

# The Tuesday Minute

*Nutritional information.... one byte at a time*

## *This Week's Topic*

### **New Research: Zinc Deficiencies Related To Depression, Cancer**

Zinc. As a nutritionist, it's easy to get psyched about it! And after looking over several new studies, I'm reminded how much we need zinc! Is your staff trained to test all your patients for zinc deficiency? Get this! As if immune support and prevention for the common cold are not enough incentive, new research is emerging that our "little friend" zinc can be a predictor of treatment resistant major depression and has been shown to assist in the genetics of cancer reduction. We'll look more at the clinical applications in a minute, but let's talk about why so many people may be deficient.

Zinc deficiency can be caused by a variety of factors. Two of the main ones are excess coffee consumption and plasticizers. Coffee as we all know is a diuretic, depletes minerals, and increases cortisol; but what about plasticizers? Not only do we wrap and store our food in plastic wraps, we immerse ourselves in a sea of materials that out gas phthalates or plasticizers.

Things like detergents, soaps, cosmetics, shampoos, solvents, perfumes, and insecticides all contribute to excess body burdens. Then if we add vapors from construction materials like carpet, flooring, paint, wood finishers; we can see exposure is unavoidable. Agents like new cars, computers, vinyl seat covers, clothing purses, notebooks, toys, pens and PVC products all contribute to the seemingly endless list of offenders.

Dr. Sherry Rogers has been quoting medical journals for years on how plasticizers are being tied to diabetes and insulin resistance, low testosterone, low thyroid function, high cholesterol, and of course cardiovascular disease. But for our discussion here, plasticizers deplete zinc storage in the body.

Another major contributor for zinc loss can be commonly prescribed medications. Many diuretics used for treating high blood pressure cause mineral losses. Hydrochlorothiazide which is probably the most widely prescribed medication for hypertension has a direct link to zinc deficiency. Beta blockers also lead to this depleted zinc status. Add medications to an over processed food generation and it is not too difficult to connect the dots to see how your patients can be low in this essential mineral.

Remember zinc is involved in over 200 enzyme systems and a huge factor for white blood cell health and immune support. And with all the buzz about colds and flu, how much pain and suffering could you abate by boosting your patients' immune system, not to mention the good will it promotes.

Zinc is necessary to make HCL, it's critical for healthy GI cells, and it speeds wound healing. Zinc deficiencies have been related to: low testosterone, inflammation of all kinds, low sperm motility and low sperm count, night blindness,

cadmium and copper buildup, hair loss, and depression. We need zinc for healthy cell membranes and EFA metabolism.

Low zinc status can contribute to skin problems, compulsive behavior, reduced appetite (even to the point of anorexia), and prostate problems in men. Many of you know this and some of you are even saying, "Come on Joe. That is so basic." Remember that zinc is a crucial component to hundreds of enzyme systems.

These enzyme systems won't work efficiently if zinc status is suboptimal. For instance patients with GERD, perhaps they don't have enough zinc for the parietal cells to make adequate HCL? How many people have night blindness for lack of zinc? The gold standard for zinc status is white blood cell zinc. Dr. Alex Vasquez feels that when using serum zinc levels less than 100 mg/decileter should be a warning sign and part of a treatment plan since zinc is so important to reduce inflammation and pain.

I like fancy lab test just like the rest of you, but let's not forget one of the simplest and most effective ways to screen our patients is with our old friend the zinc taste test. The point is, we should test everyone who comes in our office as standard protocol especially during cold and flu season. Here's a short version of instructions for testing. Give the patient a small amount of liquid zinc. If they taste a strong taste they have sufficient tissue stores. If they don't taste it or the taste begins a minute later, they should supplement with zinc.

We tested our staff today just to give you an example of the prevalence of zinc deficiency with "healthy" people, 80 % needed zinc. That means that the 200 enzyme systems that depend on zinc cannot function at 100%. Suboptimal levels mean suboptimal performance. It's an inexpensive "test and treatment" that can have an enormous payoff.

What kind of good will are we promoting as we optimize peoples lives with some of these simple tests? You can easily train your staff to do the test and follow up results monthly with the form I've provided on this page. When patients are deficient, I recommend that they take 2 Tbsp daily of the liquid zinc until they start to taste it. Somehow the liquid seems to prime the absorption pump better than tablets or capsules and we get faster results. Once the patient starts to complain about the taste, use Zn-Zyme Forte (25 mg per tablet) 3 per day for 4 weeks and retest. Remember too much zinc for an extended period of time will drive down copper, so after 60 days we want to make sure they are on a multiple with some copper in it.

Think zinc to optimize enzyme systems, reduce pain, inflammation, and optimize the immune system. As new research is showing, it can assist in the genetics of cancer reduction. Your patients will definitely be interested. Thanks for reading this week's "Tuesday Minute". See you next week.