Dear Alice,

Are there any benefits to melatonin, and are there known negative side-effects?

Answer

Dear Reader,

The benefits and side effects of melatonin are still under review by researchers and medical professionals, so any discussion about those should be considered tentative, based on what is known thus far. Similar to a wide array of supplements available over the counter, manufacturers do not need Food and Drug Administration (FDA) approval before marketing dietary supplements like melatonin. So, exercising caution and asking questions of a trusted health expert can really help consumers make more informed choices.

Melatonin is a hormone produced by the pineal gland in the brain that has a quick acting, sleep-inducing effect (more like Mellow-tonin, am I right?). It is a light-sensitive hormone, meaning that the absence of light stimulates its secretion. Melatonin may play a role in controlling the circadian rhythm, the body’s internal clock and sleep cycle. Before puberty, the pineal gland produces comparatively large amounts of melatonin. As we age, melatonin production continually decreases, perhaps explaining why older people either have difficulty sleeping, or sleep less.

The melatonin you may find in health food stores and pharmacies is actually a synthetic version of the hormone; you can also purchase a form that combines synthetic and natural (from sheep pineal glands) melatonin. Both types of melatonin mimic the real thing in chemical composition and behavior. However, some people favor the entirely synthetic form because it does not carry the risk of contamination that the partially organic form does. Research has also found melatonin in some food sources, including meats, eggs, many vegetables, fruits, seeds, oils, coffee, tea, wine, and beer. Consumption of melatonin from food sources may increase the circulation of melatonin and its benefits as an antioxidant, but more research is needed on these potential benefits.

Many claims have been made to melatonin’s miraculous powers. So far, scientific evidence has revealed melatonin to be clearly beneficial for a few sleep issues – like insomnia, jet lag, and delayed sleep syndrome. However, recent studies also reveal potential benefits in the following areas:
reducing pre-operative anxiety and post-operative pain
improving symptoms of irritable bowel syndrome (IBS)
reducing symptoms of depression and anxiety in patients undergoing breast cancer surgery

Melatonin taken in recommended doses between one and three months in duration may have very few negative side effects. That said, side effects are possible. Special caution is advised if you:

- Are pregnant, breast-feeding, or trying to get pregnant
- Are younger than 18 years old
- Have high blood pressure
- Have diabetes
- Have depression
- Have a seizure disorder

Depending on what your intended use is for melatonin, dosing can vary. And just like many medications, people can respond very differently to melatonin; some people are more sensitive than others to the supplement and dosage may factor into this as well. If you decide to supplement with melatonin, it's best to discuss dosage recommendations with a health care provider. Too high a dose could lead to anxiety. Large doses of melatonin to children under 15 could also cause seizures.

More research is still needed in all of these arenas; evidence regarding the long-term use of melatonin, in addition to its benefits and side-effects, may not be available for years to come. Talking with a health care provider about taking melatonin can help you decide if you're at high risk for negative side effects.

Hope this helps!

Alice!

Category:
- General Health
- Sleep
- Optimal Nutrition
- Supplements & Ergogenic Aids

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- Does warm milk really lull us to dreamland?
- Relaxation drinks
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Resources

- Medical Services (Morningside)
- a!Sleep website
- Medical Services (CUMC)

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