



# Wellness Minute

Health Information You Can Use On Your Path To Wellness

## MELATONIN

### New Research

Way More Than Just For Sleep!



## Exciting New Research On Melatonin

“Since Melatonin possesses anti-oxidant, anti-viral, anti-cancer, and anti-inflammatory properties, it has been shown to be beneficial in treating COVID-19 on several fronts.”

Back in June 2021, Dr. Frank Shallenberger in his newsletter, Second Opinion, recommended 1 mg of melatonin for every pound of body weight for people with elevated PSAs that were not cancerous. I was stunned with that recommendation. That’s a lot of melatonin. I know many integrative doctors have recommended melatonin therapeutically and preventatively in the 20-40 mg range, and I thought that was a lot.

Dr. Alex Vasquez, who holds degrees in naturopathy, chiropractic, and osteopathy has suggested melatonin as one of his antiviral strategies since 2014. But now, new research is showing that melatonin has benefits treating COVID-19 on several fronts.

Let’s take a few minutes and update our understanding of melatonin. Originally thought to be exclusively made in the pineal gland, and known for its sleep benefits, melatonin is also made in the energy factories of the cell called mitochondria. And when mitochondrial melatonin is depleted, it easily crosses the mitochondrial membrane.

And the gut, our second brain has melatonin, lots of it. Accord-ing to some researchers, the gut contains 400 times more melatonin than the pineal gland. Melatonin, like other hormones, drops as we age. So, by the time we reach 40, chances are pretty good we're low, especi-ally since the half-life of this amazing hormone is only 1 hour.

Melatonin possesses anti-oxidant, anti-viral, anti-cancer, and anti-inflammatory properties. It also contains anti-convulsant and anti-excitotoxic properties, buffers cortisol, and can reduce an excessive prolonged stress response. Researchers have also shown melatonin to enhance vitamin D’s effectiveness and protect mesenchymal stem cells.

You may have heard of a famous Nobel prize laureate, Dr. Otto Warburg, and his work with cancer and its energetics. ATP is considered the energy currency of the body. It’s made in the mitochondria. The more ATP we have, the more energy our cells have to repair and reproduce. Dr. Warburg discovered that tumor cells switch how our body makes energy and reduce the amount of

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energy or ATP our cells produce. Each molecule of a sugar, called glucose, optimally produces 36 units of ATP. However, tumor cells somehow reduce the amount of ATP to 2 units, a process called aerobic glycolysis. This gives tumor cells quick energy and enhances the ability of the cancer cell to proliferate.

Let's come back to melatonin, energy production, and our immune system. Some of our body's viral defense mechanisms are white blood cells called macrophages. There are 2 types of macrophages, M1 and M2. M1 are pro-inflammatory. Ultimately the body shifts from M1 to M2 macrophages where a more balanced immune response takes hold. What's commonly called the cytokine storm is when the body overreacts and in a sense our macrophages get locked in M1. Multiple authors have shown how melatonin reduces the formation of pro-inflammatory M1 macrophages and converts them to M2 macrophages, which are anti-inflammatory. Melatonin downregulates these inflammatory cytokines and upregulates antioxidant enzymes, inside the energy factories or mitochondria of the cell.

Here's some interesting data analyzed by the Cleveland Clinic. They found patients who used melatonin had on average a 28% lower

risk of testing positive for COVID-19. African Americans who used melatonin were 52% less likely to test positive. Although a measured dose was not given, most people were not aware of melatonin's antioxidant, energy enhancing properties and were just supplementing for sleep benefits. And since most supplements contain .5 mg to 5 mg, we can assume the dosage was in that range.

Biotics Research makes a low dose tablet called Melatonin B6/Mg. Each tablet contains 3 mg of melatonin, 10 mg of B6 as P-5-P and 50 mg of magnesium glycinate. The tablet is scored so patients can start with a lower dose. When first taking melatonin, some people feel groggy the next morning. Generally, you can avoid this by taking it earlier in the evening and starting with a lower dose.

Remember, melatonin drops as we age, which means chances are most of us are probably low. I encourage you to keep melatonin on your radar and consider asking your wellness clinician about a clinical trial, especially if sleep problems are a part of your clinical picture. Because melatonin is much much bigger than just a good night's sleep.