



Supporting Immune Vitality - Part Two, Supplemental Vitamins, Minerals, & Herbs

Please note: None of these recommendations are intended to offer a specific cure or prevention of COVID-19, nor should they supersede recommendations from the CDC or other local, state, or federal public health authorities. If you have signs of illness (sustained fever over 100 degrees F, sore throat, and/or dry cough), contact your primary care provider. Social distancing and handwashing remain the most important modes of prevention. The FDA has not evaluated nor approved of the following statements.

The international functional medicine community of clinicians is actively engaged in applying up-to-the-minute scientific understanding of our current health crisis to identify appropriate preventative strategies. I am currently dedicating my time and attention to staying abreast of these issues, and I will keep you updated as more information becomes available. When dosages are not given, please contact us for specific, personalized recommendations.

Basic strategies

Vitamin A is an unsung hero of normal immune response. Most of us make it by converting the orange pigments in vegetables (and some fruits) to vitamin A. It is also available in lightly cooked, high-quality egg yolk and liver. If you have done an ION test with us, you know whether or not your body converts carotene in vegetables to Vitamin A. (This is influenced genetically.) If you are a good converter, simply eat **lots** of orange vegetables. If you don't know, or you know (from testing) that you are a slow converter, consider supplemental vitamin A (not just carotene) up to 25,000 IU per day. Excess vitamin A and D are toxic. Contact us if you have questions about this.

Vitamin D is also an unsung hero of normal immune response. Aim for 50 - 80 blood levels. If you know your blood level is lower than that, use higher dosages: 5000 IU + per day. Individual cases may require higher or lower dosing. Get sun on your bare skin.

Zinc is long understood to support healthy immune response, 30 to 50 mg. per day.

Vitamin C, especially mineral ascorbate or buffered vitamin C. Recommendations vary from 500 mg to 5000 mg per day, not to exceed bowel tolerance.

Selenium and Manganese are trace minerals that also play vital roles in a healthy immune response, although both can be toxic if you take excessive amounts.

- Selenium: up to 200 mcg per day. This amount of selenium is readily available in 2-4 Brazil nuts.
- Manganese (available in the healthful food plans we recommend but depleted in the standard American diet). Use a low dose: approx. 2 mg.

We carry two products that we have used for many years which provide different combinations of the above nutrients:

- **ImmuCore** (from Metagenics): General recommendation is 2 tablets twice per day during the immune challenge. (It includes vitamin C, zinc, and mushroom extract.)
- **Bio-Immunozyne Forte** (from Biotics): General recommendation is 2 capsules per day. (It Includes all minerals described above.) May cause wakefulness in some people.



For Vitamin A and D, we use:

- **Complete D3:** D, A, and K (from Allergy Research Group)
- **Liqua-A** and **Liqua-D** (from Apex Energetics)

Additional considerations

Melatonin is the hormone of sleep and it appears to have a powerful effect on the immune system. See **Supporting Immune Vitality Part 1** to enhance your own production first. Middle-aged and older people may benefit from using supplemental melatonin between sunset and bedtime. We use a product called, “Insomnitrol” by Designs for Health, which also enhances our production; but pure melatonin is widely available. Sublingual or time-release is best. For sleep enhancement, 1.5 to 3 mg. For specific immune enhancement you may wish to consider 5 to 10 mg or more. Please do your own research on this.

Probiotics can be significantly balancing of immune response. These are especially important if you have a history of extended use of acid-blocking medications or antibiotics.

NAC (N-acetyl cysteine) is another unsung hero of immune respiratory immune challenges (both infectious and allergic, as well as toxic). It is a precursor to glutathione, the most important antioxidant that we make inside our cells. I have used this with great success for years: as plain **NAC**, and also in a form called **NutriChel-X**, which we recommend for people with toxic, as well as immune, challenges, or with excessive exposure to man-made EMF.

Stinging Nettles and Quercetin – appear to be very protective. You can harvest your own nettles (with gloves) right now in any forests you can access – and make tea or soup. They grow in damp soils near streams or rivers. Or you can buy dried nettles or nettle tinctures. Quercetin is provided by onions, apples, cruciferous vegetables, and is widely available as a supplement. Nettles and Quercetin combinations included **Aller-aid** from Oregon Wild Harvest or others.

Immune-supportive mushrooms including reishi, shitake, turkey tail, oyster, cordyceps, and maitake (available from many sources, including ImmuCore above).

Andrographis – is an Asian herb with well-known immune-supporting properties, especially protective of the respiratory tract. We use **Andrographis plus** from Metagenics or Herb Pharm’s **Andrographis tincture**.

Echinacea and **Astragalus** are herbs widely considered to support normal innate immune response. We use a product called **X-Viomin** (from Apex Energetics) for this. May cause wakefulness if used in excess.

Elderberry –has long been considered immune supporting, although there have recently been concerns raised that it may aggravate acute respiratory illness. However, there is no evidence that it is unsafe to use it preventatively.