

Top 10 Things Your Nails Say About Your Health

For most of us, our nails still have an important role to play: They protect tissues, scratch [itches](#) and act as windows to our overall well-being. They also offer warning signs of malnutrition, infection and serious disease.

Composition: Nails are layers of keratin, a protein that's also found in our skin and hair, and are made up of six parts. The **nail plate** is the hard, protective piece and the most visible part. The skin around the nail plate is called the **nail folds**, and the **nail bed** is the skin underneath the nail plate. The whitish crescent moon at the nail base, under the nail plate, is called the **lunula**, and the tissue overlapping the nail at the base is the **cuticle**.

Your nail grows from the matrix, an area under the protective cuticle at the base of the nail bed. Fingernails grow 2 to 3 mm every month and toenails about 1 mm, but growth is faster in the summer months and on your dominant hand [source: [American Academy of Dermatology](#)].

1: Thyroid Disorders

Every disease has its signature symptoms. For example, [thyroid](#) disorders (like hyperthyroidism and hypothyroidism) are most often associated with weight loss and weight gain, respectively. However, doctors frequently link up nail changes with thyroid diseases, too.

The presence of onycholysis often occurs with hyperthyroidism [source: [Gregoriou, et al](#)]. Also known as Plummer's nail, this condition occurs when a fingernail -- most often the ring finger or little finger -- or a toenail separates itself from the nail bed. This lifting can occur at the tip of the nail or along the sides.

Because dirt and moisture can easily collect under lifted nails, Plummer's nail can easily lead to bacterial and [yeast infections](#). Therefore, it's important to see a doctor as soon as possible if you notice any separation of your nails. Not only will you require tips on preventing infection, you'll also need to seek treatment for the underlying cause of the condition.

Spoon nails, which are nails that are concave and look scooped away from the finger, can be a symptom of hypothyroidism [source: [Mayo Clinic](#)].

2: Cardiovascular Problems

How do you know if you have or are at risk for cardiovascular problems? High blood pressure? [High cholesterol](#)? Well, yes, those are common indicators. But what about the condition of your nails? As it turns out, there are a number of nail changes that can indicate [cardiovascular diseases](#).

Splinter hemorrhages, which are thin red or reddish brown lines under the nails, can be a sign of heart valve infection or vasculitis [source: [Medline Plus](#)]. While they may look like splinters, they're actually lines of blood.

Congenital heart abnormalities can lead to clubbing of the nails [source: [Medline Plus](#)]. In clubbing, nails soften and appear to float above the nail bed, which has usually become wider and rounder than normal. Additional nail signs that can indicate cardiovascular problems are spoon nails (nails that look scooped away from the finger) and pale or blue-tinged nails [sources: [Mayo Clinic](#); [WebMD](#)].

3: Anxiety and Stress

If you're a [nail-biter](#), you're not alone. About 50 percent of kids and teens in the United States ages 10 to 18 bite their nails -- as do about 23 percent of adults ages 18 to 22. It's a hard habit to quit, but by age 30, most people have given it up [source: [WebMD](#)].

Nail-biting is a nervous habit, like fidgeting and thumb sucking, and people do it when they're stressed or bored. Mild nail-biting won't cause permanent damage, but it does leave your hands looking unkempt and bloody, and could also leave you susceptible to infection in your fingers and your mouth. To help quit, try stress-management methods and physical barriers such as bitter-tasting nail polish. Or, keep nails looking nice with frequent [manicures](#) -- tidy nails may deter you from bothering.

Sometimes, though, nail-biting and picking is severe enough to be categorized by mental health professionals as an impulse-control disorder. It could indicate an [anxiety](#) or compulsive disorder and may require behavior therapy. If nail-biting is accompanied by hair pulling or self-mutilating behaviors, see a doctor.

4: Diabetes

If you frequently paint your fingernails, you'll notice they tend to have a [yellowish hue](#) after you've removed the nail polish. However, if your nails remain yellow over a period of days or after a lightening remedy (such as dipping your nails in lemon juice), the discoloration could have a more serious cause: [diabetes](#).

Diabetes can lead to yellowing of both the skin and nails, but is usually more evident in nails [source: [Huntley](#)]. The color change is probably caused by glucose connecting with the collagen proteins in the nail [source: [Oz](#)].

If your yellow nails are not going back to a normal shade, and if you're also experiencing other symptoms of diabetes like increased thirst and urination, you should see your doctor right away.

5: Pulmonary Problems

Matching your nail color to your lip color can be a beauty strategy. But when you're sporting a light shade of blue on your nails and lips and cosmetics aren't involved, you could be in immediate danger.

Blue nails (particularly when paired with blue lips) can mean that you have an oxygen-related health problem, such as [source: [Weil](#)]:

- Low hemoglobin
- Asthma
- COPD
- Emphysema
- Chronic bronchitis
- Pneumonia

In addition to pulmonary problems, blue nails can also indicate certain heart conditions [source: [WebMD](#)]. If your nails have turned blue, regardless of condition, it's usually a sign that your illness has become severe. Emergency medical attention might be needed.

6: Arthritis-related Diseases

Generally, [arthritis](#) is thought of as an achy-joint disorder that affects the elderly. There is a type of arthritis like that. It's called [osteoarthritis](#), and it is very common. However, there are actually more than 100 diseases that qualify as types of arthritis [source: [Arthritis Foundation](#)]. The following conditions in the arthritis family can sometimes lead to nail changes:

- Osteoarthritis: Weak nails caused by selenium deficiency are often observed in people with this most widespread form of arthritis [source: [Arthritis Foundation](#)].
- Psoriasis: Yellow nails, rippled nails (when the surface of the nail has a pitted or rippled look) and splinter hemorrhages all can be signs of psoriatic arthritis [sources: [WebMD](#); [Gregoriou, et al](#)].
- Lupus: Puffy nail fold, a symptom when the skin around the base of the nail swells, is often seen in connective tissue disorders like lupus [source: [WebMD](#)].
- Rheumatoid arthritis: Red lunula (the lunula is the crescent shape in the nail bed) in rheumatoid arthritis is often due to prednisone treatments for the disease [source: [Gregoriou, et al](#)].
- Kawasaki disease: This disorder can lead to onychomadesis, the shedding of nails [source: [Gregoriou et. al](#)].

7: Injury

Accidents happen -- who hasn't unintentionally caught a finger in a door or dropped something heavy on toe? Mild trauma to the nail bed can cause small, [white spots](#) (leukonychia[[url](#)]) in the nail plate that are harmless -- they grow out as the nail grows and eventually you'll clip off the damaged part of the nail. A more severe injury to the nail bed can cause dark spots or streaks on or under the nail, nail detachment (onycholysis[[url](#)]) and splinter hemorrhages

Nail injuries can also happen during a manicure or pedicure. Nail polish and remover are drying and cause [brittleness](#). And if you're a chronic nail-biter, try to quit the habit -- it can lead to nail deformities, as well as infections.

8: Nutritional Deficiencies

You are what you eat: Beauty on the inside will reflect beauty on the outside. Healthy nutritional choices include [omega-3 fatty acids](#), lean proteins and iron to help support healthy hair, skin and nails.

Nails can reflect some nutritional deficiencies, such as low levels of iron, biotin and protein -- although protein deficiencies are rare in the United States [source: [Mayo Clinic](#)].

Most nail problems aren't associated with your nutrition, but if you have an iron deficiency, your nails may disclose it. Pale, whitish nail beds are a common symptom of [anemia](#). With more severe deficiencies, the fingernail may change shape -- a condition called koilonychia (also known as spoon nails) in which the nails are thin and concave with raised vertical ridges.

9: Melanoma

You might think skin cancers only appear in areas of the body most obviously exposed to the sun --like the nose or ears, for example. While many [skin cancers](#) do commonly occur in such areas, the deadliest kind -- melanoma -- can show up under a nail. Known as acral lentiginous melanoma, the kind of melanoma found under nails is the only skin cancer that is more common in African Americans and Asians than it is in Caucasians in the U.S. [source: [Skin Cancer Foundation](#)].

Acral lentiginous melanoma usually appears as dark lines underneath the nail, so if you notice this symptom, see your doctor right away. This type of skin cancer is known to advance quickly.

Another tip: If you get an annual skin cancer check by a dermatologist, be sure to remove any nail polish before showing up for your visit. This will allow the doctor to check your fingernails and toenails for signs of melanoma.

10: Infection

Painful, red and itchy skin around your nails is a pretty big clue that something's not right. Just like other parts of your body, your fingernails and toenails are prone to [infection](#), usually occurring in adults and caused by fungus (such as yeast), bacteria (such as Staphylococcus) and viral [warts](#). Nail infections don't necessarily indicate larger, systemic health problems but they do need to be treated by a doctor, especially if you have a medical condition that weakens your [immune system](#).

Fungus is the most common perpetrator, infecting about 12 percent of Americans [source: [American Academy of Dermatology](#)]. It can cause nails to become thick and crumbly and change color, taking on a blue-green hue. Fungus is notoriously difficult to treat, so see a

doctor for medicine and expect to see results only after your nails have gone through a complete growth cycle (a few months).

Bacteria and viruses also both cause unsightly changes to nails. [Bacterial infections](#) target the skin under and around the nail and can lead to nail loss if not treated. Skin viruses cause warts around and sometimes under the nail, which a doctor can freeze off or chemically treat to remove.

Unkempt artificial nails, unsanitary manicure equipment and vigorous manicuring can all increase the chances of infection. Always be sure to properly -- and gently -- clean your nails, fingernails, toenails and artificial nails, and buy your own manicure tools to reduce the spread of bacteria from person to person.

Chemotherapy and Nail Infections

If you're undergoing chemotherapy, you're likely to experience some of the side effects associated with these powerful drugs. Chemotherapy drugs specifically attack the fast-growing cells in your body, such as those in your hair and your nails, which can make you more prone to nail injuries and infections.

During chemotherapy, you may experience several changes in your nails. They may look bruised, develop blemishes such as lines or indentations, become dry and thin or grow more slowly. Your nails are likely to break more easily, your cuticles may fray, and sometimes a nail may fall off. These side effects are temporary, but they can lead to a more serious problem: infection [source: [Healthline](#)].

Chemotherapy suppresses your immune system, which is the set of processes in your body designed to fight infection -- with a weaker immune system, your nails and other tissues lose strength. You'll be more likely to develop an infection through a skin opening where your cuticle has frayed or in the nail itself, and you'll be less able to combat it. If you suspect that you have a nail infection, see your doctor immediately.

A variety of nail infections can occur among chemotherapy patients and other people:

- A fungal infection, called onychomycosis, usually starts on your big toe as a discolored spot and spreads to the cuticle, causing the end of your nail to rise. Occasionally, infection can also begin at the cuticle and raise your nail from there. Once the fungus sets in, it causes your nails to thicken and flake. The most common fungus to cause these symptoms is *Trichophyton rubrum*.
- Yeast, a specific type of fungus, can also get under your nails when your immune system is compromised. A yeast infection causes your nails to thicken and turn yellow, brown or white. People who develop yeast infections in their fingernails may spread the infection to their mouths.
- Paronychia, a bacterial or fungal infection of the nails, causes inflammation and redness at the base of your nails and in the cuticles. *Pseudomonas*, commonly referred to as "green spots" or "green nails," results when bacteria get under the nail plate or between the natural nail and an artificial nail. Bacterial infections can be short- or long-term and are more likely to discharge pus. Keeping the skin around your

finger­nails and toenails clean and dry reduces the likelihood of contracting paronychia [sources: [Harvey](#), [Skinsight](#)].

Protect Your Nails

The last thing you need when you're undergoing chemotherapy is a nail infection. Here are some tips for avoiding one:

- Wear rubber gloves when gardening, cleaning house or washing dishes.
- Keep your nails trimmed and clean, and don't pick, bite or tear your nails or cuticles.
- Use moisturizing cuticle and nail cream.
- Use mild soaps and cleaners, and avoid nail polish removers that contain drying chemicals like acetone.
- Limit the amount of time your nails are in water, and dry them thoroughly after bathing or showering.
- Don't get a manicure unless you bring your own sanitized equipment, and avoid artificial nails -- the adhesives can trap bacteria [source: [BreastCancer.org](#)].

How to treat a Nail infection

Nails are more than simple protective coverings for sensitive fingers and toes. Your nails are living, growing parts of your body, and as such, they can get sick just like the rest of your body.

Infections of the nails and the surrounding skin can result from injury, ingrown nails, split and separated nails and other more serious conditions. Infections not only cause pain, but they can also affect the way your nails grow and can impact your overall health.

Nails seem vastly different from the outer layer of skin known as the epidermis, but they are merely the hardening of the top layers of epidermis. On thicker-skinned parts of your body, such as your palm, the epidermis comprises five layers -- at the tips of your fingers and toes, these outermost layers of the epidermis harden into nails. These nails, made from a protein called keratin, protect the sensitive tissue underneath and make it possible to use fingers and toes for scratching and other purposes [source: [O'Rahilly](#)].

An infection occurs when foreign bodies, such as viruses, fungi and bacteria, get inside your body. Infections may seem like mild matters, but they can become serious complications for people with other medical conditions or if they go untreated and spread. Signs of infection include redness, swelling, irritation and pain. Infected tissue is also warm and tender to the touch and may produce pus [source: [Breastcancer.org](#)].

Treating Nail Infections

Different types of nail infections call for different treatments, and some infections are easier to treat than others.

Fungal nail infections, including yeast infections, can be stubborn and often recur even with treatment. If you suspect that you have a fungal nail infection, see your doctor. Over-the-counter remedies are inadequate for fighting fungal infections, and you don't want to waste time while the infection worsens.

A doctor can treat infected nails in several different ways. One method is to prescribe an oral antifungal medicine, such as terbinafine or itraconazole -- these medicines help a new fungus-free nail grow. If your doctor prescribes an oral medicine, you'll need to take it for six to 12 weeks, and you probably won't have a completely clean, healthy nail for at least four months. Antifungal medications can also cause side effects, including rashes and liver damage [sources: [Harvey](#), [Mayo Clinic](#)].

For mild infections, your doctor may prescribe ciclopirox, an antifungal nail polish that you paint on daily for a week. After a week, you wipe the nail clean with alcohol and start again, repeating the weekly applications 52 times. This treatment requires you to apply the medicated polish every week for a year, and the nail polish isn't guaranteed to clear up the infection. A doctor may also recommend applying over-the-counter creams that contain urea, or he or she may file down the nail, which is known as debridement, to increase healing time [source: [Mayo Clinic](#)].

Finally, for severe or particularly painful infections, your doctor may suggest removing the infected nail entirely. The surgery is quick and simple, but you may have to wait as long as a year for the new nail to grow [source: [Mayo Clinic](#)].

Bacterial infections, such as paronychia and pseudomonas, require different treatment. People with bacterial infections can alleviate pain and swelling by soaking their hands or feet in warm water three to four times a day. Your doctor may prescribe an oral or topical antibiotic, depending on the cause of the infection. Some forms of paronychia may result from fungal infections, meaning the doctor will probably prescribe an antifungal medical as described above [source: [American Academy of Family Physicians](#)].

Source: <http://health.howstuffworks.com/skin-care/nail-care/health/5-things-nails-say-about-health10.htm>

Discovery Health

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