

The Surprising Benefits of Melatonin

"Anti-cancer benefits, cardiovascular benefits, anti-viral benefits, anti-inflammatory benefits, and anti-aging benefits."

If someone has written over 1,600 scientific articles on melatonin, I think we can agree he's an expert. In fact, Russel Reiter at 86 is still sharp as a tack and considered the world's leading authority on melatonin. I've heard him lecture multiple times and will be sharing his insights. So, let's dive into the multiple benefits of this inexpensive hormone.

Before we do, let me remind you that all chronic disease has major oxidative stress, and free radical damage accompanies it. So, anything we can do to support the body's ability to increase antioxidants naturally is high on our radar. Also high on our radar is anything that will support or enhance mitochondrial health. Our mitochondria are our intra-cellular energy

factories. We know that if cells don't have enough energy to repair, cells function at sub-optimal levels. If cells function at suboptimal levels, we have fatigue, brain fog, concentration issues, inflammation, etc. And melatonin supports mitochondrial function in multiple ways.

With that in mind, melatonin not only has independent and direct antioxidant effects on its own, but because it is a hormone, it signals or stimulates the synthesis of glutathione and other important antioxidants like superoxide dismutase and catalase. Glutathione is the holy grail of antioxidants and superoxide dismutase quenches billions of free radicals.

Our bodies make two forms of melatonin. The pineal gland

produces about 5% of the total melatonin in the body, which is secreted into our blood and is produced at night. The rest of the melatonin is made in our mitochondria and then stays in our mitochondria. Supplemental melatonin will migrate into the mitochondria as needed.

One of the things I didn't know was that near-infrared spectrum from regular sun exposure will trigger the generation of melatonin inside your mitochondria. Did you catch that last statement? Regular sun exposure will trigger the generation of melatonin inside your mitochondria. Remember, inside the mitochondria is where ATP is made and stored, and free radicals are a huge part of the process.

The half-life of melatonin in the blood is around 40 minutes. Once swallowed, melatonin enters the bloodstream very quickly. However, within cells, the half-life varies according to the oxidative stress that is ongoing. If there's high oxidative stress, as in cancer, a heart attack, stroke, COVID, or any other virus, melatonin is destroyed much faster. If there's low oxidative stress, melatonin stays within the cell much longer.

Knowing the powerful effects of melatonin's antioxidant capacity, two of Dr. Reiter's friends, who have diabetes, take 1,000 mg per day to combat oxidative damage. Dr. Reiter wasn't saying that was the best way to deal with diabetes. The point he was making was that there is no toxic level of melatonin. He admits there is much we do not know about high doses for long periods, but based on his research, he hasn't seen any dangers from short-term high doses.

Melatonin is also an antiviral agent. He shared that there's about 200 publications in the scientific literature suggesting the use of melatonin for COVID. He knows a physician colleague who gave 1 mg per 2.2 pounds of body weight of melatonin for COVID cases at the time of diagnosis and then for 5 days afterwards. He has now treated more than 2,000 patients very successfully with melatonin. Melatonin has also been effective for the delta and omicron strains. In pigs, 4 different coronaviruses were successfully treated. Also, Zika virus toxicity was prevented by melatonin.

He's personally been taking melatonin for 28 years. Currently, at 86, he takes around 80 mg but has taken as much as 300 mg. He shared that he divides his dose in the evening and takes the first dose of melatonin about 45 minutes before he wants to go to sleep. And then the second dose is about 15 minutes before sleep.

Researchers have found melatonin to be effective against cancer in multiple ways. Keep in mind, Dr. Reiter was sharing the safety and use in extreme cases. Low dose melatonin is also effective. According to my friend and colleague Dr. Berkson, "The work of a National Cancer Institute and National Institute of Health sponsored study showed .75 mg was effective for cancer prevention." So, smaller doses can have powerful effects as well. Remember, melatonin is a hormone that signals intracellular organelles to make glutathione, SOD, etc.

Biotics Research makes a 3 mg melatonin that also contains 10 mg of B6 as P-5-P and 50 mg of magnesium glycinate called Melatonin-B6/Mg.

We know melatonin levels drop dramatically as we age. And knowing it has anti-cancer benefits, cardiovascular benefits, anti-viral benefits, anti-inflammatory benefits, and anti-aging benefits, it makes sense to increase melatonin levels via sunshine and supplementation. Talk to your wellness clinician about melatonin and the best dosage for your body.