

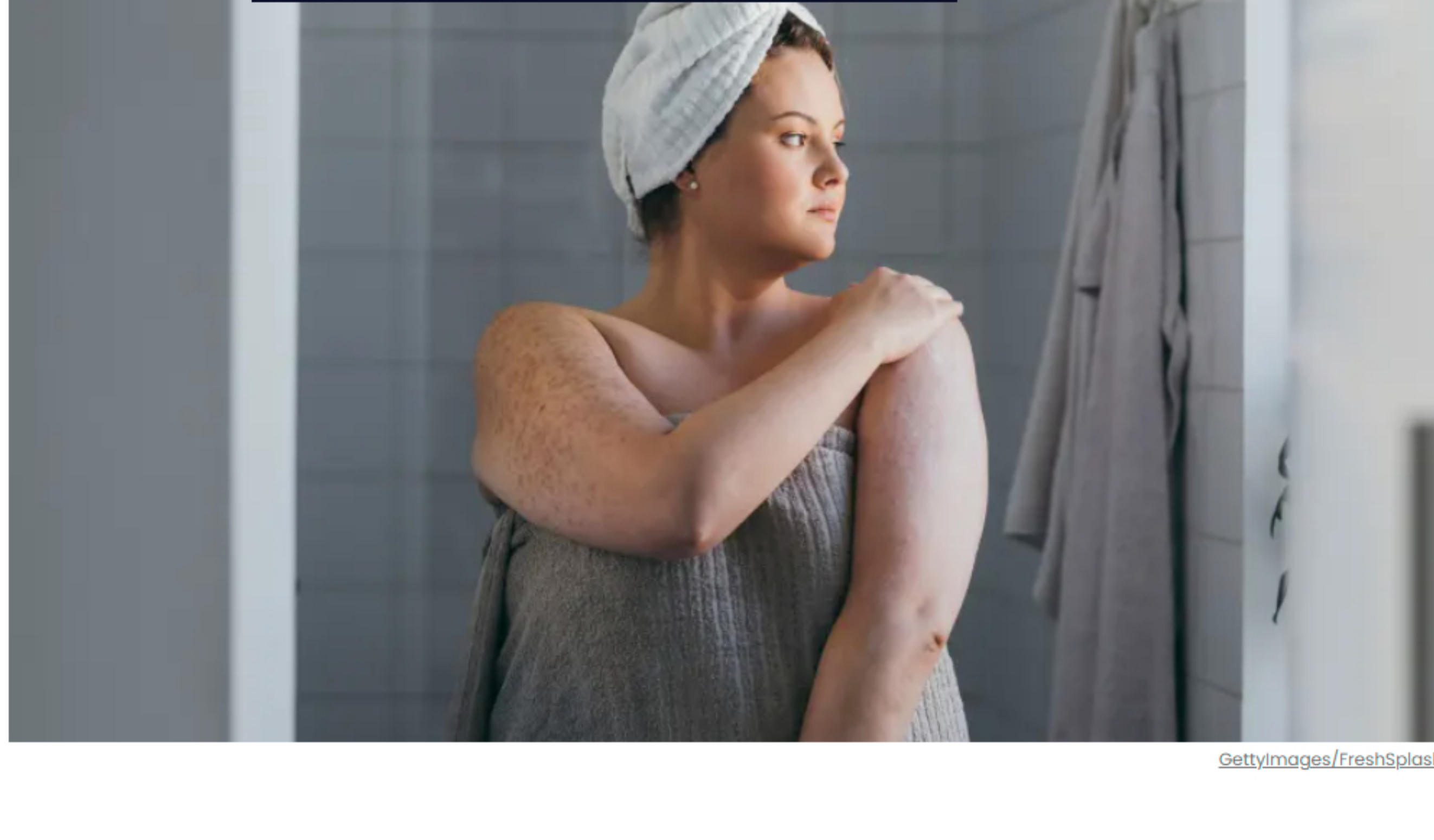
Inflammation and Psoriasis: What's the Connection?

Psoriasis and inflammation go hand in hand. Here, experts explain why—and how to fight the fire.

by **Barbara Brody** Health Writer

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WHEN YOU THINK of psoriasis, you likely think of its hallmark symptom: itchy, scaly patches on your elbows, knees, and more. But [psoriasis](#) goes more than skin deep: It's a chronic autoimmune disorder and it's driven by inflammation that can affect your entire body, says [Cindy Wassef M.D.](#), an assistant professor at the Rutgers Center for Dermatology in Somerset, NJ. Here's why that's important—and how treatments and lifestyle changes that target inflammation can help soothe your skin, and improve your health, too.

What Is Inflammation, Anyway?

From [rheumatoid arthritis](#) to [Crohn's disease](#), many chronic conditions are directly linked to [inflammation](#). In fact, an entire category of chronic diseases are auto-inflammatory, meaning the condition itself is driven by an inflammatory response in the body.

Inflammation is a normal part of the immune response that occurs when healthy tissue is injured or exposed to something damaging, like a virus, according to the [National Library of Medicine](#). The inflammation in [psoriasis](#) stems from an immune system malfunction that causes the body to mistakenly attack skin cells, which makes them grow too quickly.

While no one knows exactly what causes psoriasis, experts believe that it starts with a genetic predisposition that gets triggered by an illness, stress, or something in the environment, says Dr. Wassef. These factors combine to disrupt the immune system and cause inflammation that, if not treated, can wreak havoc on the skin as well as the rest of the body.

"Inflammation is a positive immune response when you need to kill bacteria, but when the immune system overreacts [in the absence of such threats], that's when you end up with an inflammatory disease like psoriasis," says [David Pearson, M.D.](#), an assistant professor of dermatology at the University of Minnesota Medical School in Minneapolis and a dermatologist with M Health Fairview.

How Inflammation in Psoriasis Affects the Skin

In people with psoriasis, the cycle of growing and shedding skin cells speeds up considerably. (It shortens from about 30 days to just three or four, according to [Johns Hopkins Medicine](#).) The result is inflamed skin, with symptoms that often include:

- Slightly raised skin plaques with sharply defined borders
- Scaly or flaky skin over the plaques that looks silvery
- Itchiness or irritation

There are several [types of psoriasis](#), but plaque psoriasis is the most common. These plaques tend to appear on the elbows, knees, shins, or around the belly button, says Dr. Pearson. They may also occur on the scalp and look similar to dandruff, he says.

"Usually, the plaques are pink or red with a silver scale, but in people with darker skin they might be dark brown or have a purple hue, and they might not even be scaly," adds [Nicole Negbenebor, M.D.](#), a board certified dermatologist, fellow at the University of Iowa, and member of the Skin of Color Society.

How Inflammation in Psoriasis Affects the Rest of the Body

Although psoriasis is best known for causing skin problems, the disease is systemic, meaning inflammation has the potential to impact the entire body. As explained in a [research review published in *Frontiers in Medicine*](#), people with psoriasis have elevated levels of inflammatory substances, including interleukin-23 (IL-23), IL-17, and tumor necrosis factor (TNF) in their blood. As these substances circulate through the bloodstream, they can contribute to inflammation in other tissues, including organs and blood vessels.

"The inflammation in psoriasis is not limited to the skin," says Dr. Wassef. "People who have psoriasis have a higher incidence of cardiac events and metabolic syndrome," in addition to higher rates of [obesity](#), [inflammatory bowel disease](#), [diabetes](#), and nonalcoholic fatty liver disease, reports [The British Journal of Dermatology](#).

If you have psoriasis, all of the above health issues should be on your radar, but it's especially important to know about [psoriatic arthritis](#), a type of inflammatory [arthritis](#) that's related to psoriasis. In [psoriatic arthritis](#), "the same inflammation that targets the skin is acting on the joints," says Dr. Wassef.

Symptoms of Psoriatic Arthritis

About 30% of people with psoriasis develop psoriatic arthritis (PsA), according to the [National Psoriasis Foundation](#). Symptoms of PsA include:

- Joint stiffness and pain
- Nail changes (like dents, pitting, or thickening)
- Swollen fingers and/or toes
- Unusual fatigue

Treating Psoriasis Inflammation

There are many treatment options for psoriasis, and all of them work to dampen inflammation to a certain extent, says Dr. Pearson. The best one for you depends on the severity of your psoriasis as well as whether you also have psoriatic arthritis.

[Treatments](#) range from topicals (creams and [ointments](#)) and phototherapy—which treat inflammation but only focus on the skin—to oral and injectable medications that mitigate inflammation throughout the entire body. Here's when doctors say each one is appropriate:

Topical Treatments

If you don't have psoriatic arthritis and your psoriasis is mild, your doctor will likely suggest topical treatments first. "Mild" psoriasis means that it only impacts 3% to 5% of your body's surface area, Dr. Wassef explains.

Topical steroid creams are considered the gold standard, she says. "For mild psoriasis, you can expect to use topical steroids daily for two to three weeks during a flare, then just a few times a week after the flare resolves."

For people who can't use steroids or don't want to use them—prolonged use may cause skin thinning, stretch marks, or discoloration—a topical treatment called calcipotriene, which is a form of synthetic vitamin D, is a good alternative, says Dr. Wassef.

Phototherapy for Psoriasis

Phototherapy, which uses UVB light to reduce skin inflammation, is a great option for some patients who don't respond sufficiently to topicals, says Dr. Negbenebor. The catch is that you'll probably have to go to your dermatologist's office two to three times a week when you first start the treatment, though some insurance companies will cover a lightbox for home use, she says.

As with topicals, phototherapy only treats skin inflammation, so it's not appropriate by itself if you have psoriatic arthritis, says Dr. Pearson. (In that case, it might be used in combination with other therapies.) He adds that modern phototherapy uses narrow-band UVB bulbs, which makes it safer than sun exposure as far as the risk of [skin cancer](#) is concerned.

Can Common Medications Treat Psoriasis Inflammation?

When many people think of oral anti-inflammatory medication, drugs like Advil (ibuprofen) and Aleve (naproxen) may come to mind, but those work on different inflammatory pathways and aren't helpful for psoriasis, says Dr. Negbenebor. The most commonly prescribed [oral drug](#) for psoriasis is Otezla (apremilast), she says. "It helps with inflammation by blocking PDE4, an inflammatory enzyme."

Your doctor might also consider giving you the disease-modifying antirheumatic drug (DMARD) methotrexate, says Dr. Wassef. This medication is often prescribed for people with inflammatory arthritis, including psoriatic arthritis.

Biologics for Psoriasis Inflammation

Biologics are a targeted form of DMARDs. They treat inflammation by zeroing in on specific pathways responsible for triggering the immune system response. They're given via infusion or injection, and they include drugs such as Humira (adalimumab) and Remicade (infliximab), among many others.

"If someone has bad arthritis, we might jump to a biologic" and not bother trying topical medication alone first, says Dr. Negbenebor. These medications will help control inflammation in the skin as well as in the joints, she says.

Diet and Psoriasis Inflammation

In recent years, there's been a growing interest in the connection between food and inflammation. Connecting the dots between specific foods and their role in psoriasis, however, is tricky, says Dr. Wassef. "Patients often ask about different [psoriasis diets](#) or cleanses, but the best thing to do is to follow a generally healthy diet—including lots of fruits and vegetables—and try to stay at a healthy weight," she says.

While a produce-heavy diet and staying active is good for everyone, it's especially important for folks with psoriasis, since they have an increased risk of cardiovascular disease, Dr. Wassef explains. Keeping off extra weight helps, too, because the inflammatory protein TNF is actually found in fat cells, she adds.

Although research on exactly [what to eat or avoid for psoriasis](#) is limited, some health experts advise limiting foods that have been linked with increased inflammation in general. According to a [Johns Hopkins Medicine](#), people with psoriasis may benefit from cutting back on:

- Added sugar
- Alcohol
- Dairy
- Gluten
- Refined carbohydrates
- Saturated fats

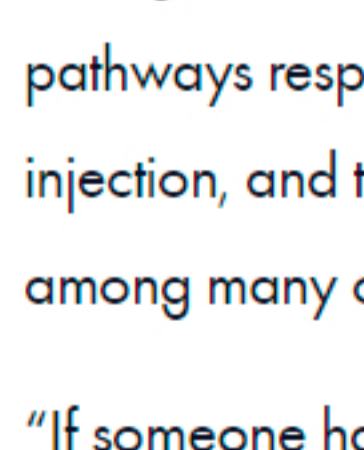
Taking Care of Yourself With Psoriasis

Keeping up with your medications, eating an anti-inflammatory diet, and monitoring your heart health are all important for people with psoriasis. Good self-care includes taking care of your mental health, too. Stress doesn't cause psoriasis, but it is a common trigger for flares, as many patients report that their skin gets worse during stressful periods, says Dr. Wassef.

The exact mechanism that connects stress to psoriasis flares isn't fully understood; she stress might be causing physiological changes in the body that increase the likelihood of flaring. That said, Dr. Wassef notes that some people who are under a lot of stress neglect to take their medications as prescribed, which could also lead to a flare.

Plus, the inflammation from psoriasis may contribute to [depression](#), writes [The National Psoriasis Foundation](#). Prioritizing adequate sleep, eating a healthy diet, getting regular exercise, and leaning on friends and family for support can all help you feel your best.

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Barbara Brody is a New York-based writer and editor who specializes in health and wellness. A former national magazine editor, she's an expert in translating medical topics into stories that everyone can understand and enjoy... [more](#)