



YOUR NAILS REFLECT YOUR HEALTH

Your nails can reveal important clues about your health, past illnesses, occupation, nutrition and personality. Underlying health conditions can also be revealed in your nails. If you notice changes in your nails, you're advised to bring this to a doctor's attention.

When we're children, it takes about 3 months for our nails to grow their entire length, from cuticle to tip. In adults this can take up to 6 months. If your health suffers a significant event, this can show up as an indented sideways line, called Beau's Line, on your nails. By tracking the growth of your nails, an observer can put a time on the event.

Not all nails grow at the same speed. Your middle fingernail grows quickest, with the index and ring fingers slightly slower. The nails of your dominant hand tends to grow quicker, as all the minor scrapes and chips promotes nail growth. Nails on a hand that isn't used much, for instance if you're confined to bed or has your arm in a cast, grow slower.

As we get older, our nails get thicker. If a post-menopausal woman has thin nails, that could be a sign of osteoporosis.

Nutritional therapy for nails

Nails are built up of keratin, a form of protein. So a diet with adequate protein is important for nail health, and digestion must be effective in absorbing the protein. If you don't get enough protein, you may notice that your nails no longer have the white half-moons at their base. (Ignore thumb nails, as they may be without the half-moons anyway.) If your half-moons are absent and you do eat enough protein, the problem may be digestion. Taking some apple cider vinegar with your meals can help with digestion.

A number of other nutrients are also good for nail health.

Vitamin E can combat Yellow Nail Syndrome. Yellow nails are linked to diabetes, heart disease and some other significant health ailments which can also be improved with Vitamin E. The Vitamin E can be taken orally or applied topically.

Silicon promotes the health of bone and skin. This trace mineral aids the formation of collagen which promotes the development and strength of skeletal and epithelial (bones, teeth, skin, gut) connective tissue. In one study subjects took 10mg silicon daily, using a stabilized orthosilic acid which is easily absorbed. After 20 weeks, their nails and hair was smoother and less brittle.

Iron deficiency can cause brittleness in nails. If your nails are brittle, it is a good idea to talk to your doctor about the need for a blood test. About one third of women suffer iron deficiency. Red meat in your diet can help.

Zinc deficiency causes white spots under the nails and is often linked to inflamed cuticles, hangnail and deformed nails. As well as helping the immune system, zinc plays a role in some 300 different reactions in the body. Zinc levels can be low when you have poor digestion, as zinc can only be absorbed from food if you have enough gastric acid. A simple taste test can help show if you need additional zinc, which can be taken orally.

Biotin taken orally can increase the thickness of your nails. A study showed that in 63% of participants, who had brittle nails, the thickness increased by 25%. The daily biotin dose was 2.5mg administered in just over 5 months.

Fungal infection of the nails

By far the most common nail disorder is fungal nail infection or Onychomycosis. In most cases, the fungus starts on the skin and spreads under the nails.

Onychomycosis occurs mostly in adults and usually affects the toenails. In some countries, fungal nail infection affects up to 13% of the population. Its rising incidence is a factor of people living longer, more people with diabetes and immuno-suppression.

Fungal nail infection is most often caused by the *Trichophyton rubrum* fungus (70% of cases), while the *Trichophyton mentagrophytes* fungus accounts for about 20% of cases.

The people most at risk of getting fungal nail infection are those of higher age, with a family history of the infection, being in poor health generally, living in a warm climate, taking communal baths, wearing sweaty footwear and suffering immune suppression due to drugs or HIV.

Treating nail fungus

If you think you have a fungal nail infection, take some nail clippings to your doctor, as other nail disorders may present similar symptoms. It is important to make sure of the condition before you start treatment, which can be difficult. Drugs taken orally for the condition may have side effects.

Fungal nail infections are difficult to treat. Topical creams only work in about 10% of cases. Oral drugs work more than half the time, curing as much as 70% of cases. However, this treatment needs to continue for about three months, with regular blood tests as the potential side effects might impact on the liver.

Low Level Laser Therapy (LLLT) has emerged as a new way to treat fungal nail infection. Now available in New Zealand, LLLT can help with wound healing, reducing bruising and injury. Its success rate in treating fungal nail infection is 70-90%, requiring one to three treatments. If you suffer from fungal nail infection, LLLT may be a good option that lets you avoid drugs and their side effects.

Surgery is also a possible way to deal with fungal nail infection. This involves removing the infected nail completely or chemically dissolving the nail using urea paste.

Other nail ailments

Psoriasis of the nails is the second most likely nail ailment after fungal nail infection. With psoriasis, nails may look pitted and be thicker. While you cannot do anything specific about it, it may be a signal that you need to get a general health check-up.

Koilonychia causes nails to curl up or become spoon-shaped. It can indicate diabetes, iron deficiency, protein deficiency or auto-immune disease such as Systemic Lupus Erythematosus (SLE), or Raynauds Disease.

Thin, brittle, splitting nails can be caused by osteoporosis, malnutrition, an underactive thyroid, eczema or iron deficiency.

Brown discolouration is something to be on the lookout for. The causes of brown discolouration of the nails include malignant melanoma, Addisons disease and breast cancer.

Be on the lookout

If you notice unusual changes in your nails, it could mean something is wrong. It might be a simple matter of nutrition, but could also signal infection, problems with your immune system or perhaps something serious. It's best to go see a doctor and have the condition diagnosed.