The downsides of sleep deprivation [1]

Dear Alice,

What are the long-term effects of sleep deprivation?

Answer

Dear Reader,

While you may be a busy bee, try not to let those ZZZs get away from you! Chronic sleep deprivation [2] (going for extended periods of time with less sleep than your body needs ? which for some could be as much as ten hours a night) can cause a variety of physical and psychological problems. Loss of sleep can make people more irritable, less efficient and able to recall events, and more accident-prone. Additionally, research on chronic sleep deprivation suggests more serious long-term complications, including:

- **Cognitive problems**: It is believed that adequate amounts of sleep are essential for storing and maintaining long-term memories. People who are sleep deprived also score worse on cognitive tasks, such as judgment and reaction time. The National Sleep Foundation [3] estimates that as many as 100,000 car accidents a year may be caused by sleep deprivation.
- **Diabetes**: Sleep deprivation can interfere with the body's ability to regulate insulin production and sugar metabolism, potentially increasing the risk of diabetes.
- **Weakened immune system**: Lack of sleep can lead to changes in immune response and white blood cell production, which can lead to difficulty in fighting off infections.
- **Obesity**: Some scientists believe that sleep deprivation decreases the production of leptin, a hormone that makes people feel “full” after eating. Without enough leptin, people continue to crave carbs even after they've eaten ? leading to overeating and possible obesity.
Going into debt is a major problem these days? sleep debt, that is. Basically, sleep debt is the cumulative effect of not getting enough sleep night after night. A person who gets only a few hours of sleep each night can easily accumulate this sleep deficit. While someone experiencing sleep debt may feel rejuvenated after one night of recovery, he or she might actually need two full nights of sleep to recover performance, alertness and normal mood. Short term consequences of sleep debt include decreased daytime alertness, impaired memory and cognitive ability, and more than double the risk of sustaining an occupational injury. Watch out!

If increased demands in your life have forced you to cut back on your ZZZs, welcome to the club. A century ago, when people went to bed and awoke based on the sun's schedule, the average person could expect to get approximately nine hours of sleep a night. By 1975, nightly slumber was down to about seven-and-a-half hours, and today, one-third of Americans get less than six hours of nocturnal snooze-time. Electricity, television, and computers have created a world that's lit and lively 24/7, and many around the world are sacrificing siesta time to take part. Here are some tips for upping your ZZZ factor:

- Limit caffeine, alcohol, or nicotine close to your bedtime. These products have all been shown to interfere with sleep quality which in turn may keep you awake at night.
- Limit naps to 20 to 30 minutes. Try to get your sleep at night, but, if napping during the day, keep 'em short and sweet to reduce gogginess and to maintain alertness and performance without disrupting your nighttime sleep.
- Exercise regularly, but try to finish up at least three hours before you plan to go to bed. While exercising daily is known to improve sleep quality exercising close to your bedtime may increase alertness, keeping you awake.
- Avoid late night eating. This may make you less comfortable when settling down for bed.
- Keep a regular bedtime schedule, even on weekends.
- Avoid exposing yourself to bright lights right before going to bed, such as bright computer and cell phone screens.
- Try to make sure your bed is used only for bedtime activities. Studying in your bed may cause your mind to associate your bed with work, thus cuing your mind to think about work instead of rest.
- Create a sleeping environment that is dark, quiet, cool, and comfortable.

When you cut back on nightly napping, it's not just beauty sleep you're losing? sleep buffs both your body and brain.

Alice!
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