BEAUTY

What Sun Spots Really Say About Your Skin

The marks may be stubborn, but the evidence points to a simpler strategy than crowded shelves and collagen promises.

The marks arrive quietly

One day, a patch of colour on your face or hand seems newly obvious. Perhaps it has been there for years. Perhaps you have already bought a cream with an ambitious label and an ingredient list you did not quite understand. Age spots can feel sudden, even when the skin changes behind them have accumulated gradually.

Skin becomes thinner, drier and less plump as you age. It may also take longer to heal. Age spots sit among these visible changes, but time is not acting alone: sunlight is a major cause of skin aging. Researchers call skin damage caused by ultraviolet radiation "photoaging."

That distinction matters because "age spot" can make a mark sound like an unavoidable birthday present. The available evidence points instead to a history involving light exposure. You cannot edit that history, but you can reduce further exposure and be more sceptical about products claiming to reverse it.

The phrase also should not become your diagnosis for every unfamiliar mark. The supplied evidence does not offer a visual checklist for identifying age spots or distinguishing them from other skin changes. If you are uncertain about a mark or have questions about your skin, that is where self-care stops and a conversation with a healthcare professional begins. Treatment claims are not a substitute for knowing what you are treating.

A crowded shelf, a short evidence list

Once a mark bothers you, the beauty aisle offers abundance: botanicals, peptides, brightening products, "natural" formulas and creams framed as anti-aging. Abundance is not the same as certainty. Only a few products have been approved for sun-damaged or aging skin, although various treatments may reduce the appearance of age spots.

A 2024 systematic review examined topical cosmeceuticals for photodamaged skin, including botanicals, peptides and hydroquinone. It concluded that these categories can treat photodamage and described much of the evidence as high quality. Peptides had the strongest evidence base among the ingredients reviewed.

That conclusion is encouraging, but it is not a promise about every jar carrying one of those words. "Cosmeceutical" covers a range of topical products, and the review considered photodamaged skin broadly rather than supplying a single, guaranteed fix for an individual age spot. "May help" is the honest reading. "Will erase" goes beyond the evidence provided.

Nor does a reassuring front label settle the question. Terms such as "natural" and "hypoallergenic" have no official meaning; companies can use them as they choose. The useful information is on the ingredient list. If a cosmetic is also a drug, its first listed ingredient may be identified as the active ingredient-the chemical intended to make it effective. That is more informative than the mood created by the packaging.

Irritation is not progress

A product does not become more effective because it stings. Cosmetics can cause allergic reactions, and the first sign is often red, irritated skin. Fragrances and preservatives are common causes of cosmetic-related skin problems. If a new product leaves your skin red and irritated, do not reinterpret that reaction as proof that the spot is being lifted away.

This is especially relevant when you are layering several products in pursuit of faster results. The evidence supplied here does not establish that a longer routine treats age spots better. It does establish that cosmetics contain ingredients worth checking and that some of those ingredients can cause problems. More bottles create more ingredient lists, not necessarily more benefit.

There is another important boundary around the evidence. Post-inflammatory hyperpigmentation-the persistent colour that can follow inflammation-is not automatically the same thing as an age spot caused by accumulated sun damage. A 2024 systematic review of post-inflammatory hyperpigmentation in people with skin of colour found no robustly effective approach across the treatments studied.

In that review, some participants improved with topical retinoids, laser therapy, chemical peels or hydroquinone, but results varied. Laser treatment sometimes worsened pigmentation, even though it was also the only intervention to produce complete resolution in a subgroup. That is a useful warning against borrowing a treatment result from one kind of pigmentation and applying it confidently to another.

Collagen answers a different question

Collagen supplements are often drawn into any conversation about aging skin. Yet the

outcomes most often studied are hydration, elasticity and wrinkles-not age spots. A supplement could change one measure of skin aging without changing a patch of pigmentation, and evidence about those measures should not quietly be repackaged as evidence about spots.

A 2021 meta-analysis of 19 controlled trials, involving 1,125 participants, reported improvements in skin hydration, elasticity and wrinkles with hydrolyzed collagen. Most participants were women. Read alone, that analysis makes supplementation sound persuasive.

A more recent review changed the picture. A 2025 meta-analysis examined 23 randomized controlled trials with 1,474 participants and separated results by study quality and funding. Across all studies, collagen appeared to improve hydration, elasticity and wrinkles. But studies without pharmaceutical-company funding found no effect, and high-quality studies found no significant benefit in any of those categories.

The 2025 reviewers concluded that there is currently no clinical evidence supporting collagen supplements to prevent or treat skin aging. Even the earlier positive review did not establish collagen as a treatment for age spots. The hardest truth on the supplement shelf is also the most useful: evidence for smoother or better-hydrated skin is not evidence for fading pigmentation.

Your next week needs protection, not perfection

Reducing further sun exposure is less glamorous than chasing reversal, but it follows directly from what is known: sunlight is a major cause of skin aging. General guidance includes avoiding the sun when it is strongest, wearing protective clothing, avoiding sunlamps and tanning beds, and using sunscreen with a sun protection factor (SPF) of at least 15.

This does not promise that an existing spot will disappear. It gives you a way to act on the cause of further sun-related aging while you decide whether any appearance-focused treatment is worth pursuing. That is a different goal from erasure, and a more defensible one.

For the coming week, make one change visible enough that you do not have to remember it from scratch each day. Put a bottle of sunscreen beside the place where you get ready, and place protective clothing-such as a long-sleeved layer or a hat-with the things you take when you leave home. The step takes sunscreen with SPF 15 or higher and protective clothing.

If you also want to investigate a fading product, keep the task modest: use the container's ingredient list, not words such as "natural," to understand what you are buying. But let protection be the action you complete first. On Monday morning, the most useful thing on your shelf may be the one that asks the least of hope.

Where this comes from

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- Cosmetics

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