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MOLECULES & HEALTH

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It's Past Your Bedtime!



Have you ever been told, “Nothing good ever happens after midnight?” The common saying comes from the idea that people who are up past this hour are generally misbehaving in some fashion or another, and it is commonly used to encourage a reasonable bedtime. It turns out, there might actually be some science that helps support the idea. In a recent study, researchers found a relationship between risky behaviors, substance abuse, and poor sleep in adolescents.¹ The authors determined that the total number of hours of sleep each night and level of difficulty falling asleep are both predictors for increased chances of eventually participating in risky behaviors including substance abuse. It is impossible to say from this study whether

lack of sleep causes risky behaviors or vice versa; or if there are underlying neurological/psychological issues also at play – it only shows a correlation.

In our modern society, the “nothing good happens after midnight” statement becomes much less relevant considering that many people have altered sleep cycles due to shift work and 24-hour business operations. However, there may still be some lessons to be learned from this well-known idiom that have less to do with the exact time we go to bed. Perhaps in our modern society, a more appropriate version of the saying would be “nothing good happens when you do not get enough sleep.”



When it comes to inadequate sleep, we have much more to worry about than just participating in risky behaviors. Insufficient sleep and/or low levels of the sleep hormone melatonin have also been linked to:

- Decreased immune response²
- Reduced work performance/productivity³
- Absenteeism at work and school³
- Depression / mood disorders^{2,4,5}
- Increased risk of cancer and reduced response to some cancer treatments^{2,6,7}
- Diabetes⁴
- Cardiovascular disease^{2,4}
- Worsening or increased perceptions of musculoskeletal and/or chronic pain⁸
- Increased risk of mortality⁴
- Disability, loss of mobility, and/or limitations in completing activities of daily living (ADL)⁴
- Decreased ability to engage in valued activities⁴



It is important to clarify that scientists have had a difficult time determining if trouble sleeping contributes to some of the above issues or vice versa. That is to say, people may have higher stress levels and increased risk of cardiovascular disease because they don't get enough sleep, or they may have trouble getting adequate sleep because of their higher stress levels and cardiovascular disease. We may never be able to determine what the actual case may be, but the fact of the matter is that getting inadequate sleep at night is not a good thing.

One study showed that the annual cost-per-person including economic costs, doctor appointments, medications, and several other factors was around \$5,000 for people with diagnosed insomnia and about \$1,400 for people only presenting with symptoms of insomnia. In stark contrast, the annual cost-per-person for people that sleep well at night is only about \$400.³ The study showed that there are economic benefits when people get adequate sleep at night, both on the personal level and societal level.

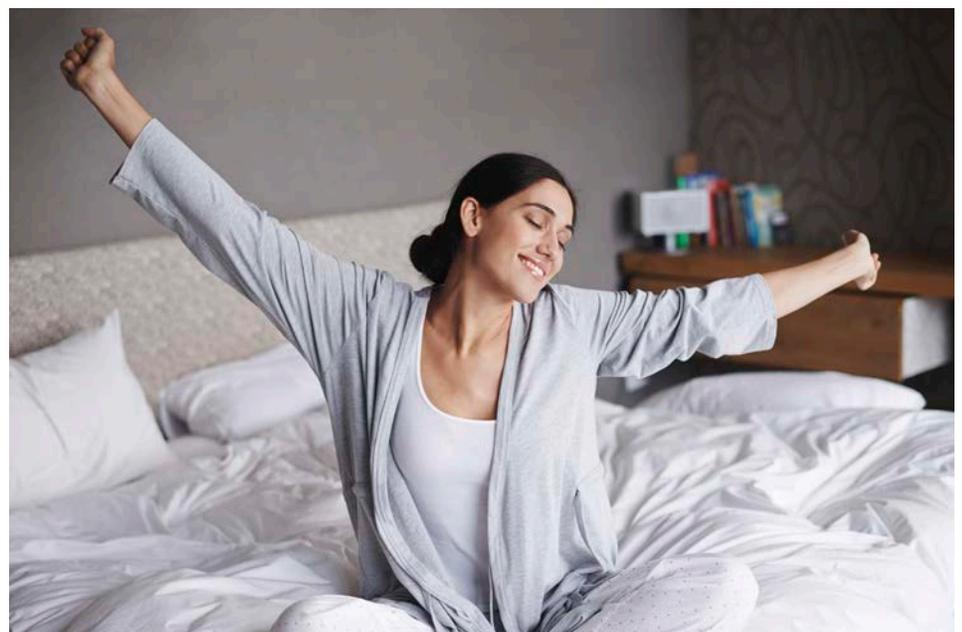
One way you can help your body

to get adequate rest at night is to increase your body's level of the sleep hormone melatonin at bedtime. You can do this naturally by simply turning off the lights. Our brain is constantly trying to make melatonin, but lights block this process.⁹ When the lights go out, melatonin production is allowed to proceed and we get tired and go to sleep. Unfortunately, we live in a world flooded in electrical light and this can disrupt our sleep cycles at night. Our brains also produce less melatonin as we age, making us more susceptible to the effects of decreased melatonin.¹⁰ In these circumstances, it may be necessary to use a melatonin supplement to make up for the lower amounts being produced in the brain.

Small Molecule Technologies Sleep support contains a safe and effective 2 mg dose of melatonin per 2 capsule serving that can help you fall asleep and stay asleep using your body's natural chemistry.^{11,12} The 2 mg dose has been shown to closely match typical melatonin levels, allowing

you to wake up without the grogginess or hangover effect that can happen with excessive doses or other sleep aids.¹³ In addition, Small Molecule Technologies Sleep Support contains naturally calming ingredients that help promote restful sleep including magnesium and curcumin, plus the potent antioxidant Olivamine 10 Max helps your body to naturally repair itself on a cellular level while you sleep.

You can start your path to better sleep and health by incorporating Small Molecule Technologies Sleep Support around the same time every night. Also, be sure to get physical activity during the daytime, try to go to bed at the same time every night, and close the blinds and turn off all of those light-producing electronics that interfere with sleep.



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