

Ask a skin-care expert to name their favorite ingredient (aside from SPF), and nine times out of 10 you'll hear retinoids. The praise stems from more than 30 years of research and clinical trials demonstrating the active's seemingly endless benefits for healthier, more youthful skin. "Like a Chanel purse, I don't think retinoids will ever go out of style," says Hamden, CT dermatologist Mona Gohara, MD. "They are the original, and thus far the most effective collagen builders we have in our cosmetic armamentarium."



## THE TWO TYPES

"When we talk about retinol and retinoids, what the skin is actually using is retinoic acid," explains New York dermatologist Dendy Engelman, MD, noting that all retinoids are derivatives of potent antioxidant vitamin A. "Retinoic acid is extremely effective at communicating with the skin's cells—it has the ability to connect to almost any skin cell receptor site and tell it to behave like a healthy, younger skin cell. Prescription retinoids contain retinoic acid, whereas over-the-counter topicals contain retinol, which converts to retinoic acid in the skin."

## Retinol

Retinol is considered the over-the-counter version of the ingredient and is more commonly found in skin care. "Retinol is the smallest and purest molecule in the vitamin A family and comes in varying strengths, with the most common being 0.25, 0.3, 0.5 and 1 percent," explains cosmetic chemist Ginger King. The limit for OTC retinol is 2 percent, and if you see a higher number on a skin-care product, King says it's because the retinol has been encased in liposomes to help it enter the skin gradually and minimize irritation. "New micronized technology allows retinol to be delivered in little aliquots on the skin, allowing for less irritation, too," adds Dr. Gohara.

New York dermatologist Jody A. Levine, MD says that in general, retinols work more gradually than retinoids due to their molecular structure: "You may notice some differences within a week of use, but it can usually take weeks, even months, before you start seeing results." However, that doesn't mean they aren't effective. "Although they are less potent than other retinoids, retinols are less expensive and still effective in removing clingy dead skin cells and stimulating collagen production, which helps thicken the deep layer of skin and smooth out fine wrinkles," explains San Diego plastic surgeon Larry H. Pollack, MD.

## Retinoids

Retinoids, on the other hand, such as tretinoin, tazarotene, Retin-A, and high-strength adapalene, are the prescription-strength version, which dermatologists often recommend for chronic acne treatment and anti-aging purposes. (Adapalene is available over the counter now in lower strengths, which can be found in acne treatments like Differin Gel.) "Prescription retinoids have a significantly higher concentration of retinoic acid than retinol and it's more readily available for the skin to use," says Dr. Engelman.

Formulated in creams with strengths of 0.025, 0.05 and 0.1 percent, "prescription-strength retinoids work faster and do a more aggressive job to exfoliate the skin and boost collagen production, resulting in more corrective results," adds Dr. Pollack. Those who are pregnant or nursing should avoid using retinol and retinoids, and instead, consider a natural alternative (more on that later). Anyone with highly sensitive skin should consult a physician before using vitamin A derivatives as well.

# 03

## KEY BENEFITS OF RETINOL + RETINOIDS

### 01 They increase cell turnover.

“Retinoids penetrate the dermis—the middle layer of skin—stimulating cellular activity and promoting cell reproduction,” celebrity aesthetician Nerida Joy says. This increase in cell turnover also helps reverse photodamage such as dark spots by expediting the rate at which pigmented cells are removed.

### 02 They boost collagen to smooth wrinkles.

According to Washington, D.C. dermatologist Tina Alster, MD, research shows that vitamin A and its derivatives stimulate the production of collagen, which can boost skin's elasticity and thickness, and improve wrinkles, acne and discoloration. “The remodeling and strengthening of the skin's collagen and elastin fibers also reduces transepidermal water loss (TEWL) from the skin barrier,” adds Dr. Engelman.

### 03 They prevent and treat acne.

Retinoids can help unclog pores and make them appear smaller, as well as keep blackheads at bay. “Retinoids reduce sebum activity by decreasing the enzyme participating in the formation of oil and fat, and thereby reducing blackheads,” explains Joy.

“This anti-comedogenic effect keeps skin free from dead cells, bacteria and sebum buildup.” Dr. Levine often recommends prescription-strength retinoids for acne patients, which she says are more effective than over-the-counter options.





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### Night Shift

Though there are daytime-use retinol products, most experts stand by their “nighttime-only” recommendation. “It’s proven that retinoids break down quickly when exposed to sunlight, thereby rendering them inactive,” says Dr. Alster. “For that reason, it’s best to use a retinol product at night.” Nighttime is also when skin repairs itself. “In general, anti-aging ingredients will be more effective if applied before bedtime,” adds Saddle Brook, NJ dermatologist Fredric Haberman, MD.

Though Dr. Alster says recent studies have clarified the longstanding myth that sunburns are more prevalent when using retinol products—“they are not”—it is still important to be mindful of sun exposure when using them. “Newly exposed skin must be protected!” she stresses. “I advocate the use of a mineral sunscreen because of the risk of irritation or sensitivity to chemical sunscreens.”

## 03 TIPS FOR PROPER APPLICATION

### 01 Ease in.

“Your skin needs to get used to the ingredient,” says Dr. Haberman. “If you don’t experience residual dryness, stinging or redness, then you can increase your frequency.” Dr. Gohara advises patients to start using retinol one time a week for one week, then two times a week for two weeks, and so on. “Some may stick to two times a week while others can work up to seven without incident,” she says, noting that a pea-size amount is enough to cover the whole face.

### 02 Try buffering.

Dr. Levine suggests “buffering,” which is mixing retinol/retinoids with moisturizer to help skin adjust and prevent and reduce irritation. Another way to buffer, which is great for dry and/or sensitive skin: “Layer your retinol or retinoid on top of a hydrating serum, like hyaluronic acid,” adds Joy. Or, try the “sandwich technique,” which is layering the retinoid between a thin base coat of moisturizer and a topcoat of hyaluronic acid serum.

### 03 Mix accordingly.

King says a general rule of thumb is to avoid using anything that could further irritate the skin, such as alpha hydroxy acids (AHAs) or benzoyl peroxide that could lead to over-drying of the skin. “Retinol is fat-soluble and AHAs are water-soluble, so they can actually block each other’s function on the skin,” says Joy. However, vitamin C pairs well with retinol, and many experts suggest using vitamin C in the morning for antioxidant protection, and then retinol at night.

## Natural Alternatives

While retinol continues to be the tried-and-true gold standard—it's one of the most studied skin-care ingredients in history—King says there are many other ingredients coming to the forefront that can "achieve similar results without the undesirable effects." Among them are rosehip seed oil from the seeds of the wild rose, a sea fennel extract called arophia that's found in France, and undoubtedly the most popular of the bunch: bakuchiol. A naturally occurring compound extracted from the Indian babchi plant, "bakuchiol works like retinol but without the irritation," says King. "The ingredient came to fame when UC Davis published a side-by-side clinical study showing bakuchiol and retinol had a similar mechanism in gene expression on the skin."

Dr. Gohara loves the idea of having an alternative that is just as effective, but still considers retinol the gold standard when it comes to collagen production. "That being said, having a potentially less-irritating runner-up is key. I personally like to layer a retinoid and bakuchiol to really get my collagen going!"



The combination of wrinkle-smoothing bakuchiol and skin-energizing olive leaf extract in **philosophy Nature in a Jar Retinol Serum** makes it a double-duty solution for signs of aging. \$59, [ulta.com](http://ulta.com)



### Do I Need a Retinol Eye Cream?

The skin around the eyes is the thinnest on the face, so it's no surprise many people are hesitant to use strong actives like retinoids in the area. However, Dr. Levine says retinol eye creams are safe and beneficial, if the user can tolerate them. "They can often help reduce the appearance of fine lines and wrinkles while giving extra support to your skin, especially in an area that's thin."