

Vitamin A & Infections

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Do you think the most published cardiologist in the history of the world, has the right to be heard on, “What went wrong with how we treated COVID”? We are talking about Dr. Peter McCullough, and you can see a link to one of his lectures to the right.

His opinion was that we should be treating people with COVID as soon as possible to limit the replication of the virus. Why did we wait until things got so bad that people had to go to the hospital? Dr. McCullough’s believes that historians will look back and ask “Why didn’t they treat early?”

By now we know that lots of things could be used to reduce replication. In fact, Dr. Alex Vasquez, back in 2014 outlined the major nutrients to reduce viral contraction and replication in his book, Anti-Viral Nutrition. Many of the things I will be discussing come from his work. You can also see a brief video to the right on his 2020 updates. One of the nutrients to reduce viral contraction we haven’t



heard much about is Vitamin A sometimes called the “Anti-infection Nutrient” Let’s take a closer look.

Vitamin A is essential for immune defense against infection of all kinds both viral and bacterial. It is important for the maintenance of epithelial barriers to keep pathogens from getting into our blood. But it also is essential to balance inflammation providing protection against the cytokine storm what is commonly called immunomodulation.

Dr. Vasquez shares that Vitamin A (along with iron) is one of the only essential

nutrients that presents a legitimate risk of toxicity with therapeutic doses. Manifestations of toxicity can appear quickly with acute high-dosing or chronically with lower doses. In the link to the right called Vitamin A Summary, I provide a link to a study in Italy where cancer patients took 300,000 iu for 2 years with minimal side effects and how to test for toxicity. You can also see a link to the right where the WHO suggests bolus doses of Vitamin A for measles.

This 2019 report on Medscape suggests two doses of 200,000 iu for children older than 1 year old and 2 doses of

100,000 iu for children 6 months to 1 year. But let's be sensitive that some people may not tolerate high doses.

The symptoms associated with Vitamin A toxicity are: Headaches, fatigue, dry skin, weakness, nausea, blurred vision, bone pain, muscle aches, hair loss, chapped lips, increases in liver enzymes especially GGT, hypercalcemia or elevated triglycerides for no apparent reason.

OK, so we've talked about the cautions. Let's come back to Vitamin A and why it is so important to maintain healthy levels before we get sick. One of the things I always forget is that there is a loss and catabolism of nutrients particularly vitamin A during Acute Infections and Inflammation. Dr. Vasquez points out 4 areas to consider:

1. Many people have marginal or deficient vitamin A status, so their tanks are near empty at the start of the challenge. Some studies show 25-45% of people have impaired ability to convert beta-carotene to vitamin A.
2. Increased metabolic demand of severe/acute infection utilizes or destroys vitamin A, exactly when it is needed.
3. Changes in liver and kidney function lead to increased urinary loss of vitamin A during inflammation and infection.

In other words, "when people are acutely sick or inflamed, they actually lose vitamin A through their urine, thus making them increasingly vulnerable to both inflammation and infection". Here's a Clinical Pearl:

4. The changes in hepatic-renal handling of vitamin A that lead to a loss of vitamin A are mediated by cytokines especially IL-6, which also raises CRP blood levels. If you see an elevated CRP during acute infection-inflammation, then you are probably looking at a situation of increased vitamin A loss that needs compensatory supplementation.

For acute dosing Dr. Vasquez recommends a 100,000 iu a day for 2 days and then 50,000 iu for the next 4 days. As you can see, an additional 25,000 iu would be safe for the next 30 days always being sensitive to the toxicity symptoms mentioned earlier. As a caveat, due to poorly designed animal studies, women who are pregnant or might become pregnant are advised to keep their vitamin A intake below 10,000 IU/d.

I think we know that most people have multiple nutritional deficiencies (not simply that of vitamin A) and that these nutritional deficiencies all cause immunosuppression and exacerbation of infection. Thus, the only reasonable, ethical and cost-saving course of action is to address any/all nutritional deficiencies, including protein, zinc, vitamin D, and selenium. For this acute dosing daily amounts of zinc (100mg) selenium (400-800 mcg) and vitamin D (20,000 iu) is safe.

Personally, I would cut those doses in half once the patient starts feeling better generally in about a week. Sadly, due to our litigious society, Dr. Vasquez suggest limiting treatment in writing with clear instructions that the patient or caregivers understand that treatment is only for a few days with a maximum of 7-10 days before either termination or re-evaluation.

We started our discussion mentioning Dr. McCullough and how important it is to treat early for virus not just COVID, but any virus. And while we are talking about early treatment, let's not forget about dilute Hydrogen Peroxide in a nebulizer or Neti-pot. I'm sure you have your own favorites, but I wanted to remind you about the dynamics of Vitamin A. Thanks for watching, I look forward to being with you again next Tuesday.