

Melatonin a new weight loss medicine?

Saturday Sept 28, 2013 (foodconsumer.org) -- Researchers at University of Granada published a study in Journal of Pineal Research saying melatonin helps prevent obesity or promote weight loss by promoting the burning of fat.

Melatonin is a natural hormone produced in the body and its production is boosted in the dark at night and is also found in many fruit and vegetables including mustard, Goji berries, sunflower seeds, almonds, , cardamom, fennel, coriander and cherries, according to a statement issued by University of Granada.

Melatonin has a thermogenic effect because it helps burns fat.

The study led by Aroa Jiménez-Aranda, Gumersindo Fernández-Vázquez, Daniel Campos, Mohamed Tassi, Lourdes Velasco-Perez, Tx Tan, Russel J. Reiter and Ahmad Agil shows that melatonin consumption helps control gain weight, promote weight loss, and prevent obesity because it stimulates the production of beige fat whose cells burn calories in vivo instead of storing them.

Melatonin has been known to provide metabolic benefits in treating diabetes and hyperlipidemia. The current study offers an explanation why melatonin helps these medical conditions.

Earlier, the researchers tested melatonin for its effect on obesity, dyslipidemia, hypertension, and type 2 diabetes mellitus associated with obesity in young obese diabetic rats and chronic melatonin supplementation induces the formation of beige fat, which is found also in thin animals.

Melatonin is safe to use and these findings suggest that this supplement may help treat obesity and induce weight loss. Melatonin may not be the only supplement a person can take to maintain a high level of melatonin in his body. An obese person can also increase his intake of this wonder compound by sleeping in the dark and eating foods with melatonin to help control weight gain and prevent cardiovascular disease which is associated with obesity and dyslipidemia. (DL)

Some basics about melatonin

Melatonin is a hormone released by the pineal gland in the brain. Primarily it helps regulate other hormones and maintain the body's circadian rhythm, which determines a person's sleeping pattern.

Melatonin can also help control the timing and releasing of female reproductive hormones. That is, it determines how a woman should experience a period and when a woman should stop menstruating or have menopause.

Melatonin is also believed to be associated with aging. Young children have high levels of melatonin and as we age, the melatonin level drops.

Melatonin is also a strong antioxidant and evidence suggests that it may also help boost a person's immunity.

Medical conditions melatonin may help

Insomnia

Old people and people with certain medical conditions and those who have their circadian rhythms disrupted by their work, jet lags and night shift etc.) do not sleep well because they have a low level of melatonin.

Supplementation of melatonin is expected to improve their sleep.

Melatonin supplements may help prevent jet lag in people who cross time zones. Melatonin when taken for a short term also helps people fall into sleep quickly and increases sleeping hours.

Melatonin can also help older people with insomnia who are stopping use of benzodiazepines including diazepam (Valium), alprazolam (Xanax), or lorazepam (Ativan). Benzodiazepines are used to treat anxiety, insomnia, seizures, agitation, muscle spasms, alcohol withdrawal and as a premedication for other medical or dental procedures.

Also children with attention deficit hyperactivity disorder (ADHD) and autism may take melatonin to sleep better.

Menopause

Because melatonin has an effect on the timing of menstruation, melatonin has been tried to improve symptoms of menopause, but no strong evidence supports the notion that melatonin can relieve menopausal symptoms. However, it may help with sleep problems associated with menopause.

Breast Cancer

Breast cancer patients tend to have lower levels of melatonin than those without the disease. Women who do shift work have their circadian rhythms disrupted and reduce their serum levels of melatonin. Women who do shift work have been found to have a higher risk of breast cancer, so there is a link between low melatonin levels and high risk of breast cancer as some studies have found.

Laboratory studies show low levels of melatonin promote the growth of some breast cancer cells whereas adding melatonin retard the growth.

Additionally, melatonin may also increase the efficacy of some chemotherapies used to treat breast cancer and help prevent bleeding associated with chemotherapy.

Prostate Cancer

It is not just women who can benefit from melatonin. Men may enlist melatonin to fight prostate cancer just as women may use it to fight breast cancer. Studies have found men with prostate cancer tend to have lower melatonin levels than healthy men.

Fibromyalgia

At least one trial shows that people with fibromyalgia relieved their symptoms when they took a melatonin supplement.

Melatonin may also help sunburn, irritable bowel syndrome, epilepsy, sarcoidosis.

Melatonin Supplements and Dosage

On the market, melatonin is available in a number of forms including tablets, capsules, cream, and lozenges.

No one knows how much a person should use to have an effect even though it is known that when the dose is too low, it don't have any effect. It is advisable that people who want to try melatonin supplements start with a low dose and then gradually increase the dose if needed. But the general guideline is that one should not use a dose that is much greater than the amount our body normally produce, that is, <0.3 mg per day.

Adults with insomnia may take 1 to 3 mg one hour before bedtime. A low dose of 0.1 to 0.3 may not help everyone with insomnia. If 3 mg per day does not work for three days, then a high dose like 5 to 6 mg may be tried.

People who have to face jet lag may take 0.5 to 5 mg of melatonin one hour before bedtime at their destinations. They may also start taking melatonin 2 days before departure and they continue taking it for 2 days after landing in a different time zone.

Cautions

Do not give melatonin to children unless doctors advise so. A dose of 1 to 5 mg may cause seizures in young children.

Pregnant or nursing women should not use melatonin because it may interfere with fertility.

People may not want to use melatonin or at least talk to their doctors if they are taking certain medications particularly calcium channel blockers, antidepressant medications, antipsychotic medications, blood pressure medications, Beta-blockers, blood-thinning medications (anticoagulants), interleukin-2, and steroids and immunosuppressant medications.

Melatonin side effects

Too much melatonin may actually disrupt your normal circadian rhythms and cause drowsiness if taken during the daytime. If you take melatonin at night and feel drowsy in the morning then you may want to use a lower dose.

Other side effects that may occur include stomach cramps, daytime dizziness, headache, irritability, decreased libido and sperm count. Melatonin may also worsen symptoms of depression. The most important thing to keep in mind is that one should never use more than he needs. When a high dose is used, it should not be used for a long term.