

HEALTH IN OUR HANDS!

The Arkansas State University Wellness Program Newsletter
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Sleep

Why do we need to sleep?

Sleep was previously understood to be a passive activity. It wasn't until sleep was studied further did scientists understand that sleep was vital to maintaining health. Sleep is now defined as an active process where important processing, restoration, and strength occurs. Sleeping helps convert short term memories into long term memories, by a process known as consolidation. Sleep is directly related to new information retention rates. The amount of sleep you get each night may also directly impact some areas of your health. Those that do not receive enough sleep may have increased symptoms of depression, increased risk of seizures and high blood pressure. Your body's metabolism can also be affected by the amount of sleep you get each night. Sleep is also important in

terms of fighting diseases and infections. While you sleep, your immune system releases cytokines. Certain cytokines are vital in fighting an infection or inflammation.

Sleep Duration Recommendations

The National Sleep Foundation has done several studies to determine how much sleep people of varying ages need. It is important to note that the amount of sleep each person requires is variable and these are just a guideline. Too much sleeping may result in difficulty falling or staying asleep.

Ages	Hours
0-3 months	14-17
4-11 months	12-15
1-2 years	11-14
3-5 years	10-13
6-13 years	9-11
14-17 years	8-10
18-25 years	7-9
26-64 years	7-9
65+	7-8

Differences in Sleep Between Men and Women

There are differences in the amount of sleep between men and women. Women typically require about 20 more minutes of sleep each night. Though they typically require more sleep, women tend to function at a higher level than men when they are sleep deprived. Men and Women's circadian rhythms differ by about an hour. This difference will cause women to go to bed earlier than males but also wake up earlier.

The Sleep Cycle

While asleep, your body will cycle through two different variations of sleep: REM (rapid-eye movement) and non-REM sleep.

Non-REM sleep is the first cycle of sleep and can be further broken down into 4 substages. The first stage occurs in the time between

being awake and falling asleep. The second stage is known as light sleep. During this stage heart rate and breathing regulate and body temperature drops. The third and fourth states are both classified as deep sleep. In the past, it was thought that REM cycle sleep was the most important. In recent studies, it has been shown that non-REM sleep is more important for learning and memory.

During REM sleep, the eyes will move rapidly. The brain waves in REM sleep mimic those seen during wakefulness. During this period, breathing rates will increase and the body becomes temporarily paralyzed as you dream. Through the night, the body will cycle through these stages of sleep 4-5 times. As your body makes it through the cycles, the amount of time spent in stages 3 and 4 of non-REM sleep decreases and the time spent in REM sleep increases.

Tips for Good Sleep

- 1. Stick to a sleeping schedule.** Make it a priority to go to bed and wake up at the same time each day. Try not to deviate away from your sleep schedule on the weekends. If you are unable to fall asleep within 20 minutes of laying down, leave your room and try to

do something relaxing. When you feel tired try going to sleep again.

- 2. Pay attention to what you eat and drink.** Avoid eating large meals within a few hours of bedtime. Being too full may interfere with sleep. It is also important not to be hungry when going to sleep. Be careful of nicotine, caffeine, and alcohol before bed.
- 3. Create a calm environment.** A room ideal for sleeping can go a long way. Try to keep the room dark by using curtains. Ear plugs and a fan may also help make the room more suitable for your sleep needs.
- 4. Limit daytime naps.** Long day time naps have the ability to interfere with the body's natural sleep schedule. If you do nap, try and limit it to 30 minutes and avoid taking one late in the day.
- 5. Include physical activity in your daily routine.** Regular exercise is a great way to promote sleep. However, exercising



close to bedtime may make it harder to fall asleep.

- 6. Manage your worries.** Try and calm your mind before it is time to go to sleep. Being organized, setting priorities, and meditation are all things that can help.

References

- <https://www.mayoclinic.org/diseases-conditions/insomnia/expert-answers/lack-of-sleep/faq-20057757>
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Other News

**If you have any suggestions for newsletter topics, please contact Dean Susan Hanrahan at hanrahan@astate.edu.

The Arkansas State University Employee Wellness Newsletter is published monthly during the academic year by the College of Nursing and Health Professions. Health questions can be addressed to Dean Susan Hanrahan, Ph.D., ext. 3112 or hanrahan@astate.edu. Produced by Kayla Leal, graduate student in the College of Nursing and Health Professions, Physical Therapy Program.