## The Tuesday Minute

Nutritional information.... one byte at a time

## This Week's Topic

## **Look At Patient Fingernails For Health Clues**

Physical clues can tell us a lot about our patients if we know what to look for. During your physical exam, make sure to do a quick fingernail check. Do you see any splitting, cracking, chipping, peeling, or layering nails? We have all heard that splitting nails is a need for calcium and or gelatin. Those are two factors that may be helpful but it doesn't always work. With splitting nails what other factors could be causing the problem? There are several but before we go further, let me lay the foundation using a different example.

White spots on the fingernails are very common too. If you can fix the problem easily, you'll look like a star. The standard fix which originates from Dr. Karl Pfieiffer is that white spots are a zinc deficiency. He recommends 30 - 60 mg of zinc per day. Sometimes that works great especially with teenagers who are frequently deficient in zinc, but I have seen the best results when we fix digestion and get the patient on adequate amounts of hydrochloric acid.

One of my colleagues concurred and shared with me just yesterday how a patient had white spots on their nails their whole life. Even with zinc supplementation, the white spots didn't go away until the patient started supplementing hydrochloric acid with meals.

Months of zinc supplementation with no results, yet with the right amount of hydrochloric acid in the gut the spots disappeared never to return.

You see we need an acid medium in the stomach to cleave the mineral from its substrate. If we give a zinc supplement and we don't have enough stomach acid, the zinc won't separate from its carrier molecule into an ionic highly absorbable mineral. So whether it's zinc oxide, gluconate, aspartate, or picolinate, low acid will keep the molecule intact and thus bound or attached to the zinc. This is not only true of zinc but other minerals as well. By the way, since I mentioned zinc, if you see little cracks and splits in the skin on the tips and sides of your fingers, zinc along with essential fatty acids will really help this painful condition.

Anyway regarding stomach acid and treating deficiencies, digestion is a major factor whenever we need bio-available minerals or the amino acids we get from digested protein. And when we talk about nails, we need amino acids from protein, calcium, and trace minerals.

You can see why so many conditions can be helped by hydrochloric acid therapy. Dr. Jonathon Wrights' book "Why Stomach

Acid is Good For You" reviews over 26 conditions, everything from acne rosacea and aging to multiple sclerosis and osteoporosis. If you'd like to learn more about the use of dietary hydrochloric acid to enhance digestion, you'll find a previous "Tuesday Minute" below. But let's stick with the subject of nails and get back to my first example.

What about nails that split or peel? What are the factors that we need to make diamond hard nails? Obviously as we've mentioned, we want to add hydrochloric acid; and I know you are probably thinking calcium. Don't stop there, add vitamin D and a quality multi-mineral formula that has a good dose of trace minerals. I like Osteo-B II from Biotics Research. It has a calcium to magnesium ratio of 1:1 with a very healthy dose of the minerals needed to increase bone density as well as a host of trace minerals including silicon. Right off the bat your chances are amplified. There's information about dosage suggestions below.

But what if your patient doesn't respond in 60 days? What are some of the other factors that are necessary for healthy nails? One of the key ingredients to make healthy nails is biotin. Once we've covered the basics HCL, calcium, and trace minerals supplementing with biotin can often strengthen nails dramatically.

If your patient has brittle nails as well as dry skin and hair, try increasing Omega 3 fatty acids. Another option if joints and tendons seem to be weak in addition to poor nails, add MSM (methylsufonylmethane). MSM is a component of proteins found in

the hair, nails, skin, and tendons. MSM contains sulfur, which your body also uses for detoxification and joint health.

Finally, weak nails can also mean a weak thyroid. The thyroid hormones T3 & T4 increase the metabolic activities of almost all the tissues of the body. In terms of nails, we are interested in the thyroid's effect on the rate of protein synthesis and the rate of protein catabolism. To give you an idea of the effect on basal metabolic rate, thyroid hormone increases metabolism in most cells of the body and can raise the basal metabolic rate 60-100% above normal. However hypothyroid can drop the basal metabolic rate to almost half of what is normal. Low metabolic rate means low protein synthesis.

The body prioritizes and since your fingernails are low priority in terms of overall health, fingernail health takes a back seat to things like heart health. So remember, healthy thyroid function means healthy protein synthesis which translates into healthy nail and hair synthesis.

Interestingly enough, low thyroid and poor HCL go hand in hand. So if you see a low thyroid case look for low HCL and vice versa. If we want healthy hair and nails for all our patients, make sure the thyroid is purring at the correct metabolic rate, the stomach has adequate HCL, and keep an eye out for the physical clues that signal which nutrients are deficient.

Thanks for taking the time to read this week's edition today. I'll see you next Tuesday.