

New melatonin study examines effects on insomnia

To date, many studies have examined the role of melatonin in helping people to fall asleep and stay asleep through the night. A hormone produced by the pineal gland after dark, melatonin has been shown in research to increase sleepiness, decrease core body temperature and increase peripheral temperature (i.e. hands & feet) in humans [*J Appl Physiol* 2001 Sep;91(3):1214-22].

New research from the National Institute of Mental Health and Neurosciences, Bangalore, India adds weight to the argument regarding melatonin as a sleep aid by actually examining its use in those with sleep problems [*J Clin Psychiatry* 2001 Jan;62(1):41-5]. Investigators there examined 33 people diagnosed with initial insomnia, giving 18 of them melatonin and placebo to the remaining 15 subjects. Different sleep measurements were recorded over the next 8 to 16 days. Compared to the placebo group, melatonin users took significantly less time to fall asleep, had better-quality, deeper and longer sleep, without experiencing any residual morning or daytime drowsiness. They also reported feeling fresh and functioning better during the day. In this study, results showed that a mean stable dose of melatonin was found to be 5.4 mg.

That dose may seem high given what other researchers have deemed effective doses for sleep induction. For example, Richard Wurtman, M.D., an MIT researcher who's studied melatonin for decades showed in his lab that administering 0.3 to 1.0 mg melatonin even during the day proved enough to raise blood melatonin levels to their usual nighttime high and induce

sleep in young, normal subjects [*Proc Natl Acad Sci U S A* 1994 Mar 1;91(5):1824-8]. But more research will be needed to establish optimal doses and administration times for melatonin to help those with sleep disorders.

—Angela Pirisi

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