

Terry Talks Nutrition

IMPROVING THE HEALTH OF AMERICA



Ref. #151



Terry's Bottom Line

Bacteria and viruses are major threats to our health, young and old alike. And yet, bacterial infections have become more and more difficult to control because of the overuse of antibiotics. Viruses have become increasingly unpredictable and hard to treat.

But you can protect yourself easily, every day. Andrographis is a powerful, protective herb used by Ayurvedic practitioners for centuries. Melatonin, best known for its ability to help you sleep, is an incredibly powerful immune system booster. Selenium and zinc are minerals required for optimal immune system activity, and can make the difference between whether you catch an illness or resist it. Working together, these ingredients:

- Bolster your immune resistance
- Help you recover from colds, flus, and infections faster
- Relieve duration and intensity of upper respiratory infections
- Strengthen you at a cellular level to fight viruses and bacteria



ANDROGRAPHIS

Widely used in Ayurvedic medicine in India for thousands of years, andrographis is probably best known in the West as a botanical that boosts your immune system's ability to defend you from viruses and bacteria. Its application for stopping colds, flus, and other viral infections has never been more important than it is now.

First, many antibiotics are less effective because of overuse and resistance to their effects, so a way to treat bacterial infections effectively is a real need. Secondly, we need to find ways to fight bacterial and viral infections without causing serious side effects, like liver, gastrointestinal, and brain damage. For viral infections such as the flu or common colds, andrographis is definitely up to the task.

In a double-blind, placebo-controlled study, andrographis relieved the intensity of cold symptoms in just two days, including fatigue, sore throat, runny nose, and the sleeplessness that accompanies a cold, even when you feel tired. By the fourth day, participants also experienced a significant decrease in all symptoms, which also included headache, earache, phlegm production, and the frequency and intensity of coughing spells.

Another clinical study of individuals with upper respiratory tract infection (URTI) showed similar results. In this case, 223 patients either received andrographis or a placebo. By the third day, there was a dramatic difference in cough, headache, sore throat, and disturbed sleep. People in the placebo group noticed no improvement—in fact, some symptoms got worse—while those in the andrographis group saw a major difference in only five days.

In addition to stopping the symptoms of colds and flus, andrographis can stop the growth of dangerous bacteria, including *Staphylococcus aureus* (staph infection).

Considering how overprescribed antibiotics have become in the past twenty years or so—and how much stronger bacterial infections have become as a result—this botanical could be a much more effective form of treatment.

Andrographis protects and strengthens your body at a microscopic level, giving you much better odds against bacterial or viral threats, by boosting the activity of glutathione, superoxide dismutase, and Nrf2—all powerful cellular defenders. Key compounds in andrographis, called andrographolides, are most associated with the herb's effectiveness. Getting a consistent dosage is critical, which is why I think that a supplemental form standardized to a minimum of 80 mg of andrographolides is required for an optimal immune boost.

MELATONIN: SLEEP OR IMMUNE BOOSTER?

Most people think of melatonin as a sleep aid. And they're right. Melatonin helps set our circadian rhythms, the day and night cycle we rely on for a good night's sleep. But it does much more than that.

Melatonin works with both the innate and adaptive immune systems. That means it protects you at all times from bacteria, and viruses you may encounter on a regular basis. It unleashes small proteins called "cytokines" that, in the right amount, can stop viral invasions.

However, we need a carefully calibrated response from the innate immune system: too chaotic, and we're likely to suffer what is known as a "cytokine storm" initiated by our innate defenders as they try to work out a solution to the disease.

That's when we need our adaptive immune system to kick into gear. It's the special team activated by our bodies when we encounter something new, like a novel virus, for example. But again, an overwhelming reaction can cause respiratory collapse as the body tries to stop the spread of the virus.

Melatonin appears to be able to balance these aspects of the immune system very effectively, helping to rapidly shut down viral infections. This is why some researchers are recommending its use in Europe to help treat and battle dangerous viruses, including COVID-19.

SELENIUM

One of the reasons that viruses take hold is because they take advantage of weaknesses in our cells caused by oxidative damage. In fact, they don't just sneak in when our bodies are under stress, they also cause much of the oxidative damage that allows them to replicate.

In this case, selenium is exceptionally well-positioned as an immune-building mineral. That's because once in the body, selenium works through a rare amino acid called selenocysteine. This amino acid is part of a family of selenoproteins unique to the nutrient. Additionally, selenium promotes the body's own responses to fight off bacterial or viral invaders when you are under attack.

There are also illnesses that are worsened by suboptimal selenium and zinc in the body that illustrate the importance of these minerals. One example is asthma, where levels of selenium and zinc tend to be lower. Asthma is a condition involving high levels of inflammatory activity and oxidative stress. Clinical research into this phenomenon found that this deficiency ramps up C-reactive protein levels, creates an imbalance of lymphocytes, lowers levels of antioxidant enzyme activity (like glutathione) and reduces respiratory actions. If you suffer from asthma or any respiratory condition, it is imperative that you have sufficient levels of selenium.

But I think that one of most important things to remember about selenium and your immune system is that deficiency of this mineral puts you at risk, and it is estimated that one in seven people have low dietary selenium intake. In fact, there is research from the University of Chapel Hill in North Carolina that shows deficiencies of selenium could make individuals more susceptible to viral infections, because their cells just can't withstand the attack of these pathogens.

ZINC

Zinc is also a critical mineral for the immune system, interacting with at least 300 different enzymes and reactions in the body, including T-lymphocyte (white blood cell) activity that fights off dangerous threats to your health.

Researchers who pooled the results of three clinical studies found that zinc reduced the duration of cold symptoms by 42 percent compared to a placebo. But they also noted that it is incredibly important to get zinc on board as soon as you start feeling ill for the best results, though it is never too late to start.

One of the best absorbed forms of supplemental zinc is chelated to the amino acid glycine (zinc bisglycinate). This amino acid helps shepherd the mineral through the intestinal wall, allowing it to be readily used by the body.

REST AND RECOVER FASTER

COLD AND FLU STATS

In the United States alone, **VIRUSES CAUSE** more than **1 BILLION COLDS EVERY YEAR**

BETWEEN 5 and 20% of Americans **ALSO GET THE FLU**

These viruses replicate in the body and can take over—unless they're stopped or prevented. Nutrients, including **andrographis, melatonin, selenium, and zinc** can help you build a strong defense against viruses or shorten the duration of colds and flus when they attack.

These nutrients will help prevent illness, and speed the process of healing should you fall prey to a cold, flu, or some other bacterial or viral infections. I think that taking a combination of andrographis, melatonin, selenium, and zinc is one of the most important ways you can bolster your immune defenses.

For a powerful immune protection from bacterial and viral infections, I recommend using a combination of Zinc (from Zinc Bisglycinate Chelate), Selenium (as selenium yeast) (*Saccharomyces cerevisiae*), Andrographis (*Andrographis paniculata*) Leaf Extract, providing a total of 60 mg of andrographolides and Melatonin to be taken before bed.

