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Short on Shut-eye?

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Sleep deprivation puts your mental health at risk.

Short on Shut-eye?

A regular wake-up time is essential.

BY WINSTON J. CRAIG

It's a widespread public health problem. One in five American adults show signs of chronic sleep deprivation. On average, we sleep about 20–30 minutes less per night than we did a decade ago. New findings reveal how important sleep is, and the integrated way the brain works while we sleep. Sleep deprivation is associated with serious health issues such as high blood pressure, arrhythmia, obesity and diabetes. Studies have shown that people who averaged at least seven hours of sleep per night had a 22 percent lower risk of cardiovascular disease and a 43 percent lower risk of death than those getting less.

Sleep influences our memory, learning and behavior. Not getting enough sleep can limit our ability to concentrate and solve problems. In a sleep-deprived state, we simply cannot do our best, and are placed at greater risk of having an accident, injury and/or illness.

Sleeplessness plays havoc with memory processes. Sleep enables memories to be remodeled, including the weakening of irrelevant memories and the coherent integration of old and new information. Sleep remodels synapses, aiding memory consolidation.

Sleep-deprived people are more likely to feel stressed out, worry too much about things, or suffer from depression, and a depressed mood can lead to lack of sleep, setting up a vicious cycle. Getting adequate sleep can help you handle stress better.

Sleep deficiency also can put you at risk for unwanted weight gain. Sleep deprivation causes hormonal changes that stimulate appetite and reduce the sensation of feeling satisfied after eating. A lack of sleep makes people prefer processed and sugary foods rather than fruits and vegetables. The result is weight gain. A recent study from the Mayo Clinic showed that people who shortened their sleep by about one-third, ate more than 500 extra calories a day. A lack of sleep also causes people to have less energy and less desire for exercise.

It is important to maintain a regular bedtime and wake-time schedule, including weekends. This helps one to fall asleep easier. Sleeping in late on weekends affects your biological clock. It is like putting your body clock on Pacific time Friday night and then flipping back to Eastern time on Monday morning. Quality of sleep is also just as important as the duration of sleep. Certain lifestyle habits and medications used to treat insomnia can harm the quality of our sleep.

Sleep-deprived people do not perceive how impaired they are. When students were restricted to fewer than six hours in bed each night for two weeks, their cognitive ability and reaction times progressively declined. By the end of two weeks, they were seen to be as impaired as subjects who had been awake for 48 hours straight, the same impairment as someone after two drinks of alcohol.

"We cannot underestimate the importance of a good night's sleep," says Clifford Saper of Harvard Medical School, an expert on sleep deprivation. "Brain imaging and behavioral studies are illuminating the brain pathways that are blocked or contorted by sleep deprivation, and the risks this poses to learning, memory, and mental health."[1]

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1. Source: http://sleepfoundation.org/sleep-news/findings-reveal-brain-mechanisms-work-during-sleep, retrieved November 25, 2014.