

What's New about Sleep?

An old Chinese proverb states, "Only when one cannot sleep does one know how long the night is." Almost everyone can relate to those words at some point in life. In younger people, stress and worry commonly cause insomnia. Older people suffer from a natural decrease in melatonin—a sleep-inducing hormone. Pressures from job and family, illness, side effects of some medications, and aches and pains caused by uncomfortable beds or pillows can also rob us of sleep.

Television and computers may also contribute to sleep problems. Computer use, especially in the workplace, has been associated with all types of insomnia in adults—more so than stress, which affects only difficulty falling asleep and early morning arousal.¹ Studies have found that unlimited TV, computer, and Internet use cause sleep deprivation in children—they go to bed later, sleep fewer hours, and feel more tired.^{2,3} Extensive television viewing in adolescence may result in adult sleep problems.⁴ Playing computer games may affect adults, as well. A Japanese study found that performing exciting tasks on computers with bright monitors at night affects melatonin concentration and the human biological clock, interfering with sleep.⁵

The signs of insomnia are:

- Taking more than 30 to 45 min. to fall asleep
 - Waking up many times each night
- Waking up early and being unable to get back to sleep
 - Waking up feeling tired.⁹

Overall, 40 million Americans suffer from chronic sleep disorders each year, and an additional 20 million have occasional sleeping problems.⁶ While Starbucks is helping us function during the day, caffeine cannot be a solution to sleep deprivation. Deep sleep helps children grow and improves their learning ability.^{6,7} Lack of sleep affects the immune and nervous systems, memory, judgment, attention, patience, thinking and reading ability, and ability to think, read, and understand directions. It can be

especially dangerous for those who drive. The National Highway Traffic Safety Administration estimates that sleep deprivation is responsible for 100,000 vehicle accidents a year, resulting in 1,500 deaths and 71,000 injuries.⁸

Sleeping problems are common in people with most mental disorders, Alzheimer's, stroke, cancer, and head injury. In hospitalized patients, sleep deprivation may be worsened by treatment schedules and routines. Insomnia contributes to the patients' confusion, frustration, or depression. They become more sensitive to pain and may request increased pain medications.⁶

Recent research shows that the old advice of sleeping in a comfortable bed in a cool bedroom, eating an early dinner, going to bed at the same time each night, and avoiding caffeine and alcohol before sleep may not work for everyone.¹⁰ Sleep medications are not suitable for long-term use. So, what can we do when all the known remedies have been tried, but sleep is nowhere to be found?

Sleep experts recommend the following:

- On weekends, go to bed at the same time as on weekdays.
- If you exercise in the evening, do so at least 3 hours before bedtime. Also, stay away from evening brain-stimulating or stressful activities, such as balancing checkbooks, reading thrillers, and playing computer games.¹¹
- Develop a sleep ritual that will help you to relax and unwind, such as a warm bath.
- Try listening to relaxing music before going to sleep. Soothing music may improve sleep quality in children, older adults, and critically ill patients.¹²⁻¹⁶
- Limit your child's exposure to TV or video games to less than 1 hour a day.² Long hours spent in front of the TV may lead to not only sleep problems, but also headache, back pain, and eye symptoms.¹⁷ Make sure there is no television set in your child's bedroom.¹⁸
- Be sure your children go to bed early and get enough sleep. Children between 3 and 6 years of

Several supplements may be helpful

Valerian (*Valeriana officinalis*) has historically been used for sleep disorders, trembling, nervousness, and distress.²⁹ It may be more appropriate for long-term use than sleep medications.³⁰ Although sleeping medications impair vigilance the morning after use, valerian does not.^{31,32} More studies are needed, however, to assess valerian's effectiveness and establish the optimum dose.³³ Pregnant or nursing women, children under 3 years of age, and people who use alcohol or sedative drugs, such as barbiturates and benzodiazepines, should not take the herb.²⁹

German chamomile, hops, lavender, lemon balm, passionflower, and wild lettuce have been said to have mild sedative properties, but need more scientific investigation.^{34,35} Remember that most herbs are nearly always contraindicated in combination with drugs designed to accomplish a similar purpose, for fear of an accelerated effect. Pregnant women should not use an herb unless it has been proven safe to use in pregnancy. People with depression or ulcers should not take hops. Children under 4 or those with hypotension, epilepsy, depression, or serious problems with the pancreas or liver should not use passionflower. Lemon balm should not be used by those with sluggish thyroids.³⁶

Melatonin supplements may be useful for treating some insomniacs.^{37,38} They appear to be safe when used for days or weeks—but the long-term use safety is not clear. Melatonin may help reduce sleep onset, but other benefits are not clear. It does not help people with jet lag or those who work night shifts.⁸

age should get 11-13 hours of sleep at night. Children from 1st to 5th grade should sleep 10-11 hours.¹⁹ Late bedtimes and short sleeping hours have been strongly associated with childhood obesity.²⁰

- Older people should take 30-minute afternoon naps to reduce sleepiness and fatigue and improve mood and performance.^{21,22}
- Sleep on a comfortable, supportive mattress and pillow. Talk to your doctor of chiropractic about choosing the bed and pillow that are right for you.

Researchers are looking into several possible **alternative sleeping aids**. Although they have not been widely researched, sleep experts agree—it can't hurt to try them:

- Acupuncture has been proven effective for some sleep disorders and anxiety.²³⁻²⁵
- Therapeutic touch and relaxing back massage are useful for promoting sleep in critically ill patients.^{26,27} Traditional chiropractic care may also help those with spasms, pain, and joint dysfunction of the neck and back.²⁸
- The effect of yoga and Tai Chi on sleep is now being investigated in clinical trials.

To view the list of references, go to www.acatoday.com/media/tips/sleep.shtml.

Your doctor of chiropractic has the knowledge, training, and expertise to help you understand what your problem is and, in many cases, manage it successfully. Remember, however, that the treatment program can be successful only with your active participation. If your doctor of chiropractic feels that he or she cannot help you, he or she will direct you to another health care provider.

For More
Information

For more information on prevention and wellness, or to find a doctor of chiropractic near you, go to the Patient Information section on ACA's Web site at www.acatoday.com or call 800-986-4636.

- NATALIYA SCHETCHIKOVA, PHD, Writer
- CAROL MARLEIGH KLINE, MA, Editor
- ANGELA KARGUS, BS, Designer



The For Your Health patient page is a public service of the Journal of the American Chiropractic Association. The information and recommendations appearing on this page are appropriate in most instances, but they are not a substitute for a diagnosis by a specialist. For specific information concerning your health condition, consult your doctor of chiropractic. This page may be reproduced noncommercially by doctors of chiropractic and other healthcare professionals to educate patients. Any other reproduction is subject to ACA approval.