

## In Search of a Perfect Night's Sleep

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Remember what it was like to sleep like a baby? Thousands of people walk around feeling tired from not getting enough sleep, or from sleeping in fits and starts. It might seem like a minor irritation on the big scale. Not so, according to Jose S. Loredo M.D., Director of the Sleep Medicine Center at UCSD Medical Center and Associate Professor of Clinical Medicine in the Pulmonary and Critical Care Medicine Division at UCSD.

"If you don't sleep well or the quality of your sleep is poor, your health suffers, particularly your cardiovascular health," says Loredo. "There are so many aspects of poor sleep that affect life. It permeates the whole of the person."

More than half of American adults say they sleep poorly at night, and nearly one in five adults complain of feeling tired during the day, according to a nationwide poll of over 1,500 adults ages 18 and over, conducted for the National Sleep Foundation (NSF) and released in March 2005. About 52 percent of those polled held full-time jobs, most on regular day shifts.

But how much sleep is enough? The survey found that on weekdays, respondents slept an average of 6.8 hours a night, slightly less than the seven to nine hours sleep specialists generally recommend. Most people try to fill their sleep "debt" on the weekend or days off, averaging 7.4 hours when not ruled by the alarm clock. But the lack of sleep still takes its toll, according to Loredo.

"If a person consistently doesn't get enough sleep, he or she should consider seeking an evaluation at a Sleep Medicine Center," suggests Loredo. "People who don't sleep well have been found to have more health problems. For example those with sleep apnea often have higher rates of hypertension, more heart disease, and more strokes, besides the more commonly found concerns such as falling asleep during the day while at work or school, cognitive dysfunction, family discord, and motor vehicle accidents due to fatigue."

Most people with sleep apnea have *obstructive* apnea, in which the person stops breathing several times an hour during sleep due to an airway blockage. Sufferers usually resume breathing within a few seconds, but periods of as long as sixty seconds are not uncommon in serious cases. Some people experience apnea episodes over 100 times an hour, preventing them from falling into the deeper, restorative stages of sleep.

It is more common among people who snore, who are obese, who consume alcohol, or who have anatomical abnormalities of the jaw or soft palate. However, in up to 30% of cases the patient does not fit the classical profile.

The UCSD Sleep Medicine Center provides in-depth consultations on difficult, chronic sleep conditions such as obstructive sleep apnea; insomnia; abnormal behaviors during sleep; narcolepsy or falling asleep during inappropriate daytime activities; cataplexy, a type of inappropriate sleep behavior when the muscles become weak and causes a person to fall, and other sleep derangements related to neuromuscular disorders. The center offers sleep recordings using state-of-the-art polysomnography equipment. The equipment measures physiological parameters such as breathing, oxygenation, muscle activity, and brain activity during sleep. A board certified technician oversees the laboratory based sleep recordings.

Once a patient is evaluated for a sleep disorder the physicians determine the best course of treatment. Loredó says that most sleep apnea problems are resolved with the use of Continuous Positive Airway Pressure (CPAP), a nasal-mask worn during sleep that delivers air into the airways and holds them open, eliminating upper airway blockages during sleep. For people with narcolepsy and others with abnormal sleep behaviors the physicians might prescribe pharmacological treatments, behavior therapy and light treatments for circadian rhythm disorders.

The center is staffed by a multi-disciplinary team of specialists who can evaluate and treat disorders ranging from physical obstructions of the upper airway during sleep to sleep related neurological or psychological problems.

In addition, Loredó and his colleagues, Sonia Ancoli-Israel, Ph.D., and Joel Dimsdale, M.D., from the UCSD Department of Psychiatry, and Terence Davidson, M.D., a Head and Neck Surgery specialist, are conducting numerous sleep research studies at the center.

For example, Dimsdale, Ancoli-Israel, Loredó, and Wayne Bardwell, Ph.D. of the Department of Psychiatry are conducting a four-year study to examine the medical, psychological and social effects of sleep apnea.

The "Sleep Health and Knowledge in U.S. Hispanics" is the first large study sponsored by the National Institutes of Health that will specifically study sleep in Hispanics. This five year study spearheaded by Loredó will recruit 2,000 individuals specifically of Mexican-American descent and a control group of 2,000 Caucasians in the San Diego area. One of the hypotheses is that Hispanics may have more sleep problems than Caucasians because of higher rates of obesity and diabetes in the Hispanic population. Sleep problems are more prevalent in overweight subjects.

For further information call (619) 543-5713 or go to <http://medicine.ucsd.edu/pulmonary/feature/sleep.shtml>

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