

Fingernail Health

By Douglas Niedt

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Why are my nails so thin? Why do my nails break so easily? How can I get my nails to grow better? My nails keep splitting, what can I do? These are frequently-asked questions by guitarists.

How to Stop Breaking Your Nails

Be Careful

The answer to this of course is to be more careful! Yes, that's obvious. But it's actually a real answer.

Left-handed people break their right-hand nails far less frequently than right-handers because their left hand performs tasks that might break a nail. Tasks such as opening a car door, turning on a radio, TV, or other electronic component, opening doors, turning on light switches, reaching for a tool, reaching for a kitchen pan or tool, etc. For all of us, nail breakage can be reduced tremendously simply by thinking before reaching to do something with the right hand.

For me, most of my fingernail breaks occur around a car. I've broken a nail inserting the key into the ignition. I've broken a nail loading and unloading the car. I've broken a nail opening the car trunk. I've broken a nail turning on the radio or adjusting the ac/heater.

When working with manual or power tools, I always ask myself, "If this slips, comes loose, or I lose my grip, where will my hand be when that happens? Asking yourself that simple question can prevent not only broken fingernails, but catastrophic injury.

Wear Gloves

I have done heavy-duty gardening, brick and stonework, garden tractor and machinery maintenance, light construction, tree trimming with a chainsaw, gutter cleaning, roof maintenance, and other household chores for many years. I have found that gloves are a must, but not heavy duty gloves (except for specialty gloves for chainsaw work).

Heavy-duty gloves give the impression they will protect your nails while performing the most strenuous tasks. However, when you wear heavy gloves, you can't feel the stress that various tasks place on your nails and fingers. You will tend to exert excessive pressure on the nails without realizing it. You finish the task, take off your gloves, and you have a broken, split, or cracked nail. That happened to me many times. I changed to wearing disposable, waterproof nitrile rubber gloves. I use the 8-mil thickness, 9 1/2

inch long type. They come in a variety of sizes and are [available here](#). They are pretty tough for a rubber glove and chemically resistant. You can have your hands exposed to gasoline, oil, grease, garden chemicals, solvents, paint, and other nasty stuff with no harm to your hands or nails. *And you can feel what you are doing to prevent putting excessive stress on your nails.* I have rarely broken a nail while wearing these gloves. The downside is they are expensive and can be uncomfortable in hot weather. They don't breath at all. After a couple hours of work under hot conditions, your fingers will be swimming in sweat. My wife doesn't like them for that reason, but I'm willing to put up with it to protect my nails.

For the guitarist, gloves must protect not only against physical injury or breakage of the nails. They must also protect them from chemicals and cleansers and from abrasive materials such as garden soil, and sand. Garden soil is terrible for the nails. It is very abrasive to the nails and dries them out. Thoroughly cleaning garden soil out of the nails requires lots of soap (which removes oils from the nails) and brushing (more abrasion).

Heredity and Age

Heredity is a major factor in the quality and health of your nails. Some people just naturally have great nails for guitar playing. I am one of those people. I have never had to use nail improvement products. Therefore, I have not personally tested the products or "therapies" I discuss below. I am passing on what others say works. I don't guarantee any of these will truly improve your nails.

It should also be noted that in general, fingernail health deteriorates with age. They become drier and more brittle.

Don't Expect Results Overnight

No matter what nail improvement product, diet regimen, or treatment you use, do not expect results overnight. Nails grow from the area under your cuticle called the matrix. New nail cells grow constantly and get hard and compacted and pushed out toward the end of your fingers. Nails grow approximately 0.1 millimeter a day, meaning *it takes about four to six months to fully grow out*. This means that regardless of the type of fingernail treatment, **it will take months for that new nail growth to reach the tips of your fingers** for you to be able to tell if it did any good! Some minor improvements in the surface appearance of the nails may be noticed sooner.

Fingernail Health

Thousands of products are available in the marketplace with claims they will prevent broken nails or promote nail health. These products are not studied clinically, so most claims are not backed up by science. Many are useless or will actually damage your nails.

Richard "Rico" Stover, developer of the Rico Guitar Nails artificial nail system for guitarists ([see my Technique Tip on Rico Guitar Nails](#)), highly recommends FlexiNail penetrating nail conditioner. The keyword here is "penetrating".

Many people recommend hydrating the nails with lotion, Vaseline, or non-petroleum jellies. Some people suggest natural oils such as olive oil, coconut oil, almond oil or jojoba oil or a mixture. But, for a nail conditioner to show long term results, *it needs to penetrate the nail's protective coating.*

As the FlexiNail website explains, "Most conditioning oils don't penetrate—they just sit on top of the nail. They absorb into the cuticle, but not into the nail itself. Many products even advertise "vitamins". But in many cases, this "vitamin" or antioxidant is one of the ingredients used to simply stop the oil in the product from going rancid (and it sounds good too). For a conditioner to be effective, it has to get into the nail which is made of alpha keratin and very different in composition from the skin. Without a penetrating formulation, the ingredients can't penetrate to the nail matrix (the matrix is the part under the cuticle generating new nail growth) and you're wasting your time and money."

Also from the FlexiNail website:

Below are four things that are really tough on nails and some simple suggestions to help you get the fast fingernail growth you want while getting rid of those dry, brittle nails once and for all.

1. Excessive hand washing (or sanitizing) - Maybe you're in a profession that simply requires you to wash your hands a lot (health care, child care, food preparation etc). Washing your hands with soap and water or cleansing with alcohol based gels can really strip and dry out your fingernails. Use a penetrating nail conditioner like FlexiNail to "re-hydrate" your nails. If you just use a cuticle cream or a simple oil that isn't formulated to get past the nail's protective coating then it isn't getting into the nail and you are wasting your time and money. Once the oil based conditioner is in the nail it actually works to repel water and its effects.

2. Environmental / weather dryness - If you live in a cold dry winter area or where there are hot dry summers your nails can be severely impacted. You may even notice seasonal changes to how well your nails do. For this, a penetrating nail conditioner is highly recommended.

3. Bad fingernail product choices - Do you occasionally use nail hardening products? These products make nails and toenails harder in the short-term, but they can also then make them brittle and more prone to breaking. Some of these "hardeners" use formaldehyde which acts to cross link the nail's keratin protein. So as tempting a short-term fix a hardener might be - don't do it! Maybe you've given up and just want fake nails. Use Rico Guitar Nails, not acrylic or gel nails.

4. Fingernail polish - Note from Doug: Ladies, don't use it! These products usually have solvents and alcohol that really dries out the nail. Some even contain

*formaldehyde. Good for those lab specimens in the jars, but not your nails.
Acetone, which is used to remove polish, is also very harmful to the nails.*

Moisturize

While there is little in the way of medical data showing that moisturizing the nails directly will help nails *grow*, it can make cuticles look better and help *protect nails from breaking* due to a lack of moisture. "If your nails are prone to breakage, it could mean they need moisture — and putting oil around the cuticle helps moisturize the entire nail, which will reduce the incidence of chipping, cracking, and splitting," says Margaret Ravits, MD, a dermatologist at Hackensack University Medical Center in New Jersey.

Diet

Many say your diet has much to do with the strength of your nails. If your body isn't getting the proper amounts of protein, fats, vitamins and minerals it needs, then it is not going to be able to make strong nails.

If you eat a healthy diet and your nails are still weak, some people recommend taking a supplement for hair, skin and nails. These supplements usually contain vitamins A, C, D, E, folic acid, zinc, iron, calcium and biotin (a b-complex vitamin). In several studies, researchers found that supplements of biotin increased nail thickness and prevented splitting and breaking. In a respected German study that evaluated 45 people with severe nail problems, 2.5 milligrams of biotin daily for several months benefited everyone — with 91% of the 45 citing significant improvement. NYU dermatologist Sumayah Jamal, MD, says to get the effect, it's vital that you take the prescription strength, therapeutic level of 2.5 milligrams daily.

Some nail products also contain silicon and the supplement MSM (Methylsulfonylmethane), two other nutrients associated with nail health.

The one supplement that won't work: gelatin. Experts say eating or soaking in it won't do a thing to increase nail strength. There is also little scientific evidence that supplements or nail products containing calcium, yeast, or fluoride have any significant impact on nail health.

Lemon Juice

Some people swear by soaking the fingertips once daily for 15 minutes in a shallow bowl of lemon juice or a mixture of lemon juice and olive oil. Like every other treatment, you would have to do this for 4-6 months to evaluate whether or not it makes a difference.

Nail Filing

Don't use rough files such as emery boards. They are too harsh for nails, causing small fissures and cracks that lead to breakage and tears. Instead, file nails with a smooth, fine file and don't saw back and forth. File in one direction only, and do it slowly and evenly to reduce risk of breakage. [Refer to my Technique Tip on filing your fingernails.](#)

Change Your Shampoo

While most women know when a shampoo doesn't agree with their hair, women and men don't realize it may not agree with their nails—even if their hair looks great. This, say experts, is particularly true of detergent shampoos, or those for oily hair, which are designed to strip lipids and other natural oils from the scalp. If your nails are very dry and you are using any soap product that strips the oils, there is the potential to dry the nails.

What about those vertical ridges on my nails?

Some people have vertical fingernail ridges that start under the cuticle and extend to the tip of the nail. These are not to be confused with horizontal nail ridges (running across the nail).

The actual source or cause of these vertical ridges is unknown, but heredity is thought to play a role. These ridges tend to become more prominent as we age. Vertical ridges are harmless. They do not pose a health problem although sometimes the nail becomes weaker at these ridges and will split.

The FlexiNail product mentioned above claims to penetrate the nail's protective coating and dramatically help reduce splits and cracks, especially at these fingernail ridges. By the way, don't confuse vertical ridges with horizontal ridges. If you have horizontal ridges or your nail changes color, you should see your doctor as this could indicate a health problem.

What are those white spots on my nails?

White lines or spots are usually the result from injury to the nail plate or nail bed. In time the white spots will grow out.

To Sum Up:

1. When performing physical labor, wear gloves (preferably nitrile rubber) when appropriate to protect the nails from harmful chemicals and abrasives.
2. *Be careful* in your daily activities to avoid breaking nails!
3. Keep your hands out of harsh soaps, shampoos, and detergents.
4. Moisturize your nails regularly.
5. Maintain a good diet.
6. File your nails properly.
7. Do not use nail polish or any nail hardener or nail improvement product containing alcohol, formaldehyde, acetone, etc. Translation: don't use 99% of the nail improvement products that are manufactured by large cosmetics firms. Such products may produce short-term improvement but over time will damage your nails.

8. Remember, *you must wait 4-6 months for the nail to grow out from the matrix to the fingertip to truthfully evaluate the effectiveness of any product or therapy.*