Psoriasis

What Is It?

Psoriasis is a chronic skin disease which produces thickened, inflamed skin covered with silvery scales. This occurs because the cells of the epidermis, or the outer skin layer, are shed at a much faster rate than normal skin. Normally, skin is regenerated once a month. In people with psoriasis, the skin regenerates every three to four days.¹ This increase occurs along with inflammation, resulting in the formation of thick, scaly, inflamed skin.

Psoriasis is an autoimmune skin disease. This means that the body attacks its own cells in an overactive immune response. In psoriasis, an excess amount of T cells are found in affected skin.² T cells are white blood cells which travel throughout the body in search of foreign invaders like bacteria or viruses. In psoriasis, however, the T cells attack healthy skin cells. This activates other related immune responses which trigger the rapid regeneration of skin seen in psoriasis.³

Psoriasis is now considered to be more than just a skin disorder. The fact that it shares similar characteristics with other inflammatory diseases such as Crohn’s disease, diabetes, depression and cancer highlights the importance of looking at the underlying factors, and not just what is happening to the skin.⁴

There are many types of psoriasis. These include:

- Plaque psoriasis (psoriasis vulgaris) – the most common form
- Nail psoriasis – affects fingernails and toenails
- Scalp psoriasis – affects the scalp
- Guttate psoriasis – triggered by a bacterial infection
- Inverse psoriasis – affects armpits, groin, skin folds and genitals
- Pustular psoriasis – involved pus-filled blisters
- Erythrodermic psoriasis – covers entire body
- Psoriatic arthritis – psoriasis that occurs in conjunction with painful joints

Did You Know

Psoriasis may occur at any age, though 75 percent of cases occur before age 46.⁶ Psoriasis vulgaris (or plaque psoriasis) is the most common form of psoriasis, comprising 85 to 90 percent of those with psoriasis.⁷ Psoriatic arthritis occurs in up to 42 percent of people with psoriasis.⁸
What Causes It?

The precise cause of psoriasis is unknown, but some factors which play a role in the development or progression of psoriasis include:

- Infections
- Gluten sensitivity
- Poor digestion
- Bowel toxins
- Leaky gut
- Liver dysfunction
- Heavy alcohol consumption
- Smoking
- Stress
- Obesity
- Certain medications
- Family history (genetics)

A bacterial or viral infection may trigger a psoriasis flare up, especially in children. In people with guttate psoriasis, a strep infection usually precedes the onset. Interestingly, certain pathogenic bacteria are found on the skin of psoriasis patients, and when treated with antibiotics, the psoriasis has been shown to subside in most of these patients. Pathogenic organisms that have been associated with psoriasis include:

- Candida albicans
- Malassezia ovalis (also found in seborrheic eczema)
- Streptococci
- Pseudomonas
- Klebsiella
- Bacillus cereus

Gluten sensitivity may also play a role in the development of psoriasis. A high prevalence of gluten sensitivity has been found in people with psoriasis. In these individuals, a gluten-free diet was found to decrease psoriasis flare ups. Gluten sensitivity has been associated with many other diseases, which illustrates the far-reaching negative effects of a condition that begins in the gut. (See the Gluten Sensitivity section for more information on this condition.)
Poor digestion or, specifically, poor protein digestion, may contribute to the development of psoriasis. When proteins are not broken down and absorbed properly, they remain in the digestive tract and are instead, broken down by bacteria in the bowel. The breakdown products, or polyamines, have been found to be increased in psoriasis patients. Psoriasis has also been shown to improve when polyamine levels are decreased.

In addition to polyamine toxins, other gut toxins, such as bacterial toxins and Candida toxins, can influence the rapid regeneration of skin cells that is seen in psoriasis. This is yet one more gut-skin connection. A low-fiber diet contributes to the buildup of these toxins. Fiber binds toxins, and helps move them out of the bowel before they have a chance to cause harm. Toxins can also contribute to gut inflammation, which has been found in people with psoriatic arthritis.

The bowel toxins mentioned above create a toxic environment in the bowel which can create a condition called leaky gut, or increased intestinal permeability. Leaky gut is due to inflammation of the intestinal lining which allows for the passage of larger than normal particles through the intestine. When this occurs, toxins are absorbed into the bloodstream and travel to the liver where they are then detoxified. The toxins are easily absorbed through a leaky gut. Leaky gut has been found to be more prevalent in people with psoriasis than in healthy individuals. If the liver is overburdened, many of these toxins will go directly into the body's circulation and cause exaggerated immune responses, particularly in genetically susceptible people.

Optimal liver detoxification is increasingly difficult in today's world where chemicals are virtually impossible to avoid. Some naturopathic doctors view psoriasis as the result of the body releasing toxins through the skin because of this overexposure to toxins and the inability of the liver to detoxify them.

It is interesting that heavy alcohol consumption, which imposes a large burden on the liver, is known to be associated with psoriasis. This further illustrates the important role that liver detoxification plays in maintaining health. Similarly, smoking is also linked to psoriasis. This may be due to the increased toxic burden placed on the body by the many chemicals in cigarette smoke.

Stress also contributes to psoriasis. Not only does stress increase itching and worsening of psoriasis, but the psoriasis itself increases stress because of how it affects appearance and one's self-perception. This can create a vicious cycle that makes healing difficult.

Psoriasis has been associated with obesity, diabetes, cardiovascular disease and metabolic syndrome. This link is currently being investigated, but what is interesting to note is that these health conditions all involve inflammation, and can be controlled or reversed with a healthy diet.
Some medications can trigger a psoriasis reaction. Beta blockers, lithium, antimalarial drugs, ACE inhibitors and nonsteroidal anti-inflammatory drugs (NSAIDs) can all activate or worsen psoriasis.\textsuperscript{22}

Genetics also plays a role in psoriasis in combination with the environmental factors. About 40 percent of people with psoriasis have a family member with the disorder.\textsuperscript{23}

**What Are the Signs and Symptoms?**

Psoriasis most commonly develops on the scalp, elbows, knees, the small of the back and the lower legs, but it may develop anywhere on the skin.\textsuperscript{24} Symptoms vary and usually occur in cycles of flare ups, which subside and may even be eliminated for a period of time. In most people, it affects a limited area of skin, but in some it affects large areas of the skin of the trunk and extremities. Symptoms of psoriasis include:\textsuperscript{25}

- Red, inflamed skin covered by silvery scales
- Dry, cracked skin
- Itching
- Burning
- Thickened, crumbling nails
- Swollen and stiffened joints

**How Is It Diagnosed?**

The diagnosis of psoriasis is based on a thorough medical history and physical exam. This is usually enough to make a diagnosis, but in certain cases a skin biopsy may be taken to rule out other possible skin disorders. Psoriasis diagnosis is usually straightforward and without complications.

Natural health practitioners may also suggest a comprehensive stool analysis (CSA) that may be helpful to determine causes of psoriasis such as bacterial imbalance, or a fungal or yeast infection. Other tests suggested may include a food sensitivity test, intestinal permeability test, liver detoxification profile and the Heidelberg pH diagnostic. (See the Appendix.)
What Is the Standard Medical Treatment?

There are many different treatment options for psoriasis which come in three main forms; topical, systemic (oral or injected) and light therapy. Though many treatments are available, psoriasis can still be difficult to treat with standard methods.

Topical (applied to the skin) treatments of psoriasis include:

- Corticosteroids – immune suppressants
- Vitamin D – slows growth of skin cells
- Anthralin – helps remove scales
- Retinoids – synthetic vitamin A
- Calcipotriene – slows growth of skin cells
- Calcineurin inhibitors – eczema medication that reduces inflammation
- Salicylic acid – helps reduce scales
- Coal tar – byproduct of petroleum production
- Moisturizers and emollients – soothe flaky, inflamed skin

Topical corticosteroids are the most commonly prescribed medications for psoriasis. These work by suppressing the immune system which reduces the cell regeneration, and, thus, the inflammation that accompanies psoriasis.  

Light therapy is another form of treatment for psoriasis that involves the exposure of the skin to ultraviolet light—either from natural sunlight or from artificial lamps. There are a few different types of phototherapy available which may be used alone or in conjunction with another therapy:

- Natural sunlight
- UVB therapy, which produces vitamin D3 in the skin
- Photochemotherapy
- Excimer laser

Systemic medications (oral or injected) are usually used for patients who do not respond well to other treatments. These include:

- Retinoids – synthetic vitamin A
- Methotrexate – immune suppressant
- Cyclosporine – immune suppressant
- Hydroxyurea – mild immune suppressant
- Immunomodulators – injected biologic agents
With psoriasis, the gut-to-skin connection is fairly obvious. In fact, there are many similarities between the outside skin and the inside skin, or the gut. It is well known that psoriasis is associated with inflammatory bowel disease (Crohn’s & ulcerative colitis) as well as several arthritic conditions. This is supportive of research that has shown patients with psoriasis have increased intestinal permeability (leaky gut).

Increased intestinal permeability often occurs after significant stress, infections, or bouts with too much alcohol and improper food over a long weekend of partying. I have had patients like this in my practice. When they were placed on a bowel restorative program, which includes proper diet, increased fiber, omega-3 oils, probiotics, digestive enzymes, and vitamin D3, if indicated, not only do their IBS symptoms improve, but many also have improvement of skin conditions including psoriasis.

In genetically predisposed patients, it is thought that toxins that are absorbed through the bowel upregulate (increase) the production of many immune pathways, including both interleukin 12, and interleukin 23. Both of these cytokines have been found in psoriatic plaques, and, in fact, there is a drug, STELARA™ (ustekinumab, a monoclonal antibody) that binds to these cytokines and helps prevent and eliminate plaques.

If people are willing to live a healthier lifestyle, consume a proper diet, and use the above mentioned supplements, they have a reasonable chance of getting over this condition without resorting to drugs in many cases.
In my experience, I have found that people with psoriasis are dealing with a toxic liver. The liver becomes overburdened when it receives more toxins that it can process. This may occur from an increased exposure to toxins, gut imbalance, or often, both.

For people with psoriasis, I recommend a long-term detoxification program that begins with the Steps of Cleansing (see the Cleansing Protocol in the Appendix), cleaning up the diet (which includes avoiding alcohol), and reducing toxin exposure.

Gluten sensitivity may be an underlying factor in people with psoriasis. This is because gluten sensitivity can lead to increased autoimmunity in other areas of the body, which is precisely what psoriasis is—an autoimmune response. Gluten sensitivity should definitely be ruled out if you have psoriasis.

This condition involves a comprehensive healing approach that will require a high level of commitment. How far the person is willing to go to change their health will determine how well their psoriasis is managed. The following recommendations encompass a whole-body approach for people with psoriasis.

**Rule Out:**

- Candida overgrowth (See the Candidiasis section.)
- Gluten sensitivity (See the Gluten Sensitivity section.)
- Intestinal permeability test (See the Appendix.)

**Diet**

- If Candida overgrowth is an issue, follow the Candida diet until the skin clears up. Then follow the Fiber 35 Eating Plan for maintaining skin health. (See the Appendix.)
- If gluten sensitivity is an issue, follow the Fiber 35 Eating Plan, but also eliminate gluten-containing foods.
- If none of these are an issue, still follow the Fiber 35 Eating Plan.
- Other foods that may need to be avoided include citrus, saturated fats, trans fats and refined carbohydrates (sugar, white flour, white rice).
- Alcohol should be avoided.

**Lifestyle**

- Avoid cosmetics that contain harsh ingredients that may irritate the skin.

**Complementary Mind/Body Therapies**

- Colon hydrotherapy is helpful for to aid detoxification.
- Stress can be a major component of this disease, so find ways to reduce it with therapies such as meditation, yoga, deep breathing, massage, biofeedback, or music therapy.
- Acupuncture and hypnosis may be helpful for people with psoriasis.

A diet high in fruits and vegetables helps to maintain healthy skin.
<table>
<thead>
<tr>
<th><strong>Recommended Nutraceuticals</strong></th>
<th><strong>Dosage</strong></th>
<th><strong>Benefit</strong></th>
<th><strong>Comments</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Critical Phase</strong></td>
<td>Daily maintenance recommendations should also be taken during this phase unless otherwise indicated.</td>
<td></td>
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</tr>
<tr>
<td>Steps of Cleansing</td>
<td>See Appendix</td>
<td>Complete program that supports the body’s seven channels of elimination</td>
<td>Three-step program includes a Total Body Cleanse, microbial cleanse, and a targeted cleanse.</td>
</tr>
<tr>
<td>Probiotics</td>
<td>200 billion daily for two weeks</td>
<td>Balances intestinal flora, reducing outbreaks.</td>
<td>Look for a formula that is high in bifidobacteria, the main beneficial bacteria in the colon.</td>
</tr>
<tr>
<td>Capsaicin cream</td>
<td>Use as directed</td>
<td>Relieves pain and itching.</td>
<td>Do not apply to broken skin.</td>
</tr>
<tr>
<td><strong>Helpful</strong></td>
<td></td>
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</tr>
<tr>
<td>Vitamin A</td>
<td>5,000 – 10,000 iu daily</td>
<td>Important nutrient for maintaining skin health.</td>
<td>Look for a formula that also contains mixed carotenoids.</td>
</tr>
<tr>
<td>Vitamin D₃</td>
<td>1,000 iu per day</td>
<td>Aids tissue healing.</td>
<td>Research is showing many health complications as a result of low vitamin D levels.</td>
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<tr>
<td><strong>Daily Maintenance</strong></td>
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<tr>
<td>Omega Oils</td>
<td>2g daily</td>
<td>Provides anti-inflammatory GLA and other EFAs to repair skin and unblock pores.</td>
<td>Look for a mix of fish oil, pomegranate oil, borage oil, and sea buckthorne oil (omega 3,5,6,7,9).</td>
</tr>
<tr>
<td>Probiotics</td>
<td>50-80 billion culture count daily after critical phase</td>
<td>Balances intestinal flora, reducing outbreaks.</td>
<td>Look for a formula that is high in bifidobacteria, the main beneficial bacteria in the colon.</td>
</tr>
<tr>
<td>Skin Support Formula</td>
<td>Use as directed</td>
<td>To support liver function and cleanse blood, which feeds the skin.</td>
<td>Look for a formula with burdock, red clover, silymarin (from milk thistle), zinc, and vitamin C.</td>
</tr>
<tr>
<td>Digestive Enzymes</td>
<td>Take with meals</td>
<td>Helps digest and absorb nutrients from food, reducing inflammation.</td>
<td>If low stomach acid is found, find a formula that contains hydrochloric acid.</td>
</tr>
<tr>
<td>Fiber</td>
<td>4-5 grams twice daily</td>
<td>Promotes regular bowel movement.</td>
<td>Look for a soluble/insoluble fiber blend. Use in conjunction with high fiber diet to reach 35 g daily.</td>
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**See further explanation of supplements in the Appendix**