in cell turnover as well, compared to the untreated control. The 2% glycolic acid, 2% gluconolactone, and 1% lactobionic acid creams had 5.26, 4.94, and 5.19 days to 50 percent or greater reduction in fluorescence dye, respectively, which was significantly different than the untreated control. Consumer perception of 2% gluconolactone cream was measured among 34 female participants after two weeks of once daily use. The majority of participants reported skin feeling lightly exfoliated (94%), dry, dull skin feeling revitalized (97%), skin feeling smooth (100%), and skin feeling renewed (100%).

HT

RESEARCH BITE—Surfactants in Skin Care

Surfactants, or surface active agents, are amphiphilic molecules, with a hydrophilic head in water that decreases surface tension and a hydrophobic tail that captures oil and dirt, thus forming micelles. Surfactants can penetrate the stratum corneum, which can damage barrier lipids, causing inflammation, dryness, redness, and discomfort. However, hydrophobically modified polymers (HMPS) can be added to cleansers to increase gentleness and reduce damage from surfactants. Their large size minimizes surfactant penetration of the stratum corneum and barrier lipid impairment.

Source: Neutrogena. Surfactants in Skincare. 2022. HT



Journal Watch

Summaries of Recently Published Research in Skin Health

☞ In the digital edition, click the PMID after each summary to access the article/abstract.

Hydrophobically modified polymers can minimize skin irritation potential caused by surfactant-based cleansers

Draelos Z, Hornby S, Walters RM, Appa Y. *J Cosmet Dermatol*. 2013;12(4):314–321.

Summary. Draelos et al compared the efficacy of a foaming facial cleanser with hydrophobically modified polymers (HMPs) to a nonfoaming commercial facial cleanser in female patients with sensitive skin. At Weeks 1 and 3, patients using the HMP cleanser had significant improvements in all measured categories from baseline, with the greatest percent improvements in itching/burning and desquamation. HMP cleanser exhibited a nonsignificant, greater improvement in all categories, compared to commercial cleanser. Over 90 percent of patients in the HMP cleanser group agreed with each statement about the efficacy of the product at Week 3, compared to over 78 percent in the commercial cleanser group.

☞ PMID: 24305430; PMCID: PMC4285286

Cleansing formulations that respect skin barrier integrity

Walters RM, Mao G, Gunn ET, Hornby S. *Dermatol Res Pract*. 2012;2012:495917.

Summary. Here, Walters et al reviewed the impact of surfactants, including sodium dodecyl sulfate (SDS), on skin barrier integrity. SDS was found to alter lipids in the stratum corneum, which resulted in weakening the skin barrier. The authors highlighted strategies to reduce stratum corneum disruption, such as the addition HMPs to cleansers to protect the skin barrier from surfactants.

☞ PMID: 22927835, PMCID: PMC3425021

Skin cleansing without or with compromise: soaps and syndets

Mijaljica D, Spada F, Harrison IP. *Molecules*. 2022;27(6):2010.

Summary. Although soaps and synthetic detergents (syndets) both contain surfactants, they vary in several ways: soaps have a higher pH than syndets, which have a pH that is similar to the skin. Harsh soaps tend to increase transepidermal water loss (TEWL), disrupt the stratum corneum, and cause irritation, itching, and erythema, among other negative effects. Mild syndets are almost always superior, as they have the cleansing benefits of soaps while preserving the skin barrier, although they still have the potential to cause irritation and itching.

☞ PMID: 35335373, PMCID: PMC8954092

The effect of prolonged exposure on sodium dodecyl sulfate penetration into human skin

Morris SAV, Bobbitt JR, Ananthapadmanabhan KP, Kasting GB. *Toxicol In Vitro*. 2021;77:105246.

Summary. Morris et al measured the effect of prolonged exposure of SDS, an anionic surfactant, on the skin. When exposed for two minutes on the skin, SDS penetration ranged from 50 to 600mM. When exposed for five hours on the skin, SDS penetration increased with increasing concentration. Therefore, the authors determined that dose-dependent SDS penetration occurred due to damage from the surfactant.

☞ PMID: 34562601

Role of pH in skin cleansing

Hawkins S, Dasgupta BR, Ananthapadmanabhan KP. *Int J Cosmet Sci*. 2021;43(4):474–483.

Summary. Here, Hawkins et al conducted forearm controlled application tests (FCATs) to compare cleansers with a neutral pH to those with a pH similar to that of the skin. Cleansers containing only or predominantly anionic surfactants were associated with skin dryness and irritation, despite having a skin pH, compared to cleansers with a neutral pH. As such, pH level alone is not enough to determine the mildness of a cleanser.

☞ PMID: 34137035

Effects of skin washing frequency on the epidermal barrier function and inflammatory processes of the epidermis: an experimental study

Symanzik C, Kezic S, Jakasa I, et al. *Contact Dermatitis*. 2022. Epub ahead of print.

Summary. Symanzik et al compared the effects of hand washing with a standard cleanser, syndet with lipids, and syndet with

Maintaining skin integrity in the aged: a systematic review

Here, the authors reviewed 63 studies to evaluate the effect of nondrug topical skincare interventions in individuals aged 50 years or older. They found that cleansers with syndets or amphoteric surfactants improved dryness better than soap and water. Dryness and pruritus improved with the use of lipophilic leave-on products with humectants, and products with glycerin and petrolatum reduced tears in the skin. Use of products with a pH of 4 resulted in skin barrier improvement.

Source: Lichtenfeld-Kottner A, El Genedy M, Lahmann N, et al. Maintaining skin integrity in the aged: a systematic review. *Int J Nurs Stud*. 2020;103:103509. **HT**



lipids followed by application of rehydrating cream, on the stratum corneum. All cleansers had comparably mild effects on stratum corneum function and inflammation, indicating an improvement in occupational skin cleansers.

☞ PMID: 35357722

Evidence of barrier deficiency in rosacea and the importance of integrating OTC skincare products into treatment regimens

Baldwin H, Alexis AF, Andriessen A, et al. *J Drugs Dermatol.* 2021;20(4):384–392.

Summary. In this review, the use of over-the-counter (OTC) skincare products, such as cleansers and moisturizers, in patients with rosacea was assessed. A panel of nine dermatologists determined that products that hydrated the skin, normalized pH levels, restored lipids, and were absent of irritating substances helped improve signs and symptoms of rosacea. Beneficial ingredients included humectants, hyaluronic acid, and niacinamide.

☞ PMID: 33852244

Recommendations for using over-the-counter products as adjunctive acne care in Asian phototypes: improving treatment outcomes and managing side effects

Andriessen A, Jiang X, Kulthanan K, et al. *J Drugs Dermatol.* 2021;20(11):1213–1221.

Summary. Here, the authors reviewed the role of OTC products in conjunction with acne care in Asian patients. They noted that Asian patients often experienced less tolerability and greater sensitivity to topical acne treatments than White patients. As such, utilizing adjunctive cleansers and moisturizers to reduced dryness and irritation is of particular importance in this patient population.

☞ PMID: 34784121

Choosing the right partner: complementing prescription acne medication with over-the-counter cleansers and moisturizers

In this study, Lain et al analyzed 74 articles and found that adjunctive over-the-counter (OTC) cleanser and moisturizer use was beneficial for patients with acne. Due to their low risk of irritation and pH level that was similar to the skin, lipid-free cleansers were the most appropriate choice for acne-prone skin. Moisturizers with humectants, emollients, oil absorbers, and barrier-replenishing properties were also found to be effective in patients with acne.

Source: Lain E, Andriessen AE. Choosing the right partner: complementing prescription acne medication with over-the-counter cleansers and moisturizers. *J Drugs Dermatol.* 2020;19(11):1069–1075.

HT



A high-emollient liquid cleanser for very dry and atopic-prone skin: Results of an in-use tolerance and efficacy study conducted under dermatological, pediatric, and ophthalmological supervision

Favrel S, Mielewczyk E, Liberek A, et al. *J Cosmet Dermatol.* 2020;19(5):1155–1160.

Summary. Favrel et al evaluated the efficacy of a high-emollient liquid cleanser HELC on dry and atopic-prone skin. Infant, child, and adult participants used the cleanser for 21 days. Participants experienced improvements in SCORing Atopic Dermatitis (SCORAD) and moisturizing scores, and the cleanser was accepted and well tolerated by participants.

☞ PMID: 31773874

Effect of a botanical cleansing lotion on skin sebum and erythema of the face: a randomized controlled blinded half-side comparison

Weber N, Schwabe K, Schempp CM, Wölfle U. *J Cosmet Dermatol.* 2019;18(3):821–826.

Summary. Here, the authors compared a botanical cleanser, containing hops, willow bark extract, and disodium cocoyl glutamate, and a standard cleanser, containing sodium laureth sulfate. On Day 17, sebum level was significantly reduced with the botanical cleanser; sebum level had decreased with the standard cleanser on Day 15, but had increased by Day 17. Neither cleanser caused irritation.

☞ PMID: 30022595

Disruption of human stratum corneum lipid structure by sodium dodecyl sulphate

Yanase K, Hatta I. *Int J Cosmet Sci.* 2018;40(1):44–49.

Summary. Yanase et al evaluated the effect of SDS on the intercellular lipid structure of the stratum corneum. They observed that the long lamellar structure was disorganized by an aqueous SDS solution, whereas short lamellar and hydrocarbon-chain packing structures were almost unchanged. As such, SDS incorporation in the long lamellar structure might contribute to surfactant-related disruptions to the stratum corneum.

☞ PMID: 28922453 **LT**

News & Trends

Exploring Skin Health Research in the Media



In the digital edition, click  to access the full article.

JOHNSON & JOHNSON LAUNCHES NEW SKIN AND HAIR CARE BRAND FOR BABIES AND TODDLERS—VIVVI & BLOOM

Johnson & Johnson recently launched a cleansing gel, lotion, and massage oil under Vivvi & Bloom, their new skin and hair care brand for infants and toddlers. They incorporated input from various millennial and Generation Z parents and caregivers to create products based on consumer preferences that streamline their skincare routines.

 More information: <https://www.globalcosmeticsnews.com/johnson-johnson-launches-new-skin-and-hair-care-brand-for-babies-and-toddlers-vivvi-bloom/>

MICELLAR WATER: SKINCARE BENEFITS AND USES

According to Dr. Aneesha Ahmad, micellar water can be used on people of all skin types to remove dirt, oil, and sweat without excessive dryness or irritation. It can also clean clogged pores, which helps prevent acne and blemishes. Dr. Ahmad suggests using micellar water as the first step in a skincare routine.

 More information: <https://patient.info/news-and-features/micellar-water-skincare-benefits-and-uses>

DOUBLE CLEANSING METHOD EXPLAINED: SHOULD YOUR PATIENTS TRY IT?

Double cleansing entails washing the face twice—first with an oil-based cleanser followed by a water-based cleanser. However, dermatologist Dr. Jane Wu explains that double cleansing may lead to dryness, irritation, and impairment of the skin barrier for most skin types. Dr. Wu suggests that patients should first use micellar water to remove makeup, if necessary, and then wash with a gentle cleanser.

 More information: <https://health.clevelandclinic.org/double-cleansing-explained/>

SHOULD PATIENTS CLEANSE OR EXFOLIATE FIRST?

According to this Medical News Today article, patients should exfoliate before cleansing, as it aids in the removal of dead skin cells and is gentler on the skin. Exfoliation should only be done once or twice per week since it is abrasive. For patients who can tolerate exfoliants, cleansing before using chemical exfoliants, which slowly dissolve dead skin cells, can prevent deeper penetration of dirt or makeup.

 More information: <https://www.medicalnewstoday.com/articles/do-you-cleanse-or-exfoliate-first>

SKIN CARE TIPS FOR MALE PATIENTS

When it comes to skin care, men have traditionally kept it simple. However, more men are now pursuing healthier, younger-looking skin, making it a great time for men to evaluate their skin care routine. In a video designed specifically for male patients, the AAD offers tips on proper skin care.

 More information: <https://www.aad.org/public/everyday-care/skin-care-basics/care/skin-care-for-men>

IS SODIUM LAURETH SULFATE BAD FOR SKIN?

Although sulfates in cleansers, such as sodium lauryl sulfate, can strip lipids from the skin barrier and cause irritation, sulfate-based cleansers are not necessarily bad for the skin. Cleansers with sodium laureth sulfate, which is gentler and less likely to irritate the skin, can be effective for some patients. Cleansers with sodium lauryl sulfate can be useful for patients with excessively oily skin as well.

 More information: <https://www.sciencebecomesher.com/is-sodium-laureth-sulfate-bad-for-skin/> **HT**

RESEARCH BITE: Effects of four soaps on transepidermal water loss and erythema index

The authors compared the impact of creamy, glycerin-containing, syndet, and traditional alkaline soaps on the skin by conducting four-hour patch tests. Transepidermal water loss significantly increased 24 and 72 hours after patch removal for alkaline and creamy soaps and alkaline soap, respectively. Twenty-four and 72 hours after patch removal, there was a decreasing trend in erythema for syndet, glycerin, and creamy soaps; there was a significant decrease for creamy soap after 72 hours, suggesting that it had a protective effect on the skin.

Source: Khosrowpour Z, Ahmad Nasrollahi S, Ayatollahi A, et al. Effects of four soaps on skin trans-epidermal water loss and erythema index. *J Cosmet Dermatol.* 2019;18(3):857–861. **HT**



RESEARCH BITE: Designing cleansers for the unique needs of baby skin

The skin of adults and infants varies—infants have, for example, a thinner stratum corneum, lower concentration of natural moisturizing factors (NMFs), and higher transepidermal water loss (TEWL). As such, cleansers for infants should contain fewer total surfactants. To increase gentleness, infant cleansers should have fewer anionic surfactants and greater amphoteric and nonionic surfactants to create larger micelles, which thus reduces surfactant aggressiveness.

Source: Walters RM, Fevola MJ, LiBrizzi JJ, Martin K. Designing cleansers for the unique needs of baby skin. *Cosmet Toiletries.* 2008;123(12):53–60. **HT**



Digital Resource Center

Upcoming Educational Events and Digital Resources Related to Skin Health

In the digital edition, click  to visit meeting website or for more information.

Upcoming Conferences/Events



31ST EADV CONGRESS
September 7–11, 2022
Milan, Italy
 www.eadv.org



DERMATOLOGY WEEK
September 14–17, 2022
Online only
 www.dermatologyweek.com/



MAUI DERM NP+PA FALL
September 19–21, 2022
Nashville, Tennessee
 www.mauiderm.com



FALL CLINICAL 2022
October 20–23, 2022
Las Vegas, Nevada
 www.fallclinical.health

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Patient Resources



WATCH: Polymeric Cleansing Technology

This video provides a detailed look into how polymeric cleansing technology works compared to other cleansers.

 Access here: <https://www.neutrogenamd.com/cleansing/hmp-in-action>



READ: NeutrogenaMD—Dedicated to Dermatology Professionals

This site provides a host of resources for healthcare professionals to share with their patients, including a complete guide to cleansers, what to do about sensitive skin, videos explaining the science behind polymeric cleansing technology, and a variety of products that patients can get over the counter.

 Access here: <https://www.neutrogenamd.com/cleansing/hmp>

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