# The Dermatology Digest<sup>®</sup>

September/October 2024 Supplement TheDermDigest.com

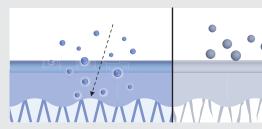
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# Innovations. in Treating Transitional Skin

September/October 2024 Supplement

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#### SMOOTH TRANSITIONS

The latest thinking on treating transitional skin, including adult acne and the signs of pre-aging

By Denise Mann, MS

Featuring: Hilary Baldwin, MD, Patricia K. Farris, MD, Cheri Frey, MD, Kavita Mariwalla, MD and Joshua Zeichner, MD

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*The Dermatology Digest*<sup>®</sup> provides actionable print and digital content for practicing dermatologists, dermatologic surgeons, and health care providers. The publication offers exclusive, front-row access to top-tier dermatology conferences, allowing readers to apply what they learn from the podium to their practice.

Published quarterly, the print edition distills cutting-edge learning into digestible and timely, practice-enhancing information. Coverage areas include clinical practice, regulatory news and updates, practice management tips, and new products. Our primary goal is educating for improved patient outcomes.

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# **Smooth Transitions**

The latest thinking on treating transitional skin, including adult acne and the signs of pre-aging

#### By Denise Mann, MS

The tumultuous tween and teen years are often associated with acne breakouts, and our late 30s to early 40s are traditionally believed to usher in fine lines, wrinkles, and other signs of aging on skin, but there is a transitional period in between these ages and stages where skin and skin care needs begin to change.

#### What Is Transitional Skin?

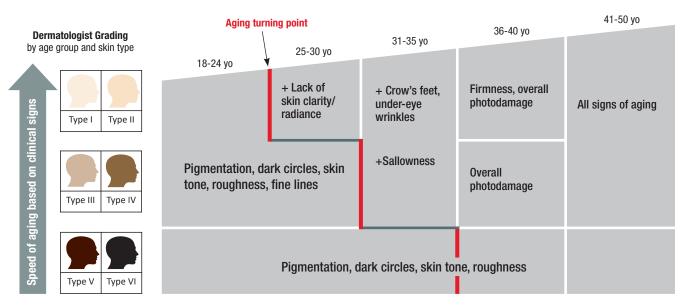
"Between the ages of 20 and 35, the skin undergoes a transition," says Joshua Zeichner, MD, Director of Cosmetic and Clinical Research in Dermatology at Mount Sinai Hospital in New York City, NY. "Under the age of 25, the biggest concerns women usually have with their skin are excess oil and acne breakouts. After the age of 30, fine lines and wrinkles begin to appear, and dark spots from the sun also begin to develop."

As the understanding of the unique characteristics of transitional skin advances, dermatologists are increasingly able to address these concerns with at-home skin care regimens, including gentle cleansers, moisturizers to preserve the skin barrier, and sunscreen, with some overthe-counter interventions pulling double duty.

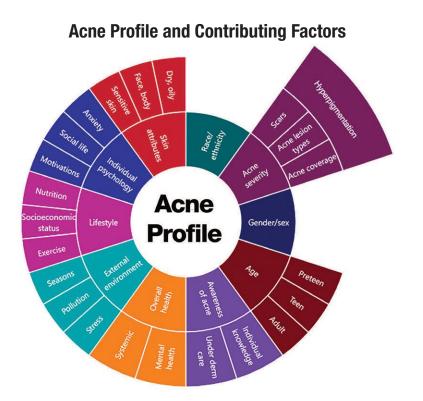
"We hope that acne stops at puberty, but that doesn't always happen," says Hilary Baldwin, MD, Medical Director of the Acne Treatment & Research Center in Morristown, NJ. "Women continue to have acne decades after their teenage years."

The adult acne lesions may look different and have a different distribution pattern, she says. "We see fewer comedones and more inflammatory lesions that are very deep-seated and may even hurt," she says. "There is less T-zone involvement and more lesions around the lower face, neck, and jaw."

These breakouts in adult women usually are



### Signs of Aging Increase as Early as 25



worse around the menstrual cycle because of fluctuations in hormones, adds Dr. Zeichner.

This is around the same time folks are hit with the first signs of aging skin. Just shy of 60% of Gen Z members, who are currently aged 12 to 27, reported that they first started to have aging concerns at 23, according to a 2023 Mintel Facial Skincare study.<sup>1</sup>

And they're on to something. Clinical, instrumental analysis and biopsies show that aging starts as early as 25 across all genders/skin types and begins underneath the skin's surface.

Some pre-aging signs include loss of radiance/ glow, freckles, uneven skin tone, undereye dark circles, forehead lines, and laugh lines.

#### **All Hail Collagen**

"Collagen and elastin start to decline in the late 20s and early 30s, and after that, you lose about 1% of your collagen yearly," says Patricia K. Farris, MD, a dermatologist at Sanova Dermatology in Metairie, LA.

"When you lose collagen and elastin, your skin begins to sag and often fine lines appear on the surface of the skin, and the skin becomes less supple and loses its 'bounce," says Cheri Frey, MD, a dermatologist and an Assistant Professor of Dermatology at Howard University in Washington, DC.

Gen Zers aren't going to take this lying down. They're craving prevention, with their online searches for skin care products that help put the brakes on signs of aging surging more than 30% since 2012, according to the Mintel Facial Skincare 2023 survey.<sup>1</sup> And they also consult TikTok for tips on boosting collagen.

"Younger and younger women come to my practice asking for advice on preventing the signs of aging," says Dr. Frey. "They understand that prevention is very effective and often less costly than treating fine lines and wrinkles once they appear."

Innovations in ingredients and science in treating the very early signs of collagen and elastin degradation are helping dermatologists meet these patients where they are to preserve and build upon the foundations of youthful skin.

Extracellular (ECM) proteins are critical for aging skin health integrity. Collagen is the most abundant of all these proteins.

"Boosting collagen requires a comprehensive

#### Featuring:



HILARY BALDWIN, MD is the Medical Director of the Acne Treatment & Research Center in Morristown, NJ



PATRICIA K. FARRIS, MD is a Clinical Assistant Professor of Dermatology at Tulane University School of Medicine in New Orleans, LA



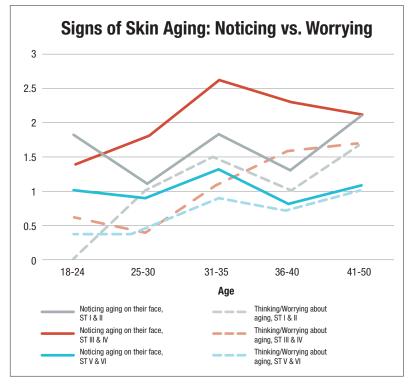
CHERI FREY, MD is a Dermatologist and Assistant Professor of Dermatology at Howard University in Washington, DC



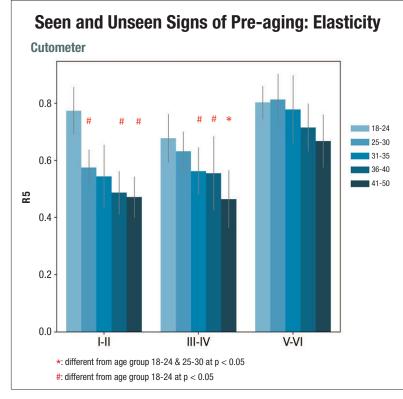
KAVITA MARIWALLA, MD is the Founder of Mariwalla Dermatology in West Islip, NY



JOSHUA ZEICHNER, MD is the Director of Cosmetic and Clinical Research in Dermatology at Mount Sinai Hospital in New York City, NY



Consumers perceive early signs of aging as skin concerns, not aging. ST: Skin Type



There is a significant decrease of skin elasticity with age, particularly with Skin Types 1-1V.

approach that includes cosmeceuticals, nutraceuticals, and in-office procedures," Dr. Farris says.

Enter patented micro-peptide technology.

"Studies have demonstrated that the patented micro-peptide technology boosts important extracellular matrix components, including pro-collagen, elastin, decorin, fibronectin, and hyaluronic acid," Dr. Farris says. "These molecules are essential for maintaining the structural integrity of the dermis and will help maintain skin youthfulness in the pre-aging population as well as soften lines and wrinkles and improve facial contour."

The patented micro-peptide also has antiinflammatory activity. "We know that inflammation contributes to skin aging or so-called 'inflammaging," she says.

"A lot of people are acutely aware that collagen starts to decrease in the 20s and they seek our advice on how can they replace it, hold on to it or preserve collagen," adds Kavita Mariwalla, MD, a dermatologist in West Islip, NY.

"The decorin and fibronectin stabilize the collagen you have, The patented micro-peptide technology stimulates fibroblasts to produce collagen and elastin," Dr. Mariwalla explains. "Not all peptides are created equally, and this technology gets through the outer layer of the skin.

The net result? "Your bank account of collagen grows," she says.

"You want to build up as much healthy collagen as you can while you can," adds Dr. Frey.

Lifestyle changes also help bank collagen. "To preserve collagen, avoid sun exposure, pollution, and cigarette smoke," Dr. Farris says.

The sun remains the No. 1 collagen-depleting aggressor, and cell culture studies show that younger skin is more reactive to UV.

"Daily use of sunscreen with an SPF of at least 30, regardless of climate and skin tone, is essential but must be used in combination with other sun protecting strategies, including wearing broad-brimmed hats, sun protective clothing, and UV protecting glasses," Dr. Farris says.

This message may not be resonating with Gen Z. According to a survey by the American Academy of Dermatology, just 37% say they use sunscreen— and only when nagged by other people.<sup>2</sup>

Treating transitional skin also involves minimizing acne breakouts.

First things first, says Dr. Zeichner. "I tell patients in this age group to address one issue at a time. If that issue was acne, then I like to get the face clear before adding other ingredients related to aging."

He commonly recommends salicylic acid cleansers because they provide both anti-acne and anti-aging effects.

Many people with transitional skin also experience dryness/flaking that comes with prescription acne treatments.

"The newest cleansers use advanced technologies that minimize disruption of the skin barrier and actually maintain skin hydration while removing soiling from skin," Dr. Zeichner adds. Moisturizers also soothe dryness caused by acne treatments, he adds.

Retinol is another ingredient that helps with acne, minimizes post-acne dark marks, and reduces fine lines and wrinkles. Younger skin is more responsive to retinol-based treatments.

Alpha hydroxy acids (AHAs), beta hydroxy acids (BHAs), and polyhydroxy acids (PHAs) are exfoliating ingredients that enhance texture and brightness by controlled exfoliation of the outermost stratum corneum. "They make skin look and feel better, brighten texture, and enhance radiance," says Dr. Baldwin.

The latest trend in treating acne is the use of patches that cover lesions and create an optimal healing environment. "Acne patches are a great option if you have red, angry pimples or pusfilled pimples. Not only do they absorb excess fluid, but they help you keep your fingers off the skin so you don't pick," agrees Dr. Zeichner.

#### **REFERENCES:**

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#### WATCH NOW



Barbara Green, RPh, MS, the Head of Global Upstream Research and Skin Health & Beauty at Kenvue, explains more about pre-aging and the unique skin care needs associated with transitional skin.



Kenvue's Barbara Green breaks down the science supporting patented micro-peptide technology.

#### A Snapshot of the Latest OTC Acne Solutions



# Ask the Expert

Collagen powders, collagen liquids, collagen pills, or collagen-enriched food promise to re-up supply from the inside out, but do they really work?

"Ingesting collagen presumes that it will be converted into something bio-available that will be used by the skin. It is not clear to me that that is a straightshot path," says Dr. Mariwalla. "We do know that people who take collagen supplements report feeling better, but this could be a placebo effect."

# Meeting Highlights

ach year, the American Academy of Dermatology (AAD) meeting brings researchers, physicians, and members of the industry together to share information and learn about the latest advances in dermatology, including breakthroughs in treating acne and improving the signs of aging skin.

Summaries of key abstracts are included here.



### Wildfires Linked to Increased Clinic Visits for Acne

The frequency with which wildfires are occurring around the world has more than doubled during the past two decades, and now, new research links short-term exposure to wildfire-associated PM2.5 exposure with increased acne vulgaris clinic visits.

For the retrospective cohort study, researchers assessed dermatology clinic visits for acne vulgaris at an academic tertiary care center in San Francisco before, during, and after the California Camp Fire in November 2018, which burned for two weeks and occurred 175 miles away. They compared these visits with patient visits during the same period in 2015 and 2016, when wildfires were absent, using three metrics of wildfire-associated air pollution: PM2.5 concentration, fire status, and satellite-based smoke plume density scores.

A 10µg/m3 increase in weekly PM2.5 concentration was associated with a 2.3% increase in adult acne clinic visits. During the Camp Fire, acne visits for adults were 1.2-fold the rate of non-fire weeks when adjusted for temperature, humidity, age, and clinic volume, the study showed.

"With the worldwide increasing frequency and intensity of wildfires, these findings can inform patient counseling and management," the study authors conclude. "No significant associations were found across exposure metrics for pediatric patients."

Access the abstract here: https://eposters.aad.org/abstracts/52052

### Putting TikTok Skincare Trends Under the Microscope

When researchers sought to evaluate the clinical evidence behind some TikTok skincare trends, they found that just 25.8% of TikTok videos on skincare trends come from board-certified dermatologists.

Here's a snapshot of some of their findings:

#### Gua Sha

Gua sha is a traditional Chinese medical practice involving skin scraping with a coin or spoon. It gained popularity in the U.S. by using polished jade stones. Advocates claim this practice reduces inflammation, decreases wrinkles, and improves blood circulation.

They found that only a small percentage of websites supporting these claims cited scientific studies and rarely quoted dermatologists, and there are no studies that suggest gua sha can increase the firmness or tone of facial skin.

#### **Facial Taping**

Facial taping involves the use of adhesive bandages to create the appearance of a facelift. Social media users suggest that overnight taping limits facial expressions during sleep and reduces wrinkles. There is no evidence that supports longterm wrinkle reduction or prevention through facial taping. The effects are temporary and only last while tape is applied. Risks include contact dermatitis, erythema, and local irritation due to adhesive, with the periorbital skin being particularly vulnerable.

#### **Skin Cycling**

Skin cycling is a four-day evening skincare routine that includes a chemical exfoliant and a retinol, followed by two nights of recovery. While there are research studies on the effectiveness of each product in this routine, there are no studies on the concept of skin cycling.

"Board-certified dermatologists' educational videos on TikTok are 50.1% more likely to be reliable than other sources, highlighting their crucial role in providing accurate information," they conclude. "Encouraging dermatologists to use TikTok for education and engagement is essential."

See page C3 for more on TikTok trends.

Access the abstract here: https://shorturl.at/48srG

### Hydrocolloid Patch for Facial Acne Demonstrates Safety and Efficacy

Hydrocolloid patches are all the rage for treating facial blemishes with good reason: They work well and quickly, a new study shows.

These ultra-thin, non-medicated blemish patches provide an optimal healing environment to help protect pimples from being picked.

In a two-week study, individuals aged 12-35 with at least two inflammatory lesions, one capable of being extracted (popped), were randomized in a 2:1 ratio to treatment (gentle wash and Neutrogena Stubborn Acne Hydrocolloid Patch) or control (gentle wash) groups.

Overall, 41 people completed the study. Hydrocolloid patches showed statistical improvements in popped pimple General Wound Appearance scores on Days 1 and 4. Clinical wound and acne grading results also demonstrated significant improvements in smoothness, crusting/scabbing, erythema, size (diameter), elevation, and dryness/ scaling for the popped pimple at different time points throughout the study.

The closed pimples had a significantly greater reduction in size on Day 4 and significantly less dryness/scaling on Days 2 and 7. For popped and closed pimples, study participants perceived a noticeable decrease in size, texture, and redness within a day compared with those who did not use the patches.

The bottom line? "Non-medicated hydrocolloid patches are an effective option for acne sufferers looking for fast, overnight results and provide a favorable experience," researchers report.

Access the abstract here: https://eposters.aad.org/abstracts/50551

# Deciphering Biomarkers of Pre-aging

Age-related alterations in lipid metabolism and enzymes may lead to disparate lipid profiles in pre-aging and aging skin, new research in Chinese females suggests.

For the trial, researchers analyzed lipids in the skin microflora of 164 healthy Chinese female subjects. They used DNA extraction together with metagenome sequencing to establish microbial diversity. Additionally, they used D-squame sampling to collect skin metabolites before metabolomics were characterized by untargeted metabolomics.

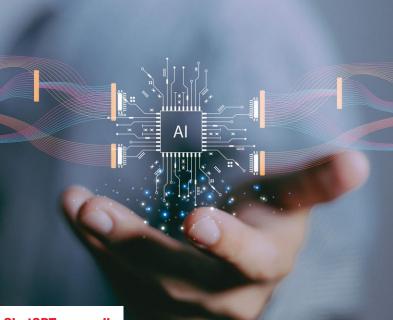
Differentiation analysis helped identify the microbial species and lipid abundance between the young subjects (ages 18-30) and older subjects (ages 31-60), and correlation analysis was performed on young subjects to determine the chronological age-related microbiome and lipid biomarkers of pre-aging.

Younger individuals showed a higher prevalence of *C. acnes*, whereas older individuals tended to have a higher abundance of *M. osloensis*. There was a statistically significant association between *C. acnes* and chronological age in the whole age group. Ceramides, glycolipids, and diglyceride lipids were statistically significantly higher in the younger group compared to the older group based on an orthogonal partial least squares discriminant analysis (OPLS-DA) model.

Out of 1,117 lipids analyzed, 57 small lipid molecules were found to significantly associate with chronological age. Specifically, Cer(t36:2), TG(4:0\_18:1\_18:2), and Cer(t18:0\_18:2) were significantly higher, and SM(d36:1) was found to be significantly depleted in the younger age group. Board-certified dermatologists' educational videos on TikTok are

50,1%

MORE LIKELY TO BE RELIABLE THAN OTHER SOURCES



ChatGPT generally provided accurate information, with average accuracy scores of 4.27/5 for acne and 4.00/5 for AD questions.

This suggests that age-related alterations in lipid metabolism and enzymes can lead to disparate lipid profiles between pre-aging and aging skin.

"Our data revealed the differences and progression of the skin microbiome and metabolomics, which changes with aging, and these findings lay the groundwork for personalized anti-aging interventions specifically targeting the pre-aging phase," the researchers conclude.

Access the abstract here: https://shorturl.at/8ke64

### Skin Aging Concerns: How Do Men and Women Really Feel?

Nearly one-third of adults are concerned about the signs of aging on their skin, but there has been limited research on how these concerns vary by gender until now.

In an online survey of 1,434 male and female adults, both men and women were unhappy about their aging skin. More women reported negative emotions caused by aging skin, and aging skin impacted the social/work lives of men and women similarly, the study showed.

"There is a need for targeted interventions for men and women to promote inclusive aging standards," the researchers report. "Further studies are needed to fully elucidate the psychosocial impact of age-related skin changes."

Access the abstract here: https://tinyurl.com/fvvc8ehc

# Putting ChatGPT to the Test With Acne

What causes acne?

If you ask ChatGPT, you will likely get an accurate answer. In fact, the generative AI chatbot does pretty well when asked questions about acne and atopic dermatitis (AD), according to new research.

For the study, researchers asked the subscription-free ChatGPT-3.5 model 15 common questions about acne and atopic dermatitis. Two board-certified dermatologists independently evaluated the accuracy and completeness of responses.

When both dermatologists assign the same rating, it is considered final. If their ratings differed, a third dermatologist's input acted as a tiebreaker. In cases of unanimous disagreement, the raters collaborated to reach a consensus rating.

Additionally, the researchers assessed the readability of ChatGPT-generated responses using the standardized Flesch Reading Ease Score (FRES). Ultimately, the study evaluated the utility of ChatGPT for addressing patient inquiries about acne and atopic dermatitis, which may provide valuable insights for improving patient education and healthcare decision-making.

ChatGPT generally provided accurate information, with average accuracy scores of 4.27/5 for acne and 4.00/5 for AD questions, the study showed.

Responses were also largely comprehensive, with mean completeness scores of 2.67/3 for acne and 2.33/3 for AD questions. Average readability assessed by FRES was 40.49 and 31.91 for acne and AD questions, respectively, corresponding to college-level comprehension.

This exceeds the American Medical Association's recommended sixth-grade reading level for patient materials and may potentially disadvantage patients with lower literacy, researchers concluded. In addition, information gaps were present, including the omission of spironolactone as an acne treatment.

Access the abstract here: https://eposters.aad.org/abstracts/53202

# Journal Review

# | ighlights of recently published research | on acne and pre-aging

### Can Omega-3 Fatty Acid Intake Affect Acne Severity?

Following the Mediterranean diet and taking omega-3 fatty acid supplements can help reduce inflammatory and non-inflammatory acne lesions and improve quality of life, a new study in the *Journal of Cosmetic Dermatology* shows.

In the study of 60 individuals with mild to moderate acne, 98.3% of participants had omega-3 fatty acid deficits at the start of the study. Acne severity lessened significantly in those who reached target omega-3 fatty acid levels during the study.

"Lifestyle interventions, including dietary recommendations, should not be considered in opposition to prescription medications, but rather as a valuable adjunct to any modern acne treatment plan," says study author Anne Guertler, MD, of the Ludwig Maximilian University of Munich, Germany, in a news release. "Future studies should build on the foundation laid by our current findings in a randomized, placebo-controlled design to improve dietary recommendations for acne patients."

For the study, participants adhered to a Mediterranean diet, incorporating oral algae-derived omega-3 fatty acid supplementation (600 mg docosahexaenoic acid or DHA/300 mg eicosapentaenoic acid or EPA week 1–8, 800 mg DHA/400 mg EPA week 8–16, 600 mg docosahexaenoic acid [DHA] and 300 mg eicosapentaenoic acid [EPA] weeks 1-8, and 800 mg DHA and 400 mg EPA weeks 8-16). At four visits, blood EPA/DHA levels were tracked using the HS omega-3 index (EPA/DHA [%] of total identified fatty acids in erythrocytes; target 8%–11%, deficit <8%, severe deficit <4%), alongside clinical assessments and standardized questionnaires.

At baseline, 98.3% of patients had an EPA/DHA deficit, with the mean HS omega-3 index rising from 4.9% at Visit 1 to 8.3% at Visit 4. There were

objective improvements in both inflammatory and non-inflammatory lesions. While self-reported appearance worsened in four patients, overall quality of life improved particularly in folks with acne papulopustulosa.

**TO READ MORE:** Guertler A, Neu K, Lill D, et al. Exploring the potential of omega-3 fatty acids in acne patients: a prospective intervention study. *Cosmet Dermatol.* 2024. Epub ahead of print. doi:10.1111/jocd.16434. https://onlinelibrary.wiley.com/doi/10.1111/jocd.16434

### AAD Updates Acne Treatment Guidelines

New acne treatment guidelines from the American Academy of Dermatology (AAD) strongly recommend benzoyl peroxide, topical retinoids, topical antibiotics, and oral doxycycline.

"These guidelines provide important updates to the 2016 AAD acne guidelines, including discussion of new topical medications such as clascoterone and new systemic treatments such as sarecycline," John S. Barbieri, MD, MBA, co-chair of the AAD's Acne Guideline Workgroup and a dermatologist and epidemiologist at Brigham and Women's Hospital in Boston, MA, tells *The Derm Digest*<sup>®</sup>.

The present guidelines were developed with a new process called Grading of Recommendations, Assessment, Development, and Evaluation (GRADE), which is a rigorous approach to translating evidence into practice, he says.

Published in the *Journal of the American Academy of Dermatology*, the new guidelines include 18 evidence-based recommendations and five good practice statements.

Strong recommendations were made for the use of the following:

• Topical benzoyl peroxide to reduce the number of acne-causing bacteria on the skin.

In the study of 60 individuals with mild to moderate acne,

OF PARTICIPANTS HAD OMEGA-3 FATTY ACID DEFICITS at the start of

the study.

• When managing acne with topical medications, the guidelines recommend combining multiple different treatment types, as this can lead to

good practice statements:

inflammation.

better results.
The guidelines recommend limiting the use of oral antibiotics when possible to reduce the development of antibiotic resistance and other antibiotic-associated complications.

• Topical retinoids (e.g., adapalene, tretinoin,

and reduce inflammation.

noids, or the above antibiotics.

tazarotene, tazarotene) to help unclog pores

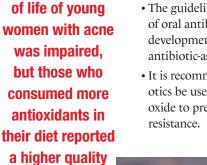
 Oral antibiotics, such as oral doxycycline and topical antibiotics, to reduce the number of

acne-causing bacteria on the skin and lessen

· Combinations of topical benzoyl peroxide, reti-

The multidisciplinary workgroup also issued five

• It is recommended that topical and oral antibiotics be used simultaneously with benzoyl peroxide to prevent the development of antibiotic resistance.



The quality



- For patients with larger acne bumps, the guidelines recommend injectable corticosteroids as a potential option for more rapid relief of inflammation and pain.
- For patients with severe acne or for patients who have failed standard treatment with oral or topical therapy, the guidelines recommend isotretinoin.

Additionally, the guidelines provide conditional recommendations that apply to most patients but may differ depending on individual patient factors.

- Topical clascoterone, which addresses hormonal causes of acne
- Topical salicylic acid to unclog pores and exfoliate the skin
- Topical azelaic acid to unclog pores, kill bacteria, and fade dark spots that may continue when acne spots clear
- Oral minocycline or sarecycline to reduce the number of acne-causing bacteria on the skin and lessen inflammation
- Hormonal therapies such as combined oral contraceptives or spironolactone to address hormonal causes of acne

Available evidence was insufficient to develop recommendations for procedures such as chemical peels, laser- and light-based treatments, and microneedling, as well as for dietary changes or alternative therapies such as vitamins or plantbased products. Additionally, there was a conditional recommendation against adding broadband light and intense pulsed light to treatment with adapalene 0.3% gel.

"We are able to offer our patients with acne more options than ever before as we work to address their concerns and determine the most effective treatment plan possible," says Dr. Barbieri. "These guidelines can help dermatologists stay up to date with the latest evidence and expert opinion on acne management."

TO READ MORE: Reynolds R, Yeung H, Cheng CE, et al. Guidelines of care for the management of acne vulgaris. *J Am Acad Dermatol.* 2024;90(5):1006.e1-1006.e30 https://www.jaad.org/article/S0190-9622(23)03389-3/fulltext#%20

### Eating More Antioxidants May Improve Quality of Life for Young Women With Acne

Consuming more antioxidants may improve quality of life among young women with acne, a new study in *Nutrients* suggests.

The study included 165 young women with acne who completed three-day food diaries and the Diet 6.0 program. Researchers used the new DAQI (dietary antioxidant quality index) to measure  $\beta$ -carotene, vitamin C, vitamin E, selenium, iron, zinc, copper, manganese, dietary antioxidant capacity, lignans, polyphenols, and phytosterols as well as the total antioxidant capacity of the diet. The antioxidant potential of the diet and the content of polyphenols, phytosterols, lignans, and selenium were calculated based on how often they ate individual food products and on available databases.

The main takeaway? The quality of life of young women with acne was impaired, but those who consumed more antioxidants in their diet reported a higher quality of life than their counterparts who ate fewer. The diet reduced the risk of acne's impact on quality of life by approximately 30-32% and the risk of depression by 33%, the study showed.

People with a higher DAQI had a healthier lifestyle than those with a lower score, and a higher DAQI was associated with less severe acne.

Exactly how antioxidants may help boost quality of life among people with acne isn't fully understood. "Inflammation caused by oxidative stress of the pilosebaceous unit and oxidation of sebum initiates the development of acne," conclude study authors from the Medical University of Białystok in Białystok, Poland. "A well-composed diet is a source of various antioxidants (vitamins, minerals, polyphenols) that may support the treatment of acne and improve quality of life."

**TO READ MORE:** Zujko-Kowalska K, Jankowska B, Zu ME. The antioxidant power of a diet may improve the quality of life of young women with acne vulgaris. *Nutrients*. 2024;16(9):1270. https://www.mdpi.com/2072-6643/16/9/1270

## Topical 0.1% Stabilized Bioactive Retinol Takes On Aging Skin With Minimal Irritation

Stabilized retinol at 0.1% in skincare products improves the signs of photoaging without causing major irritation, a new study shows.

In the integrated analysis of six vehicle-controlled studies, 237 women received daily treatment with retinol, while 234 received vehicle alone. Dermatologists assessed overall photodamage, wrinkles on the forehead, cheeks, and undereye area, crow's feet wrinkles and fine lines, lack of even skin tone, and brown spots at baseline and Weeks 4, 8, and 12 using a numerical scale.

Retinol induced greater improvements from baseline in all signs of photoaging compared with vehicle, with changes seen as early as week four and continuing through week 12. Few participants experienced irritation, and those who did reported only mild to moderate and transient erythema and skin scaling/peeling.

**TO READ MORE:** Farris P, Berson D, Bhatia N, et al. Efficacy and tolerability of topical 0.1% stabilized bioactive retinol for photoaging: A vehicle-controlled integrated analysis. *J Drugs Dermatol.* 2024 1;23(4):209-215. https://pubmed.ncbi.nlm.nih.gov/38564380/

# Acne Patients Face Stigma at Work and Play

Individuals with acne face social and Professional stigma, and folks with darker skin tones and more severe acne are likely to face greater stigma, according to a study in *JAMA Dermatology*.

"Our findings show that stigmatizing attitudes about acne can impair quality of life, potentially by affecting personal relationships and employment opportunities," says corresponding author John Barbieri, MD, MBA, a dermatologist at Brigham and Women's Hospital in Boston, MA. "Acne is often wrongly perceived as merely a cosmetic issue. It's important that people with this medical problem get access to treatment, just like any other condition."

For this study, Dr. Barbieri and his team obtained stock portraits of four adults of light or dark skin

Our findings show that stigmatizing attitudes about acne can impair quality of life, potentially by affecting personal relationships and employment opportunities. tones, including males and females. The researchers digitally altered these pictures to create two additional versions of each with mild and severe acne, resulting in a total pool of 12 portraits. They then performed a cross-sectional internet survey of 1357 participants, who were randomly shown one of the 12 images and asked about stigmatizing attitudes about the pictured individual. The answer scores for images with acne were compared with the corresponding original image without acne as baseline.

Participants were less likely to want to be friends, have close contact, or post a photograph on social media with individuals with severe acne compared to those without acne, the study showed. What's more, participants reported a greater desire to socially distance themselves from individuals with acne, particularly if the pictured individual had a darker skin tone.

Respondents were more likely to agree with stereotypes about individuals with severe acne, tending to perceive them as unhygienic, unattractive, unintelligent, and untrustworthy. This stereotype endorsement was also higher in individuals with darker skin.

Participants with past or current acne had less stigmatizing attitudes, and only 26.4% believed that acne was a cosmetic issue. Most agreed that acne does not affect only teenagers.

The study did have its share of limitations. Researchers could not control for comparisons between images with differences in sex or skin tone (for example, a female with light skin tone with severe acne versus a male with dark skin tone and



# **Get Involved**

**Miles for Melanoma** is a nationwide series of 5K runs/walks that allows participants to support and raise funds for the Melanoma Research Fund.

CHECK OUT THE Events Near You.



no acne), so results regarding differences by skin tone could be due to other factors and should be interpreted cautiously.

The survey population was mostly white and highly educated, limiting the generalizability of the results.

**TO READ MORE:** Shields A, Nock MR, Ly S, et al. Evaluation of stigma toward individuals with acne. *JAMA Dermatol.* 2024;160(1):93-98. https://pubmed.ncbi.nlm.nih.gov/38055249/

### **Prejuvenation Content on TikTok: Is It Trustworthy?**

Prejuvenation is a hashtag on TikTok, but prejuvenation-related content on this popular channel varies widely regarding quality and recommendations, a new study in *Aesthetic Surgery Journal* suggests.

For the study, investigators searched TikTok for 13 hashtags of popular colloquial terms associated with prejuvenation treatments and analyzed the top 25 videos meeting the inclusion criteria for each hashtag. Videos considered educational were analyzed using the validated modified DISCERN score and the Patient Education Materials Assessment Tool scales. The creator's prejuvenation recommendations were recorded.

A total of 303 videos amassed more than 61 million views, 3,957,091 likes, 24,455 comments, and 71,697 shares. Nonphysicians posted the most videos and had significantly higher median views, likes, comments, and engagement than physician videos.

Analysis of educational videos showed that most videos supported the use of prejuvenation treatments; 24% were neutral and 8% were opposed to the use of prejuvenation treatments.

"Physician-generated prejuvenation content was more reliable, but distinguishing it from nonphysician content was challenging, underscoring the need for platform-specific verification tools," the study authors conclude.

**TO READ MORE:** Rothchild E, Jung G, Wang F, et al. Prejuvenation: what social media tells us about the rising trend. *Aesthet Surg J.* 2024;44(4):436-443. doi:10.1093/asj/sjad347.

Participants were less likely to want to be friends, have close contact, or post a photograph on social media with individuals with severe acne compared to those without acne, the study showed.

# TikTok Trend Watch

with Joshua Zeichner, MD

or better or worse, many people get skin health and beauty advice from TikTok, an uber-popular social media platform that serves short, snappy videos.

Skincare is one of the hottest topics on TikTok. There are more than 42 million posts on "Skincare Trends 2024" alone.

Here, Joshua Zeichner, MD, Director of Cosmetic and Clinical Research in Dermatology and an Associate Professor of Dermatology at the Mount Sinai Hospital in New York City, weighs in on three recent TikTok trends related to acne and pre-aging.

#### **TIKTOK TREND: TOOTHPASTE AS AN ACNE** SPOT TREATMENT

**WHAT IT IS:** This one has been around for ages and resurfaces on social media every so often as a potential pimple panacea. It involves placing toothpaste on a lesion to clear it up ASAP.

#### **MD VERDICT: DON'T DO IT.**

"Traditionally, toothpaste contained an antimicrobial ingredient called triclosan, which was thought to kill acne-causing bacteria and reduce inflammation," explains Dr. Zeichner. "However, because of the risk of allergic contact dermatitis from triclosan, it has been removed from almost all toothpastes on the U.S. market. Toothpaste may dry out a pimple if you use it, but it is doing so by causing skin irritation rather than any meaningful way of treating acne."

#### TIKTOK TREND: THE "POTATO PIMPLE HACK"

**WHAT IT IS:** Spuds contain vitamin C and salicylic acid, so rubbing slices on your skin should help erase any pimples and cool inflammation.

#### **MD VERDICT: DON'T DO IT.**

"Potatoes are loaded with starches that may help soothe skin inflammation and help absorb oil. They are also a source of vitamin C, so they have been considered a natural treatment for dark spots that pimples leave behind," Dr. Zeichner

says. "However, in the end, it is unlikely to provide any real benefit to acne."

#### TIKTOK TREND: SLUGGING?

WHAT IT IS: Slugging involves slathering your face with an occlusive product as the last step in your evening skincare routine.

#### **MD VERDICT: GO FOR IT.**

"Slugging is a great option for people with dry, irritated, or sensitive skin," says Dr. Zeichner. "While purified petrolatum used in cosmetic formulas may feel heavy on the skin if applied in a thick layer, it should not cause acne breakouts." There is a caveat, he says. "I do not recommend slugging on top of any potentially irritating ingredients like retinol or glycolic acid, as occluding those types of ingredients can increase skin penetration and potentially cause excess irritation."



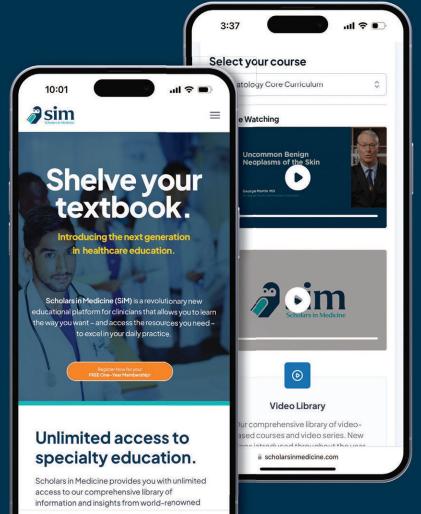
#### **JOSHUA ZEICHNER, MD**

**Director of Cosmetic** and Clinical Research in Dermatology and an Associate Professor of Dermatology at the Mount Sinai Hospital in New York City.

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