



Research notes: 5 surprising facts about exercise and sleep

Exercise can be an important contributor to your sleep health, but in some surprising ways.

DARIEN, IL – Exercise can be an important contributor to your sleep health. Overall, people tend to sleep better when their lifestyle includes some physical activity.

However, the American Academy of Sleep Medicine reports that recent research has revealed some surprising aspects about the relationship between exercise and sleep:

1. A little exercise can do a lot

Even small amounts of routine physical activity may improve your sleep and overall well-being. A survey of more than 155,000 adults in the U.S. asked participants if they had exercised at all in the past month, such as by running, golfing, gardening or walking.(1) Those who had were one third less likely to report sleep problems and half as likely to report daytime tiredness. So you don't need a daily, exhausting workout to sleep better. Remember: Getting some exercise is almost always better than getting no exercise at all.

2. Exercise before bed may be OK

Typically it is recommended that you should avoid exercising before bed. This is based on the idea that exercise raises your core body temperature, which in theory should make it harder to fall asleep. But research results have been inconsistent. For example, a small study recently found that exercise before bedtime improved sleep in healthy young men.(2) People with insomnia should still avoid vigorous exercise within a couple hours of bedtime. But exercise at night may not hinder good sleepers from falling asleep.

3. Exercise may not promote deep sleep

It seems logical that you should spend more time in deep sleep after exercising. In theory, a night of deep slumber should help your body recover from a grueling workout. But this may not be the case. Some research has shown increases in stages of light sleep after exercise.(3)

4. Exercise may reduce sleep apnea, even without weight loss

Excess body weight is the biggest risk factor for obstructive sleep apnea. A recent study evaluated a 12-week exercise program in overweight and obese adults with OSA.(4) Results show that exercise produced a moderate reduction in sleep apnea. Surprisingly, this change occurred without a significant decrease in body weight. Exercise alone is unlikely to cure OSA, but it appears to provide benefits even if weight loss isn't achieved.

5. Morning and afternoon exercise may be equally effective for adults with insomnia

Morning would seem to be the best time of day for people with insomnia to get some exercise. They can reap the extra benefit of getting exposure to morning light, which can help set the body's circadian clock that regulates sleep and wakefulness. But a small study recently found that adults with insomnia benefited equally from either morning or late afternoon exercise.(5) So if you're having trouble sleeping, try to get some exercise whenever your schedule allows it.

Although exercise can help you sleep better, it is unlikely to cure an ongoing sleep problem. Medical help for a sleep illness is available from a board certified sleep medicine physician at more than 2,500 AASM accredited sleep disorders centers across the U.S. An online directory of AASM accredited member sleep centers is available at www.sleepeducation.com.

The topic of sleep and exercise will be explored further by the 2013 Sleep in America poll, which is conducted by the National Sleep Foundation. Results of the NSF poll will be released March 4, 2013.

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Sources:

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2. Flausino NH, Da Silva Prado JM, de Queiroz SS, et al. Physical exercise performed before bedtime improves the sleep pattern of healthy young good sleepers. *Psychophysiology*. 2012 Feb;49(2):186-92.
3. Wong SN, Halaki M, Chow CM. The effects of moderate to vigorous aerobic exercise on the sleep need of sedentary young adults. *J Sports Sci*. 2013 Feb;31(4):381-6.
4. Kline CE, Crowley EP, Ewing GB, et al. The effect of exercise training on obstructive sleep apnea and sleep quality: a randomized controlled trial. *Sleep*. 2011 Dec 1;34(12):1631-40.
5. Passos GS, Poyares D, Santana MG, et al. Effects of moderate aerobic exercise training on chronic primary insomnia. *Sleep Med*. 2011 Dec;12(10):1018-27.

To arrange an interview with an AASM spokesperson about exercise and sleep, or any other sleep-related topic, please contact Communications Coordinator Lynn Celmer at 630-737-9700, ext. 9364, or lcclmer@aasmnet.org.

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