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Lupus Facts and Fictions

Analysis by Dr. Joseph Mercola | May 15, 2025

STORY AT-A-GLANCE

- Lupus is a chronic autoimmune disease that most often affects your skin, joints, kidneys and heart
- Lupus causes inflammation and a wide range of symptoms such as fatigue, joint pain, skin rashes and fever
- Lupus can affect connective tissues in the body, which are largely composed of collagen
- Inadequate vitamin D levels are common in people with systemic lupus
- Addressing cellular energy deficiency and estrogen dominance may help you overcome and manage lupus

Lupus is a chronic autoimmune disease where the body's immune system attacks its own tissues and organs. Most often, lupus affects your skin, joints, kidneys and heart, but other parts of your body, including your skin, eyes and digestive system, can also be affected.[1]

Lupus causes inflammation that can be widespread and may affect multiple organ systems simultaneously, leading to a wide range of symptoms such as fatigue, joint pain, skin rashes and fever. In the U.S., an estimated 1.5 million Americans have lupus. Globally, at least 5 million people are affected.[2] While the exact causes are unknown, addressing cellular energy deficiency and estrogen dominance may help.

4 Main Types of Lupus

While anyone can develop lupus, including children and men, it's much more common in women. Among those affected, 9 out of 10 are women, with most developing the condition between the ages of 15 and 44. About 1 in 3 lupus patients also suffer from multiple autoimmune diseases.[3]

However, it's a myth that there's only one type of lupus.[4] In fact, there are four primary forms of the disease:[5]

1. **Systemic lupus —** This is the most common form of lupus, accounting for about 70% of cases. In about half of these, the heart, lungs, kidneys, brain or another major organ or tissue is affected.

2. **Cutaneous lupus —** This form of lupus primarily affects the skin and accounts for only about 10% of cases. It includes several subtypes, including discoid lupus, which is characterized by chronic, disc-shaped and raised lesions on the skin, often leaving scars. Another subtype, subacute cutaneous lupus, features red, scaly skin lesions that typically do not cause scarring but can be widespread.

3. **Drug-induced lupus —** This form of lupus, which accounts for about 10% of cases, is triggered by certain medications. Symptoms are similar to those of systemic lupus but typically resolve once the medication is discontinued.

   Most cases of drug-induced lupus are associated with three medications: procainamide (Pronestyl), hydralazine (Apresoline) and quinidine (Quinaglute). However, at least 46 drugs, including those used to treat heart disease, thyroid disease, high blood pressure and neuropsychiatric conditions, as well as antibiotics and anti-inflammatory agents, may cause lupus.[6]

4. **Neonatal lupus —** This rare condition affects newborns, typically born to mothers with autoimmune antibodies associated with lupus. Babies with neonatal lupus may have skin rashes, liver problems and low blood cell counts, but symptoms typically

resolve after six months. In some cases, newborns with neonatal lupus may develop congenital heart block, a serious heart condition.

What Are the Signs and Symptoms of Lupus?

The signs and symptoms of lupus can vary considerably from person to person and from day to day. Symptoms may come and go and change over time, according to the Lupus Foundation of America.

- **A range of common symptoms are frequently reported by individuals with lupus —** Some of the most common symptoms include the following. Note that many people affected only experience some of these symptoms, not all:[7]
    - Extreme fatigue
    - Joint pain or swelling
    - Swelling in the hands, feet or around the eyes
    - Headaches
    - Low fevers
    - Sensitivity to sunlight or fluorescent lights
    - Chest pain when breathing deeply
- **Skin and hair-related issues are also frequent in lupus —** Skin and hair problems are also common, including hair loss, sores in the mouth or nose and a butterfly-shaped rash on the cheeks and nose.
- **Raynaud's disease is a common co-occurring condition in people with systemic lupus —** Many people with systemic lupus also experience Raynaud's disease, characterized by episodic constriction of the small blood vessels in the extremities, such as the fingers and toes, in response to cold or stress.

- **Raynaud's symptoms include color changes and numbness due to reduced blood flow —** This constriction reduces blood flow and can cause the affected areas to turn white or blue and feel cold and numb. As blood flow returns, the areas may turn red and throb or tingle.

The Collagen Connection

Lupus can affect connective tissues in the body, which are largely composed of collagen. Collagen is a structural protein that provides strength and elasticity to various tissues, including skin, tendons, ligaments and blood vessels. "Lupus can attack tissue, which leads to a loss of collagen in the skin," the Lupus Foundation of America notes.[8]

In fact, systemic lupus is sometimes referred to as a collagen vascular disease,[9] and research has shown a potential link between collagen deficiency and lupus.

- **Siglec-G deficiency worsens lupus and arthritis in mice —** One study found that the loss of the inhibitory receptor Siglec-G led to a moderate exacerbation of disease severity and early onset in both collagen-induced arthritis and spontaneous lupus nephritis in mice.[10] Siglec-G is a protein found on all B cells, which are a type of immune cell. It acts as an inhibitor to keep the B1 cells from expanding too much.

- **Loss of Siglec-G's inhibitory function worsens disease progression —** Overall, losing the inhibitory function of Siglec-G led to a moderate increase in disease severity and an earlier onset of both arthritis and lupus in these mice.

  While the research primarily focused on the role of Siglec-G in immune regulation, it highlights how deficiencies in such regulatory mechanisms can exacerbate autoimmune diseases that affect collagen-containing tissues, thereby linking lupus, collagen and immune response regulation.

- **Other studies link altered collagen metabolism to lupus progression —** Other research found a significant link between altered collagen components and lupus, suggesting that changes in collagen metabolism may play a role in the disease's manifestation and progression.[11]

- **Bone broth is a natural and cost-effective way to increase collagen intake —** One way to increase your intake of collagen is to consume homemade bone broth. Bone broth is made by simmering animal bones and connective tissue, which releases collagen and other nutrients into the broth. While there are plenty of collagen supplements on the market, bone broth is by far the least expensive option.

- **Bone broth may help reduce inflammation and joint pain —** Bone broth may help reduce joint pain and stiffness,[12] as well as inflammation, in part, courtesy of chondroitin sulphates, glucosamine and other compounds extracted from the boiled down cartilage.

To make homemade bone broth, simply place bones in an Instant Pot, fill the pot with pure, filtered water — just enough to cover the bones — add salt and other spices to taste, then set it to cook on high for two hours if the bones are from a concentrated animal feeding operation (CAFO) or four hours if organic and grass fed.

Optimize Your Vitamin D Levels

Inadequate vitamin D levels are common in people with systemic lupus.[13] Researchers from Brigham and Women's Hospital, Harvard Medical School also found that vitamin D supplementation for five years reduced autoimmune disease by 22%.[14]

- **Many lupus patients have vitamin D deficiency or insufficiency —** Further, according to researchers in Cairo,[15] most patients with systemic lupus erythematosus have some level of vitamin D deficiency, defined as a level of 10 ng/mL or less, or insufficiency, a level between 10 and 30 ng/mL.

- **Sun exposure is the ideal way to obtain vitamin D —** I strongly recommend getting your vitamin D from proper sun exposure, if possible, as it provides benefits beyond vitamin D optimization. Higher levels of vitamin D may even serve as a marker for healthy sun exposure, which in turn may be responsible for many of the health benefits, which include reduced risk of cancer and increased longevity, attributed to vitamin D.

- **Sunlight supports melatonin production and other vital processes —** Regular sun exposure, for instance, enhances production of melatonin — a potent anticancer agent.[16] However, if you're unable to get adequate sun exposure each day, vitamin D supplementation may be necessary.

  The global prevalence of vitamin D deficiency (defined as a level of less than 20 ng/mL) and insufficiency (defined as a level of 20 to less than 30 ng/mL) is 40% to 100%,[17] so many people are lacking.

- **Vitamin D levels above 20 ng/mL are still not optimal —** Further, 20 ng/mL has repeatedly been shown to be grossly insufficient for good health and disease prevention, which means the true prevalence of people without optimal levels of vitamin D is even greater. The only way to determine how much sun exposure is enough and/or how much vitamin D3 you need to take is to measure your vitamin D level, ideally twice a year.

Once you've confirmed your vitamin D levels via testing, adjust your sun exposure and/or vitamin D3 supplementation accordingly. Then, remember to retest in three to four months to make sure you've reached your target level.

The optimal level for health and disease prevention is between 60 ng/mL and 80 ng/mL (150 to 200 nmol/L), while the cutoff for sufficiency appears to be around 40 ng/mL. In Europe, the measurements you're looking for are 150 to 200 nmol/L and 100 nmol/L respectively.

Address Excess Estrogen and Linoleic Acid

Most people have dysfunctional mitochondria, and if you don't have enough mitochondria, you can't create cellular energy efficiently enough to ward off chronic diseases, including autoimmune diseases like lupus. **Optimizing your mitochondrial function** is one of the most important strategies to optimize your cellular energy, so it's at the core of almost everything that you do to improve your health.

Excess intake of linoleic acid (LA) — found in the seed oils used in most ultraprocessed foods — and estrogen dominance, I believe, are the leading contributors to mitochondrial dysfunction. Further, according to the Cleveland Clinic, "Reactions to certain hormones in your body (especially estrogen) may make you more likely to develop lupus."[18]

Exposure to electromagnetic fields (EMFs) is another contributing factor to mitochondrial dysfunction. However, LA and estrogen negatively impact your body in similar ways. They both:

- Increase free radicals that cause oxidative stress and damage your mitochondria's ability to produce energy
- Increase calcium inside the cell that causes an increase in nitric oxide and superoxide that increases peroxynitrite that also increases oxidative stress
- Cause an increase in intracellular water causing your body to retain water
- Slow down your metabolic rate and suppress your thyroid gland

"Lupus is often triggered during times of physical and emotional stress combined with a nutrient-poor inflammatory diet," Dr. Brooke Goldner, an autoimmune professor at Cornell University, who has lupus, told Fox News.[19]

In addition to lowering your LA intake by avoiding ultraprocessed foods, seed oils, chicken, pork, seeds and nuts, focus on reducing your stress, as chronic stress promotes cortisol release, which is a potent suppressor of mitochondrial function and biogenesis. Progesterone can be quite helpful here, as it's a potent cortisol blocker.

How to Counteract Estrogen Excess with Progesterone

Before you consider using progesterone it is important to understand that it is not a magic bullet and you get the most benefit by implementing a Bioenergetic diet approach that allows you to effectively burn glucose as your primary fuel with backing up electrons in your mitochondria that reduces your energy production. My new book, "Your

Guide to Cellular Health: Unlocking the Science of Longevity and Joy," covers this process in great detail.

- **Transmucosal progesterone is a natural estrogen antagonist —** Once you have dialed in your diet, an effective strategy that can help counteract estrogen excess is to take transmucosal progesterone (not oral or transdermal), which is a natural estrogen antagonist. Progesterone is one of only three hormones I believe many adults can benefit from. (The other two are DHEA and pregnenolone.)

- **Avoid transdermal progesterone due to conversion to other compounds —** I do not recommend transdermal progesterone, as your skin expresses high levels of 5-alpha reductase enzyme, which causes a significant portion of the progesterone you're taking to be irreversibly converted primarily into allopregnanolone and cannot be converted back into progesterone.

- **Recommended dose and timing of progesterone for best results —** As a general recommendation, I recommend taking 25 to 50 mg of bioidentical progesterone per day, taken in the evening about 30 to 60 minutes before bed, as it can also promote sleep.

  For optimal bioavailability, progesterone needs to be mixed into natural vitamin E. The difference in bioavailability between taking progesterone orally without vitamin E and taking it with vitamin E is 45 minutes versus 48 hours.

- **Product suggestion and DIY preparation of progesterone mix —** You can make your own mixture by dissolving pure USP progesterone powder into one capsule of a high-quality vitamin E, and then rub the mixture on your gums. Fifty milligrams of powdered progesterone is about 1/32 teaspoon.

- **Do not use synthetic vitamin E (alpha tocopherol acetate — the acetate indicates that it's synthetic) —** Natural vitamin E will be labeled "d alpha tocopherol." This is the pure D isomer, which is what your body can use.

There are also other vitamin E isomers, and you want the complete spectrum of tocopherols and tocotrienols, specifically the beta, gamma, and delta types, in the effective D isomer. As an example of an ideal vitamin E you can look at the label on our vitamin E in our store. You can use any brand that has a similar label.

- **If you are a menstruating woman —** Take the progesterone during the luteal phase or the last half of your cycle which can be determined by starting 10 days after the first day of your period and stopping the progesterone when your period starts.

- **If you are a male or non-menstruating woman —** Take the progesterone every day for four to six months and then cycle off for one week. The best time of day to take progesterone is about 30 to 60 minutes before bed, as it has an anti-cortisol function and will increase GABA levels for a good night's sleep.

Please note that when progesterone is used transmucosally on your gums as I advise, the FDA believes that somehow converts it into a drug and prohibits any company from advising that on its label. However, please understand that it is perfectly legal for any physician to prescribe an off-label indication for a drug.

In this case progesterone is a natural hormone and not a drug and is very safe even at high doses. This is unlike synthetic progesterone, called progestins, that are used by drug companies, but frequently, and incorrectly, referred to as progesterone, which are dangerous and should never be used by anyone.

You Can Often Manage Lupus with a Healthy Lifestyle

By addressing cellular energy deficiency, you can often heal medical issues and get back to a healthy state. As Goldner told Fox News, "Lifestyle changes such as regular exercise, healthy eating and stress management can help improve the quality of life for people with lupus." She suggests people "embrace taking control of all the variables they can manage, like how they eat, sleep and manage stress with self-care, so they can minimize illness and maximize recovery and remission."[20]

Along those lines, ginger, which is easy to grow at home, is a **top anti-inflammatory nutrient**. It has been shown to bolster immune system function and ameliorate autoimmune diseases such as lupus and rheumatoid arthritis by making neutrophils (a type of white blood cell) more resistant to neutrophil extracellular trap (NET) formation, which is known to propel inflammation and contribute to autoimmune diseases.[21]

Frequently Asked Questions (FAQs) About Lupus

Q: What is lupus, and who is most at risk?

A: Lupus is a chronic autoimmune disease that causes the immune system to attack the body's tissues, often affecting the skin, joints, kidneys, and heart. It primarily affects women between the ages of 15 and 44. There are four main types: systemic, cutaneous, drug-induced, and neonatal lupus.

Q: What are the common symptoms of lupus?

A: Lupus symptoms vary but often include fatigue, joint pain, headaches, fevers, and skin rashes. Hair loss, mouth sores, and a butterfly rash are also common. Many patients also develop Raynaud's disease, which causes color changes and numbness in the fingers and toes due to poor blood flow.

Q: How are collagen and vitamin D connected to lupus?

A: Lupus can damage collagen-rich tissues, contributing to disease progression. Bone broth may help support collagen levels naturally. Vitamin D deficiency is common in lupus and may worsen symptoms. Sun exposure is ideal for boosting vitamin D, but testing is needed to find and maintain optimal levels.

Q: What role do estrogen and linoleic acid play in lupus development?

A: Excess estrogen and linoleic acid (from seed oils and processed foods) may impair mitochondrial function, increasing lupus risk. They promote oxidative stress, water retention, and metabolic suppression. Cutting back on these and managing stress can support cellular energy and reduce symptoms.

Q: Can progesterone help manage estrogen excess and lupus symptoms?

A: Yes. Transmucosal bioidentical progesterone is a safe, natural way to balance estrogen and improve sleep. It's best taken with natural vitamin E. Avoid synthetic versions and follow a hormone-aligned schedule. Unlike synthetic progestins, bioidentical progesterone is well-tolerated and effective.

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