

MELATONIN

It isn't just for sleeping!

Spring Greetings!! Don't you just love this time of year? I wanted to get a newsletter off to you quickly before it warms up too much, lest I end up in the garden pulling weeds. (It is one of my favorite things to do.)

Right up front let me remind you that we do not diagnose, treat, cure or prevent disease with the Herbalife products. This product is our Sleep Now. It contains 1 milligram of melatonin. The Herbalife website states that we should not take more than 2 tablets at night. Now that we have taken them off the hook, let me tell you about this article I just read. WOW.

Frank Shallenberger, MD, HDM, FAAO presented an article entitled *Melatonin Isn't Just for Sleeping - From Cardiovascular Disease and Cancer to Aging and Macular Degeneration the Research Will Shock You* in the February/March 2019 issue of *The Townsend Letter: The Examiner of Alternative Medicine* (pp 50 - 57). I was shocked at what I learned. Before you continue, if you don't have any Sleep Now in the house, log in, place an order for twice what you think you'll need, and then come back and finish reading.

As we age, we become deficient in all of our hormones. Lack of hormones is practically the definition of aging. In his article, Dr Shallenberger (I'm going to call him Dr S for short) presents the findings of 19 recent research papers that looked at the effects of melatonin, or lack of it. He states, "if you are over the age of 40, you should be taking melatonin." Here's a quick summary of the findings:



- ❑ Protects against viral and bacterial infections,
- ❑ Prevents cardiovascular disease and high blood pressure,
- ❑ Reduces oxidant stress and inflammation and slows aging,
- ❑ Prevents neurodegenerative diseases such as Parkinson's and Alzheimer's,
- ❑ Improves menopause therapy,
- ❑ Protects against ionizing radiation,
- ❑ Prevents macular degeneration,
- ❑ Prevents and treats cancer.

We are talking about melatonin in general. Taking 1 or 2 Sleep Now can't guarantee you won't get cancer. However, these studies really are impressive, and in some cases, use just slightly more than 2 milligrams.

I was taught that melatonin is created in the pineal gland in the brain. Dr S says that the majority of our melatonin is created in the gut(!), in addition to other organs such as the eye, bone marrow, skin, the thymus and white blood cells of the immune system.

Dr S walks through each of these bullets and presents the research, so I will do the same. I will not present the references for each section. They are available on the www.TownsendLetter.com website.

Infections: Melatonin is an anti-infectious agent for several reasons. "For one, it can directly decrease bacteria's ability to reproduce. If bacteria cannot reproduce, they cannot infect. Secondly, it sets up an

environment in our tissues that bacteria cannot survive in. And third, it acts to decrease the inflammatory effects of bacterial infections.” Have a virus? Take vitamin D *and* melatonin!

Cardiovascular Disease: CD is a major killer in the US, and let me just tell you that cholesterol has very little, if anything, to do with it. Aging vessels have more inflammation and lower levels of nitric oxide. When mice, genetically altered to age faster than normal mice, were given melatonin treatment, they had the same level of cardiac function as normal mice.

Here are research findings on humans with **high blood pressure**. I know many of you will be interested in this. Sixteen men used a 24-hour blood pressure device to establish their baselines. First they gave them a placebo every night for three weeks, and measured their pressures. No change. For the next three weeks, they each got 2.5 mg of melatonin. “Even in that short a period of time and with that low a dose, their systolic blood pressures dropped an average of six points, and the diastolic dropped an average of four points.”

Aging, Inflammation, Oxidant Stress: The two major causes of aging are inflammation and oxidation. With this one, it really gets in the weeds on the science. They looked at COX-2 and Nrf2. Some non-steroidal antiinflammatory agents (NSAIDS) work because they suppress COX-2 mediated inflammation. Melatonin works in a similar way, but without all of the horrific side effects. And what the heck is Nrf2 (nerf 2)?

According to Wikipedia, “Nuclear factor-like 2, ... is a transcription factor that in humans is ... a basic leucine zipper protein that regulates the expression of antioxidant proteins that protect against oxidative damage triggered by injury and inflammation.” So up-regulating (increasing) Nrf2 protects us from inflammation and oxidation. Melatonin stimulates Nrf2. Dr S states, “Nrf2 levels are directly related to how long you will live and what your risks are of becoming sick.”

Along these lines, another study found that “melatonin acts directly on the DNA and mitochondria in our cells, causing them to behave more like they did when we were younger.”

Alzheimer’s and Neurodegenerative Diseases: This speaks directly to the state of our nervous system. As we age, we experience declines in thinking and memory, but also vision, hearing, coordination and balance. There is an area in your brain called the hippocampus. This area regulates short-term memory *

and spatial orientation. We all know that memory issues are the hallmark of dementia. Spatial orientation means knowing where you are in your space, and how to get to where you want to go, i.e., not getting lost. Clearly, any of us concerned about the aging brain know that these problems are devastating. Melatonin is uniquely qualified to help. Let me directly quote the article. “In humans, scientists have found that giving melatonin supplements ‘potentiates hippocampal neurogenesis in elderly populations.’” “A recent study looked at 80 men and women with mild to moderate Alzheimer’s disease. The researcher gave half of them 3 mg of melatonin every night for four months. The other half got the placebo pill. According to the authors, ‘Melatonin treatment resulted in significant and clinically meaningful effects versus the placebo in mean IADL and MMSE scores.’” IADL refers to independent activities of daily living. MMSE is the Mini-Mental Status Evaluation, a very basic “point to the apple; draw a pentagon” type of evaluation.

Hippocampal neurogenesis! That means that, given the correct tools, the hippocampus can repair itself! So much for the fancy Alzheimer’s drugs. Give those folks coconut oil and melatonin!

Menopause: Every woman fears it. Even ladies who use bioidentical hormone replacement can run into trouble with menopausal symptoms. In this study they measured two female hormones, luteinizing hormone and follicle stimulating hormone. They had two groups of women. The older group was 40 to 60 years old, but they also looked at 43 to 49 year olds. In both groups, using again just 3 mg of melatonin, levels of both hormones rose to more youthful levels. This resulted in a “general improvement in mood and a significant reduction in depression.” Additionally, those women who were experiencing hot flashes and other symptoms saw improvement.

Ionizing Radiation: This one gets into the weeds on the effects of radiation from tests like CT and PET scans on white blood cells, meaning your immune system. These scans, while at times medically necessary, are very damaging to your body. High dose melatonin, 300 mg taken 2 hours prior to the test, was shown to dramatically reduce, and in some cases, totally eliminate damage to the immune system.

Macular Degeneration: Here's another one that hits close to home for those of us in our later years. This study showed that oxidative stress is the primary cause of macular degeneration. Melatonin is so important to eye health that the retina makes it. A mouse study, using a 3 mg equivalent dose, improved microscopic abnormalities and a bunch of other stuff that resulted in them saying this, "Taken together, our data suggest the therapeutic potential of Melatonin for treatment and prevention of macular degeneration." In a human study, 55 patients with either wet or dry macular degeneration found that melatonin treatment "stopped the progression of the disease." Dose was not cited, but the thing with macular degeneration is that once it starts, it gets worse. This study suggests that it can be stopped.

Cancer: Yes, the big C. Dr S personally treats cancer patients, so he reports the studies as well as offers first hand information, but this section is quite large. If you know someone dealing with cancer, get a copy of this article. One study reports that melatonin not only has direct anticancer action but also "activates the body's immune reaction against cancer." On average, "melatonin reduced the risk of dying by 44%." Astounding. Melatonin did not interfere with conventional drugs, and in fact reduced side-effects. Many of the studies used 20 mg doses, so this clearly is outside the realm of Herbalife products and distributors. This information is available to anyone fighting this disease.

Melatonin Facts: Melatonin is released when we are in total darkness. You **must** turn off any light that isn't red. Cover the windows; get rid of any light-emitting devices.

There is no negative feedback inhibition. Even if you take large doses, your body still generates and secretes as much melatonin as it can. However, Dr S says that our own production begins to drop off after age 20, and by the time we hit 50, our levels are seriously low. You can measure melatonin a couple of different ways, but then you run into the tyranny of the "reference range." Just because a lab marks you down as having sufficient levels does not mean that you are getting optimal levels. That's true for much more than just melatonin.

Common thought is that melatonin makes you sleepy. Dr S says no, it's the darkness that makes you sleepy. He has his patients taking huge doses during the day without issue. I've always taught that

melatonin is not for sleep onset, it's for sleep duration. Do you get up and pee at night? I ran across an article from the *Journal of Urology* from 2013 reporting that using melatonin decreased the urge to get up to pee, especially in the elderly population.

Safety is always a concern, hence the Herbalife recommendation to only take 1 or 2 tabs, but Dr S reports that melatonin researchers have yet to define an LD50 dose for melatonin. In other words, they cannot find a level that is toxic. "In my conversations with Russell Reiter, PhD, the world's leading melatonin researcher, I learned that he has been taking 180 mg of melatonin every night for the past 18 years. At age 83, he is still running a laboratory and working as a fulltime researcher. He has boundless energy and a brain that is as sharp as ever. When I asked him why he took so much melatonin he gave me two answers. First, 180 mg is the dose for a human that is equivalent to the dose that is so effective in animals. The other reason is that there is absolutely no down side to taking even these large doses." But perhaps some significant upsides?

My Experience: I was totally blown away with this article. I have always been a good sleeper. I don't sleep much, but sleep fairly well (as long as I'm not doing cat intensive care). I have always taken 1 Sleep Now just because I take pretty much everything in the catalog. We talk about a "melatonin hang over" that can happen when you take "too much." Some people have a hard time waking up in the morning. But after reading this, I'm thinking that it might not be a melatonin issue. So I started going up. Two tabs for a couple of nights, then up to three, then four. For the past two weeks or so I have been taking five Sleep Now, along with Tang Kuei, Niteworks and a few other things. I have to tell you. I am sleeping like a champ!!! If I do wake up from cat disturbance, I can go back to sleep. I no longer get up in the middle of the night to pee. It's been amazing!! I'm not sure how high I'm going to go, but I knew that I wanted to get this information out to all of you.

Start taking Sleep Now, or take higher doses, and see how you do. Please shoot me an email or Facebook post and let me know. I believe that for many of you, it could be truly life changing.