

SLEEP MATTERS

Tips and information

University students represent one of the most sleep deprived segments of our population, with studies reporting alarming rates of insufficient sleep.

This is concerning since research shows that sleep deprivation, particularly chronic sleep deprivation, has many negative consequences for the brain and body. To make matters worse, people aren't very good at judging how sleep deprived they are.

Sleep and academic performance

Numerous functions of the brain are restored by and depend upon sleep, including memory and learning. Learning involves three distinct brain processes: acquisition (the introduction of new information into the brain), consolidation (the processes by which a memory becomes stable), and recall (the ability to access the information after it has been stored). Inadequate sleep negatively affects all three processes.

You need sleep before learning to refresh your brain's capacity to absorb new information, and after learning, to press the save button on those memories and prevent forgetting. Sleep also plays a role in enabling us to forget stored information we no longer need, which reduces the brain resources required for retrieving information we want to keep. Unsurprisingly, insufficient and poor-quality sleep during the university years is associated with lower academic performance

Sleep and health

Those who sleep poorly are at increased risk for several diseases and health problems including an impaired immune system, compromised reproductive health, hypertension and cardiovascular disease, diabetes and weight gain, cancer, and Alzheimer's disease.

Regarding mental health, lack of sleep has been linked to emotional irrationality, and may even contribute to the onset and/or maintenance of many psychiatric illnesses. Considering the many potential negative health outcomes of insufficient sleep, it is not surprising that poor sleep is also associated with lower life expectancy.

Sleep and driving

Sleepiness is one of the leading causes of road crashes and affects everyone. However, people under 25 are over-represented in the number of serious injuries and fatalities on our roads.

According to the Sleep Health Foundation, if you drive after 17 hours without sleep, your performance is as bad as driving with a blood alcohol level of 0.05 percent. Getting up at 7 in the morning, staying awake during the day, going out in the evening and then driving home at midnight gets you to this level.

Twenty four hours without sleep is as dangerous as driving with a blood alcohol level of twice the legal limit.

See some helpful tips on the next page to improve your sleep quality and habits!

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Tips and information

1. Treat sleep as a priority

Sleep is a non-negotiable biological necessity not an optional lifestyle luxury. In general, adults need 7-9 hours each night.

2. Stick to a regular sleep schedule

Aim to go to bed and wake up at the same time every day, even after a bad night's sleep and on the week-ends. This sets the body's "internal clock" to expect sleep at a certain time each night.

3. Use light to your advantage

Natural light keeps your "internal clock" on a healthy sleep-wake cycle. So, let in the light first thing in the morning and aim to spend at least 30 minutes each day outside in natural sunlight. We need darkness in the evening to allow the release of the hormone melatonin, which helps us to fall asleep, so dim the lights before bedtime.

4. Minimise the effects of technology on your sleep

Blue light, which is emitted by most electronic devices, has been identified as the most potent light stimulus that suppresses melatonin production. Noise from technology during the night can also disrupt sleep. So, aim to stop using technology at least an hour before bedtime and leave it outside of your bedroom.

5. Avoid caffeine and nicotine

Caffeine (found in coffee, tea, cola, chocolate and certain medications) is a stimulant that can keep you awake. As its effects can take as long as 8 hours to wear off, it is best avoided later in the day. Nicotine is also a stimulant, so smokers should refrain from using tobacco products too close to bedtime.

6. Avoid alcohol before bed

While alcohol may make you sleepy initially, it disrupts your sleep in the second half of the night, causing you to sleep less deeply and to wake more frequently.

7. Avoid large meals and beverages late at night

A light snack is OK but a large meal late at night can cause indigestion, which interferes with sleep, and drinking too many fluids close to bedtime can cause frequent awakenings to go to the bathroom.

8. Prepare yourself for sleep

Ease the transition from wake time to sleep time by leaving space to unwind before bed. Make a relaxing activity such as reading or listening to music part of your bedtime ritual. Taking a bath before bed can help you relax and slow down, and the drop in body temperature after getting out of the bath promotes sleepiness.

9. Exercise during the day

This is one of the best things you can do to improve your sleep and overall health. Ideally, avoid exercise within a few hours of going to bed. If you are someone who enjoys working out at night then listen to your body, as any exercise is better than none.

10. No clock watching and don't stay in bed awake

If you are a clock watcher, turn your clock's face away from you. Staring at a clock when you are trying to fall asleep or when you wake in the middle of the night, can increase stress, making it harder to get to sleep. If you haven't fallen asleep within what feels like 20 minutes or so, or you've woken up and can't get back to sleep, get up and go to another room. Keep the lights dim and do something sedate such as reading a book or meditating, until you feel sleepy. No screens!

11. Nap early or not at all

For those who find falling or staying asleep problematic, afternoon napping may be one of the culprits. Naps late in the day decrease sleep drive. If you must nap, keep it short (20 minutes) and before 3pm.

12. Create a sleep-inducing bedroom

A quiet, dark and cool environment can help promote sleep. So, lower the volume of outside noise, use heavy curtains or an eye mask to block out light, and keep it cool. Our core body temperature needs to drop to initiate sleep (an optimal bedroom temperature is around 18°C). Keeping technology, TV's, work materials, and food out of the bedroom will strengthen the mental association between your bedroom and sleep.