



LET'S TALK ABOUT SLEEP

— STUDENT SUCCESS —
CENTER

NEUROSCIENCE



Did you know that memories are made during sleep? While you sleep, the brain clears the hippocampus of unwanted information so you are ready to learn new information the next day.

Recalling important information right before you go to sleep improves memory formation for that information.

Constant sensory stimulation (listening to music for hours or constantly texting) can exhaust your brain and make it harder to learn.

Almost every person needs 7.5 to 9 hours of sleep every night.

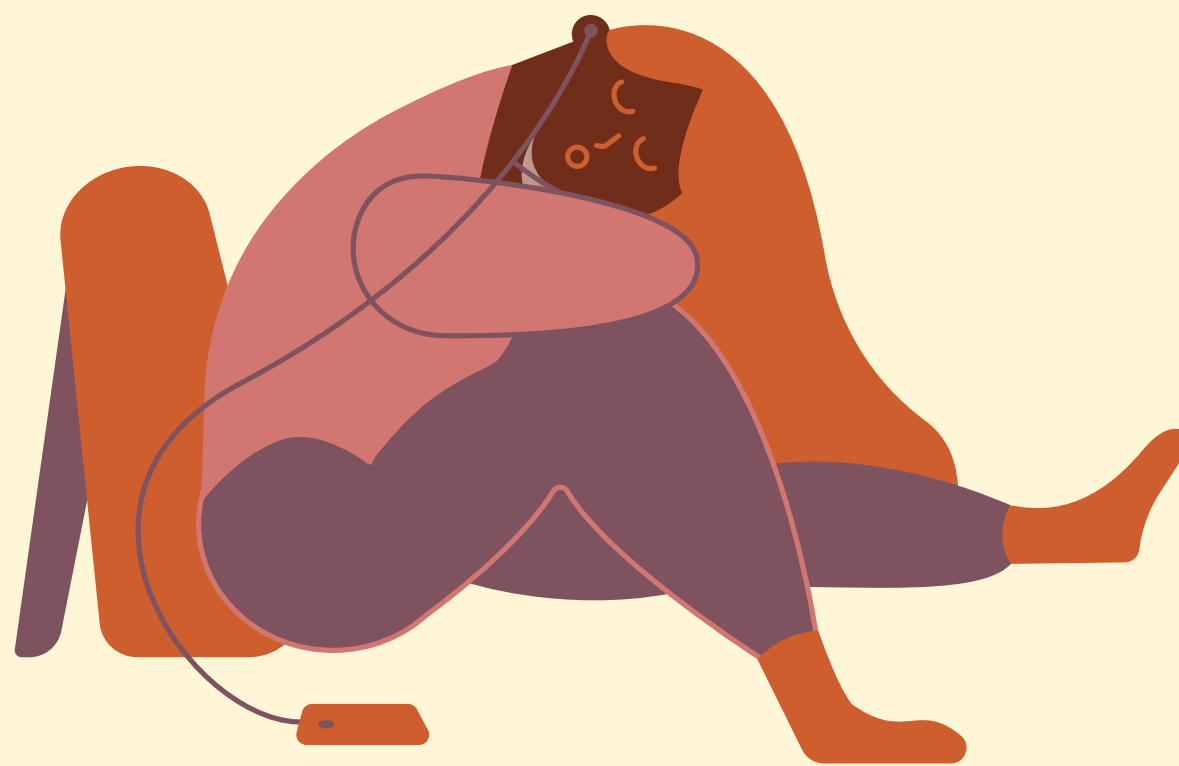
Doyle, T., Zakrajsek, T. (2019) The new science of learning: How to learn in harmony with your brain (2nd edition). Stylus.



NAPS



The best nap length is 90 minutes, because in that time you can complete one full sleep cycle! For a shorter nap, aim for 20 minutes. That will allow your brain to rest and wake up before you get into a deeper state of sleep, which makes it harder to wake up.



Napping right after learning something new will help your brain consolidate those new memories, and you will remember the information more clearly when you go to practice it later! Even taking a break (daydreaming, meditating) after learning something new will help consolidate memory.

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NOT SLEEPING WELL?



To metabolize alcohol, your body releases chemicals that inhibit your brain's ability to enter REM sleep, the deepest stage of sleep in which memories are consolidated.



Using devices that emit blue lights (phone, laptop, TV) at night decreases melatonin production. To combat the effects of blue light on melatonin, you can use blue light glasses or look in your device settings for a night shift option.

Studies have shown that individuals with diets high in saturated fats have poorer sleep patterns than individuals who eat a large variety of foods.



Caffeine is a stimulant that blocks the body's sleep-inducing chemical. It can take up to 8 hours for caffeine to leave your system, so avoid drinking caffeine 6-8 hours before you go to bed.

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SLEEP DEBT



"Sleep debt is the difference between the amount of sleep a person should be getting and the amount they actually get." Sleep debt can accumulate without you knowing it, and it affects the way your brain learns.

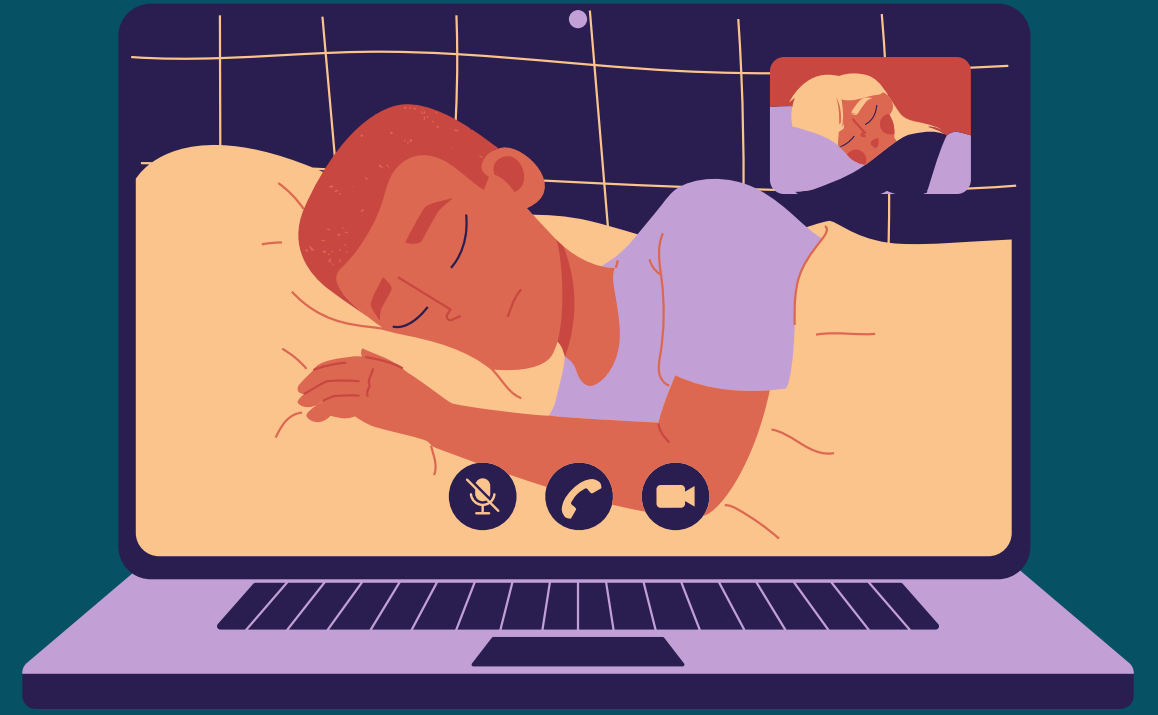
Recent studies show that there is a gene that enables people to do well on 6 hours of sleep a night, but the gene only appears in 0.03% of the population. For the rest of us, 7.5-9 hours of sleep is necessary!

Sleep debt can have some troubling short-term effects: irritability, impaired judgment, anxiety, weakened immune system, lowered sex drive, impaired driving, and trouble remembering.

Don't worry, you can reverse the adverse effects of sleep deprivation with as little as one good night's rest. "Recovery sleep" is more efficient than normal sleep. If you're recovering from sleep deprivation, let yourself sleep until you wake up naturally- no alarms!

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HELPFUL LINKS



UofA has a sleep lab that is always looking for study volunteers!

<https://sleeplab.uark.edu/>

What to do if you can't sleep:

<https://www.sleepfoundation.org/insomnia/treatment/what-do-when-you-cant-sleep>

Sleep tracking apps:

<https://www.nytimes.com/wirecutter/reviews/best-sleep-tracking-app/>

