

Is Melatonin the Closest Thing to a Cure-All?



ImmuPro is designed to boost immune power. ImmuPro comes in the form of a chewable tablet and has a great strawberry taste. Aids in normal immune function; supports the body's ability to fight illness.

How to Use

Take one tablet before retiring at night. If under stress, take 2-4 tablets at night and one at breakfast and lunch. If pregnant or under a doctor's care, consult a physician before using.

Ingredients

Melatonin, 5 powerful polysaccharides: Wolfberry polysaccharide, Organic Agaricus Blazei, Organic Reishi Mushrooms, Organic Maitake Mushrooms and Arabinogalactin, and **Orange Oil**. These immune system enhancers fight to maintain overall good health; Orange oil is a high source of d-limonene. Whole organic strawberry powder is a good source of ellagic acid. Vegan formula.

A **By Christopher Calapai, D.O.**

Parkinson's patient walks into my office: I put him on melatonin. A woman suffering from fibromyalgia and a sleep disorder walks into my office: I put her on melatonin. A cancer patient walks into my office: I put them on melatonin.

Why am I recommending melatonin? Because the research into this hormone—which helps regulate sleep but more importantly is one of our most potent antioxidants—is simply astonishing. Legitimate, peer-reviewed research has been published demonstrating the potent healing effect of melatonin in an amazing range of conditions—from high blood pressure to autoimmune illnesses.

What is it? Melatonin is a hormone found in all living creatures. It is produced in the pineal gland in the brain. Your body makes it from the amino acid tryptophan, which is also used as a building block for serotonin, the feel-good neurotransmitter in your brain. Melatonin is released during the night—it is stimulated by darkness and suppressed by light. Its levels peak in the middle of the night. For this reason it has been called the "hormone of darkness."

And therein lies a problem. How many of us live by the actual rise and fall of sunlight—rising at the first crack of dawn, and lying down to sleep when darkness falls? I can't think of one person I know who does that. Instead we draw the shades at night so we can sleep to an appointed hour, and we use artificial light at night. Until recent history, those of us who lived in temperate climates were exposed to up to 18 hours of darkness in the winter. Today, artificial lighting reduces this to eight hours or less per day all year round. And so we inhibit our

melatonin production, and in doing so, we deprive ourselves of one of our most powerful antioxidants, one that plays a particularly important role in protecting your DNA. Reduced melatonin production has been proposed as a likely factor in the significantly higher cancer rates in night workers, and the effect of modern lighting on melatonin has been proposed as a factor in the larger overall incidence of some cancers in the developed world.

Melatonin is a powerful antioxidant that can easily cross cell membranes and the blood-brain barrier. It has been studied for the treatment of cancer, immune disorders, cardiovascular diseases, depression, seasonal affective disorder (SAD), and sexual dysfunction.

Melatonin is so important it is not only synthesized by your pineal gland but also in many other organs and tissues of the body, particularly by bone marrow, thymus and lymphocytes. Melatonin has been shown to be involved in the regulation of both cellular and humoral immunity. Melatonin not only stimulates the production of natural killer cells, monocytes and leukocytes, but also alters the balance of t-cells and increases the production of important infection-fighting molecules called cytokines.

Where can I find it? Your body synthesizes melatonin, but you can also find it in small amounts in foods like tart cherries, walnuts, oats, sweet corn, rice, ginger, tomatoes, banana and barley. Still, these amounts are small. Since melatonin is practically nontoxic and exhibits almost no short-term side effects, we can take melatonin supplements.

Here are some of the remarkable study results among a range of individuals taking melatonin:

In a Tel Aviv University study of 38 patients, melatonin supplements reduced

blood pressure of patients with night-time hypertension

A double-blind study at the University of Hawaii found that one milligram of melatonin nightly improved cognitive function in the elderly.

Melatonin was found to be a safe and effective treatment for sarcoidosis, a serious autoimmune disorder that is often treated with steroids (and often unsuccessfully). This study, conducted at the University of Florence, gave relatively high doses of melatonin to patients with chronic sarcoidosis for two years. Their lung function improved, their skin cleared up, and a number of patients completely normalized by the end of the study. Remarkably, even at high doses (20 milligrams a day) no side effects were experienced. Now, this does **not** mean you should go out and take high doses of melatonin. You should always work under the supervision of your doctor.

Melatonin was used to stimulate antioxidant defenses in burn victims. This study, published in *Critical Care Medicine*, used melatonin to help limit the multiple organ failure that often occurs with severe burn injuries.

A study in the *Indian Journal of Medical*

Science reported that melatonin offered a substantial reduction in the risk of death in cancer patients. Another study in the *Journal of Pineal Research* analyzed the results of ten different randomized controlled trials of melatonin cancer between 1992 and 2003. Over 640 patients were studied. Melatonin reduced the risk of death at one year, and this held true no matter what the kind of cancer.

A new 2008 study from Malaysia notes that melatonin, which is responsive to light and therefore the seasons, may be implicated in seasonal flareups of allergies and infections. The regulatory function of melatonin on immune mechanisms is seasonally dependent. This fact may in part account for the cyclic pattern of symptom expression shown by certain infectious diseases, which become more pronounced at particular times of the year. Moreover, melatonin-induced seasonal changes in immune function have also been implicated in the pathogenesis of seasonal affective disorder and rheumatoid arthritis. The clinical significance of the seasonally changing immunomodulatory role of melatonin is discussed in this review.

Another fascinating new 2008 study from

Emory University suggests that melatonin can help quiet inflammatory bowel disease. Ulcerative colitis (UC) is an inflammatory bowel disease that afflicts up to 1 million people in the US. Current treatments, such as steroids and immune suppressants, have serious side effects. Melatonin is an important regulator of both inflammation and motility in the gastrointestinal tract, and data from in vitro studies, animal experiments, and humans suggest that supplemental melatonin may help quiet colitis.

In sum, melatonin is a master regulator of everything from sleep to immune function to inflammation. And that makes sense. We evolved to sleep at sundown and wake at sunrise. Since we live now with simulated light as much as 18-20 hours a day, we have subverted our natural rhythms and hormones. Supplementing with melatonin is something I consider for many patients with a variety of medical conditions.

Dr. Chris Calapai is Board Certified in Family Medicine, Anti Aging Medicine and Chelation Therapy. He hosts The Optimal Health Program on Saturday 6pm on XM Satellite Radio Channel 170 and Sunday 12 noon on WWRL 1600AM. He can be reached at 516-794-0404