

The benefits of napping

When you wake up in the morning, are you refreshed and ready to go, or groggy and grumpy? For many people, the second scenario is all too common. This report describes the latest in sleep research, including information about the numerous health conditions and medications that can interfere with normal sleep, as well as prescription and over-the-counter medications used to treat sleep disorders. Most importantly, you'll learn what you can do to get the sleep you need for optimal health, safety, and well-being.

With age come changes in the structure and quality of our sleep. After about age 60, we have less deep (slow-wave) sleep and more rapid sleep cycles, we awaken more often, and we sleep an average of two hours less at night than we did as young adults. It was once thought that older people didn't need as much sleep as younger ones, but experts now agree that's not the case. Regardless of age, we typically need seven-and-a-half to eight hours of sleep to function at our best. So if you're not getting enough sleep at night, what about daytime naps? Or does napping disrupt the sleep cycle, ultimately yielding less sleep and more daytime drowsiness?

These questions were addressed in a recent study by researchers at the Weill Cornell Medical College in White Plains, N.Y., and published in the *Journal of the American Geriatrics Society* (February 2011). The authors concluded that napping not only increases older individuals' total sleep time—without producing daytime drowsiness—but also provides measurable cognitive benefits.

The study. This small but well-designed study involved 22 healthy women and men ages 50 to 83 who agreed to be evaluated in a sleep laboratory. During a one- to two-week preliminary period, participants kept sleep logs at home and wore monitors to track their nighttime movements. They were then brought

into the sleep laboratory for three nights and two days and given a thorough sleep evaluation (using polysomnography and other techniques) and a battery of cognitive tests. After this initial laboratory session, participants started a month-long daily napping routine at home: half took short (45-minute) naps, and half took longer (two-hour) naps. After the second and fourth weeks, all returned to the lab for repeat assessments.

The results. By study's end, total sleep time had increased by an average of 65 minutes in the participants assigned to two-hour naps, and by an average of 20 minutes in those assigned to 45-minute naps. Participants found it harder to adhere to the two-hour nap schedule, but neither long naps nor short naps disrupted nighttime sleep or led to daytime sleepiness. Napping increased the time spent in slow-wave and rapid-eye-movement (REM) sleep, which are thought to play important roles in restoring the body and brain. Whether they took long naps or short naps, participants showed significant improvement on three of the four tests in the study's cognitive-assessment battery.

Limitations and implications. Only people in good physical and mental health were included in the study, so it's unclear whether a 45-minute or two-hour napping regimen would be as helpful to older adults with sleep disorders or medical conditions. The study tells us nothing about the effects of shorter naps (for example, so-called power naps) on waking function. Moreover, the study was brief: napping-related cognitive function was measured after only two weeks and four weeks. Whether the improvements observed during the study would continue during subsequent weeks of napping is not known. Nevertheless, the findings provide further evidence that for older people, a daily nap can add to total sleep (as well as time in restorative sleep) and improve daytime function.

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