



Everything you need to know about using retinol

With new regulations coming in, here’s a quick refresher in what dermatologists consider the gold standard anti-ageing ingredient

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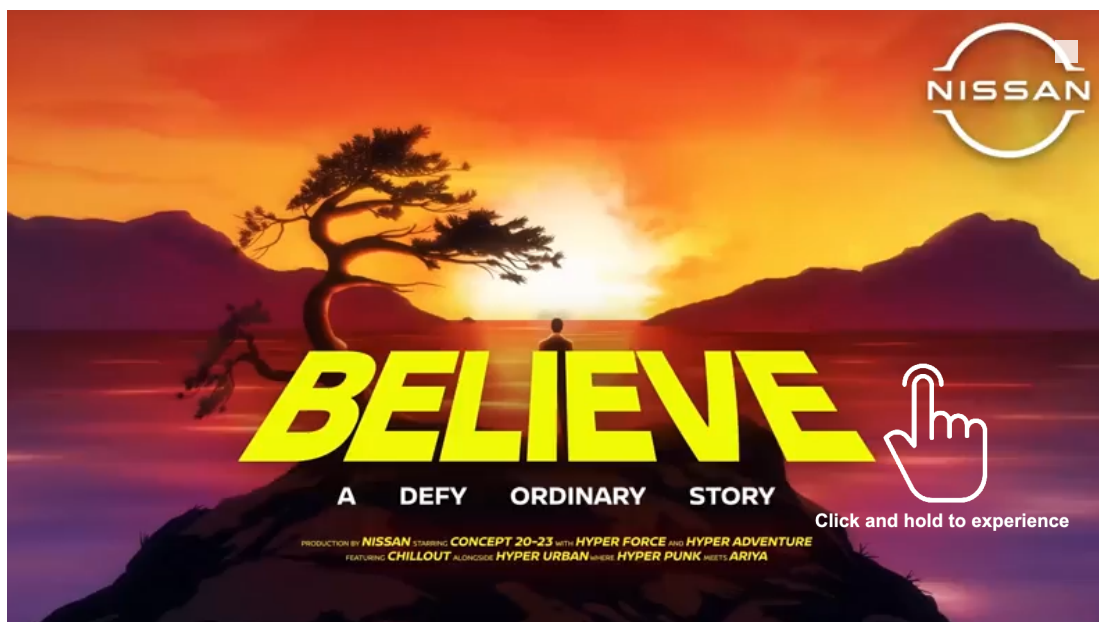
There are few skincare ingredients that are debated as fiercely as retinol. The vitamin A derivative that’s so clever it treats acne and the signs of ageing in equal measure has its share of critics as well as devout followers including Rosie Huntington-Whiteley and Nicole Kidman. New EU regulations which come into force at the end of 2024 will restrict

cosmetic retinoids over 0.3% so a refresher course in what dermatologists consider the gold standard anti-ageing ingredient is due.

What is a retinoid exactly?

Retinol, as it's commonly known, is part of a family of molecules called retinoids, the most powerful being retinoic acid or tretinoin, the topical skin treatment prescribed by dermatologists to clear acne. First given FDA approval in 1971, tretinoin has been scientifically proven to reduce acne scarring and prevent pores from clogging. More generally, it's been shown to have anti-ageing properties by speeding up cell turnover, improving skin tone and diminishing wrinkles (the latter was discovered by accident when acne patients showed a marked improvement in the signs of ageing).

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When news got out that retinoic acid had cosmetic benefits, skincare companies took to their labs to find a consumer-friendly alternative to flog to consumers. The solution was retinol, a gentler iteration that doesn't require a prescription. Since then numerous retinoid solutions in varying strengths have made their way into cosmetic skin creams. But with smarter, less irritating ingredients like peptides gaining popularity, do they still merit your money? And if so, which one is right for you?

The retinoid types

Whereas retinoic acid works directly on the skin cells, retinol and its cousins retinaldehyde, hydroxypinacolone retinoate (HPR) and retinyl esters need to be metabolised and converted into retinoic acid within the skin. The number of conversions it takes to get there determines its efficacy and potency.

Retinolaldehyde or retinal is one conversion away from retinoic acid, pure retinol takes two, whereas retinyl palmitate or propionate require three, thus these tend to be weaker in strength but, as a consequence, less irritating on skin.

Granactive retinol or HPR however, is deemed a clever new retinoid that works directly on the skin's retinoic acid receptors like tretinoin, therefore doesn't require metabolising, but has the same low-irritation characteristics as retinol esters, making it stronger but gentler than retinol. A slight caveat: HPR doesn't have the body of evidence that pure retinol has, making it less favourable with some scientists for that reason.

The hierarchy of retinoids: percentages and dosage

It seems logical to assume that the higher the percentage of retinoid, the better it is at targeting ageing, but the higher the dose, the greater the risk of irritation. Some brands, such as Medik8 and Skinceuticals, carry numerous percentages allowing customers to work their way up as their skin gets used to it.

Dr Mike Bell, the head of skincare science at No7, says that 0.3% pure retinol is the axis point where benefits are effective and the risk of irritation is low – once you exceed this threshold increased sensitivity starts to outweigh the benefits. Just as well the new EU regulations proposing a ban on cosmetic retinoids above 0.3% are on the horizon.

But the amount of retinoid in your skin cream is just one factor, and can be misleading (some brands use sneaky tactics to convince you the percentage is higher than it actually is by labelling their product with a number that refers to the total amount of ingredients in the product, not the percentage of retinoid alone). Dr Stefanie Williams, a specialist in adult acne suggests not obsessing over percentages but rather concentrating on the formulation as a whole, making sure it contains hydrating properties and protective antioxidants while ensuring it's free from silicones that make the formulation feel silky smooth, but as a side effect can clog pores and cause inflammation.

Tackling sensitivity

We've established that retinoids aren't all equal and yet they often get bundled into one sensitising bunch. "There's a misunderstanding that retinoids are irritating on everyone's skin but a severe reaction usually only occurs when the active ingredient is misused," suggests Dr. Williams.

Williams recommends tapering vitamin A into your routine slowly, beginning with a low dose retinoid product twice a week at night for two weeks then building up to applying it every other day, or even daily if it's a gentle formulation that your skin tolerates well. "It's not necessary to experience irritation to get results and I don't recommend anyone soldier on if they're experiencing side effects. When this happens it usually means they're using one that's too strong for their skin type or they're applying it too often," she explains.

The soldiering on phase is referred to as retinisation or purging – some retinol enthusiasts call it the “retinol uglies” which was once considered a right of passage for first-time users. Get through the confidence crushing stage of dry, inflamed skin and after a month you’ll emerge with an angelic complexion.

These days, however, the uglies have been mitigated by better formulations that encapsulate retinoids in lipid structures that are bioavailable. As vitamin A is an oil-soluble vitamin, encasing it in a microscopic lipid capsule not only makes it more stable, it facilitates a controlled release mechanism that penetrates deeply and slowly, thereby maximising the effectiveness of the retinoid while minimising the risk of irritation.

Encapsulation is one advancement; another is the sophistication of the formulation itself. A good-quality retinoid serum will be formulated with complimentary ingredients that help to make it more tolerable and multi-tasking, including hydrators like ceramides, squalane, and hyaluronic acid and skin barrier promoters such as niacinamide.

Or, says Dr Uma Jeyanathan, you can tailor the way you apply your retinol serum by making a retinol sandwich: one layer of moisturiser, followed by an application of retinol followed by another layer of moisturiser or facial oil. This simple practice buffers the absorption of the retinoid while counteracting dryness and reinforcing the skin barrier, a good option for first time users.

A less rudimentary solution to bypassing sensitivity is evident in new formulations that combine two or more types of retinoids as is the case with Elizabeth Arden’s Retinol + HPR Ceramide Rapid Skin-Renewing Water Cream, which harnesses pure retinol for immediate effects with the slower gentler HPR. Or Byoma’s Sensitive Retinol, £17.99, an oil formulation that’s skin barrier friendly.

Will retinol thin my skin? And how to use it during the menopause

Because retinoids at a high dose can cause peeling and fragility at the surface, there’s an assumption that the active ingredient thins the skin. But, Dr Williams says retinoids simply encourage old surface cells to turnover, a function that slows with age and causes the complexion to appear dull and appear lacklustre.

In fact, studies show that retinoids improve collagen production, leading to thicker, firmer skin in the long term and can be a smart skincare addition for women in the menopause transition when collagen depletes rapidly in the first five years.

Dr Frauke Neuser recommends a retinyl propionate product with niacinamide for women to counteract collagen loss and skin barrier compromises that can occur during the menopause. “Studies have shown that retinyl propionate is more bioavailable than more commonly used retinol esters such as palmitate – when you combine it with vitamin B3

(niacinamide) mature skin gets further improvements to the skin barrier alongside skin tone regulation and a reduction of fine lines,” she says.

The importance of SPF when using retinoids

While retinoids boost collagen, this doesn't discount the sun damage that can occur during a period of retinoid use. For this reason, No7 has created a product that includes a safe dose of pure retinol with a separate application of SPF30 to encourage users to protect their skin from potential harm.

“This is the first time that we have formulated pure retinol into a day cream but we can do this with confidence with an encapsulated retinol that provides a slower release of retinol into the skin and a reduced but still effective concentration,” says Dr Bell, the scientist behind last year's sell-out serum Future Renew. “Combining retinol with an SPF 30 in the same pot is our way of ensuring that daily SPF is used,” says Bell, adding that a higher strength retinol should be used night time only, followed by SPF in the day.

Can retinol be used on deeper skin tones?

There are many myths surrounding retinoids, one being they aren't suitable for deeper skin tones for fear of causing hyperpigmentation. For this reason, skin therapists advise a retinol-lite product as a reaction can create scarring and lead to long term hyperpigmentation.

Kelly Rowland's aesthetician, Shani Darden, created a gentle retinol ester serum for this reason, adding lactic acid and apple extract to “create a slower controlled release of the retinol's properties,” which she recommends for nighttime use. If your skin isn't irritated by retinoids and they're tolerated well, then brown and black skin can benefit from its use, says cosmetic skin doctor, Uma Jeyanathan. “Retinoids can in fact help to even out deeper skin tones by helping to regulate overactivity of the melanocytes that can cause age spots and hyperpigmentation,” she says, adding: “You don't have to use a retinoid product all year round. I switch out my retinoid product for something more hydrating at periods when I think my skin needs a break.”

A seasonal change, says Jeyanathan, is a good time to consider mixing up your skincare regime. “Some of my clients take the summer off from their retinoids and go back to them in winter and spring. Always tailor your skincare as your skin or circumstances change,” she adds.

The 12 best retinoid serums then and how to find the right one for you



Delo RX The Youth Matrix Activator, £165

A powerful complex of four retinoids that all act in different ways, plus niacinamide, antioxidants and hydrators, this is free from silicones and other pore-clogging ingredients to give your skin the best chance at radiance. It's been tested on sensitive skin too.



Shani Darden Retinol Reform Serum, £82

A gentle retinol is combined with lactic acid, a mild exfoliator, and soothing ingredients like aloe and niacinamide, to give a slow-release effect that improves skin over time.



Elizabeth Arden Retinol + HPR Ceramide Rapid Renewal Skin-Renewing Water Cream, £75

Harnessing Elizabeth Arden's ceramide heritage, this lubricating serum uses two types of retinoids along with ginger root and bisabolol to soothe irritation while providing skin both immediate and long-term benefits.



Boots No7 Pure Retinol, Vitamin C & SPF30 Day Cream Duo, £35.95

A clever two-part product that includes a pure retinol day cream at a safe dose combined with vitamin C to brighten, accompanied by a separate all-important SPF30 to protect skin from UV and pollution.



Decree by Dr. AJ Stunham Treat Tincture, £130

Granactive retinol is mixed with moisturising squalane, hyaluronic acid and pigment-reducing alpha arbutin for night time use.



Skin Rocks by Caroline Heirons Retinoid 1 Serum, £65

Specifically formulated for those new to retinoids or for sensitive skin types, this entry-level serum contains 0.2% HPR along with bakuchiol, soybean extract and nourishing squalane and vitamin E.



Medik 8 Crystal Retinal, from £45

This sought-after retinal formulation comes in five strengths to encourage new users to build up in strength slowly. Clinically proven to work 11 times faster than retinol, retinaldehyde is for those who want fast results. This one is encapsulated to minimise irritation and to keep the active ingredient stable and potent.



Skinceuticals Retinol 0.3%, £80

At this percentage, you can expect maximum results with minimal irritation, which is buffered further with the inclusion of soothing ingredients like bisabolol and boswellia serrata extract.



Revision Skincare Retinol Complete 0.5, £126

Formulated with a time-release retinol for minimal irritation, this simultaneously hydrates skin for a brighter, smoother texture.



ProXn Brighten Up Serum, £126

While this one's only available through skin clinics, it's worth booking an appointment for. The range was designed to calm inflammation and hyperpigmentation, and contains a retinoic acid ester with antioxidants and super molecule, Xanthohumol, which prevents oxidation within the skin that can disrupt collagen bonds while having a stabilising effect on lipids.



AlphaRet Overnight Cream, £134

What doesn't this cream have? AHAs are blended with hydrators and antioxidants for potent results with minimum sensitivity. Clinically proven in a 12-week dermatologist-led scientific trial to reduce fine lines and wrinkles. Available via a professional skin expert at getharley for £40.



Murad Retinal ReSculpt Eye Treatment, £92

A costly eye cream, this one proves its worth by including encapsulating.

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