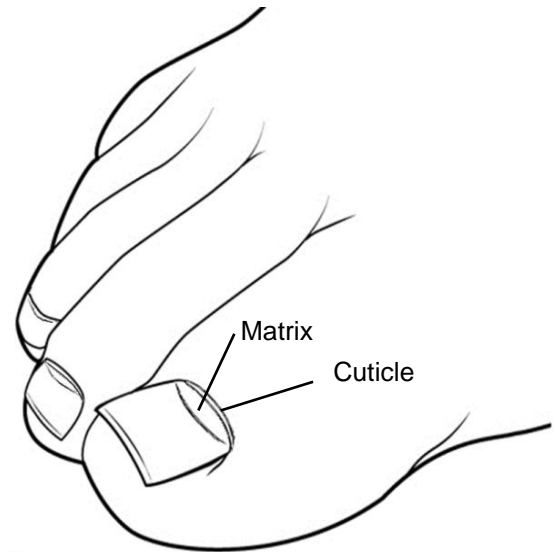




# Nail Changes

Nails are hardened skin cells that protect and support the tissues in our fingers and toes. The living cells that form nails begin in the matrix or half-moon area under the cuticle (Picture 1). As new skin cells grow in the matrix, older cells are pushed forward. They harden and form the firm, visible nail. Conditions that affect the cells at the matrix can be seen as they grow out into the visible part of the nail.

Nail growth can be slow and is affected by many things. Nails grow faster in the summer. The nails on a person's dominant or most used hand grow faster. Men's nails grow faster than women's, except during pregnancy. Fingernails grow more quickly than toenails. Each month fingernails grow an average of 2 to 3 millimeters, while toenails only grow 1 millimeter.



**Picture 1** The nail matrix is the part of the nail where the cells grow. The cuticle helps to protect it.

## Common nail changes

- **White spots.** This is often caused by mild trauma such as catching your finger in a door. These are very common, and once the spots grow out, there is no further concern.
- **Splinter hemorrhages.** These appear as fine red to reddish-brown vertical lines. They resemble splinters beneath the nail. Damaged blood vessels under the nail cause these lines. These may be caused by trauma, certain medicines or different important health conditions. **Therefore, tell your child's**

primary care doctor or dermatologist if you notice these lines in many of your child's nails.

- **Ingrown toenails.** This happens when the corner of the nail curves downward into the skin. They are often painful and can lead to infection. This is a very common problem, especially on the big toe. This can be a result of improper nail trimming or shoes that are too small.

There are ways to help prevent and treat this condition. Soaking the toe in warm water for 10 to 15 minutes may help. Wear shoes that fit well. Cut nails straight across. If an ingrown nail lasts a long time, your child may need to see a dermatologist or podiatrist (foot doctor).

- **Infections** - If a nail is hardened, thickened and changes in color (yellow), it may be caused by a fungus. (See the Helping Hand, *Tinea Pedis and Fungal Toenail Infections*, HH-I-383.) If the toe is red, painful, swollen and has drainage, the infection may be caused by bacteria.
- **Warts** - Warts can change the shape of the nail or cause pain or discomfort. Different treatment options are available if warts cause pain or persist.
- **Dark spots or streaks** - These can be normal in darker skinned people. Dark spots may be seen in one or more nails. Most of the time dark spots on the nails are harmless. It is important to evaluate your child if dark spots develop in the nails.
- **Pitting** - These are small divots or depressions in the nail. These are common in certain skin conditions such as psoriasis or alopecia areata. Nail pitting is a result of inflammation (irritation or swelling) in the nail matrix.

## Treatment

Treating nail changes can be very difficult. Your child's doctor may prescribe oral (by mouth) or topical (on the skin) treatments. Depending on the problem, these medicines may fall into one of the following categories:

- antibiotic
- anti-fungal
- anti-inflammatory (topical steroids)

**Remember that nail changes need time to grow out after a problem is fixed. It takes a long time for a new healthy nail to replace the damaged nail.**

## **Nail care**

- Keep nails clean and dry.
- Cut nails straight across. Round them slightly at the tips for maximum strength.
- Keep nails shaped and free of snags. Use a “fine” textured file.
- Avoid biting fingernails.
- Do not remove the cuticle.
- Trim toenails regularly to keep them short.
- Wear shoes that fit properly.