

# HEALTH IN OUR HANDS!

The Arkansas State University Wellness Program Newsletter  
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## Sleep Awareness

### World Sleep Day

March 17<sup>th</sup> is recognized as “World Sleep Day” organized by the World Sleep Society. The purpose of this organization is to “advance knowledge about sleep, circadian rhythms, sleep health, and sleep disorders.” The World Sleep Society seeks to raise awareness in hopes of improving the quality of life of individuals worldwide. This year’s theme is “Sleep Soundly, Nurture Life.”

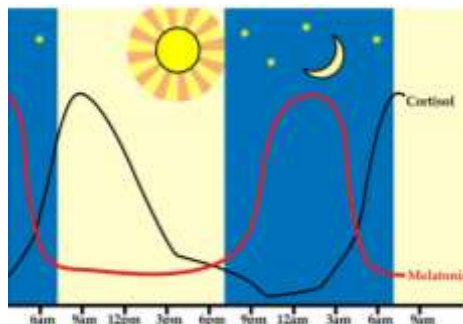
### Sleep Duration Recommendations

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+ years	7-8

### Circadian Rhythm

The circadian rhythm, also known as the sleep/wake cycle, is a 24 hour internal clock that is running in the background of your brain and cycles between sleepiness and alertness at regular intervals. The hypothalamus is the regulator of the sleep/wake cycle. As seen in the picture, cortisol levels are elevated throughout the day and early hours in the morning. This is needed to regulate several processes that take place in the body.

On the other hand, there are high levels of melatonin in order to sleep. When there is an imbalance, we may experience difficulty with sleep. Factors such as light and dark can impact it. For example, when it is dark outside, a signal is sent to the hypothalamus saying you are tired. Melatonin is then released which physically makes your body tired.



### Sleeping Tips

- **Stick to a sleep schedule-** Go to bed at the same time every day, even on the weekends. Regularity reinforces your body’s sleep/wake cycle. If you are unable to fall asleep within about 15 minutes, get up and do something relaxing.
- **Pay attention to what you eat and drink-** Do not go to bed hungry or stuffed because discomfort can keep you awake. Limit intake of liquids before going bed to prevent trips to the bathroom throughout the night. Nicotine, caffeine, and alcohol should be avoided. Nicotine and caffeine both have stimulating effects. While alcohol may make you sleepy at first, it can disrupt sleep later in the night.
- **Create a bedtime ritual-** Do the same thing before bed each night to tell your body it is time for bed such as a warm bath, reading a book, or listening to soothing music. Some research suggests that time on the phone or in front of the TV before bedtime interferes with sleep.
- **Get comfortable-** Create an environment for the best sleep. For most, this means cool, dark, and quiet. Room-darkening shades or a fan may

help. Choose bedding that is comfortable and make sure there is enough space if you share a bed.

- **Limit daytime naps-** If you choose to nap, limit it to 10 to 30 minutes around midafternoon.
- **Include physical activity into your daily routine-** Regular exercise can help with falling asleep deeper and quicker. However, if you exercise too close to bedtime, you might be too energized to fall asleep.
- **Manage stress-** When your mind is racing, this interferes with sleep. Practice organization and setting priorities. Take a break and do something that you find enjoyable. Before going to bed, maybe write down what is on your mind and save it for tomorrow.

### Benefits

- **Immune support-** During sleep, your body produces extra protein molecules that help strengthen your ability to fight infection and stay healthy.
- **Keep your heart healthy-** Sleep reduces levels of stress and inflammation in your body. High levels of “inflammatory markers” are linked to heart disease and stroke.
- **Reduce stress-** A good night’s rest can help lower blood pressure and levels of stress hormones.
- **Improve memory-** Research suggests that plasticity occurs in the brain while we sleep. This means memories and skills are shifted to more efficient and permanent brain regions.
- **Control body weight-** Sleep regulates hormones that control your appetite. Studies have indicated that when the hormones become imbalanced, appetite is increased. In addition to this increase for hunger, the body is not able to

burn the consumed calories as efficiently.

- **Reduces chance of diabetes-** Research suggests that lack of sleep may lead to type II diabetes because the body will not be able to process glucose as efficiently.
- **Reduces occurrence of mood disorders-** Insufficient sleep typically leads to agitation the following day. When this becomes recurrent, it can lead to long-term mood disorders such as depression or anxiety.

### Common Disorders

#### **Insomnia**

- Difficulty falling asleep.
- Waking up often during the night and having trouble going back to sleep.
- Waking up too early in the morning.
- Having unrefreshing sleep.

#### **Sleep Apnea**

- Breathing interrupted during sleep.
- Obstructive sleep apnea occurs from blockage of the airway.
- In central sleep apnea, the airway is not blocked but the brain fails to tell the body to breathe.
- Symptoms may include snoring, daytime sleepiness, fatigue, restlessness during sleep, and gasping for air while sleeping.

#### **Narcolepsy**

- Neurological disorder of sleep regulation that affects the control of sleep and wakefulness.
- Presents as excessive daytime sleepiness and intermittent, uncontrollable episodes of falling asleep during the daytime.
- Usually begins between the ages of 15 and 25; however, many cases are undiagnosed and therefore, untreated.

### Sleep Disorder Diagnosis

If you suspect that you may have a sleep disorder, discuss your symptoms with your primary care physician. Keeping a sleep diary for a few weeks may be helpful to share with your doctor. If your doctor suspects a sleep disorder, he or she may refer you to a sleep disorder clinic for a sleep study. The recordings from the sleep study are analyzed by a qualified physician to determine whether or not you have a sleep disorder.

### References

- <http://worldsleepday.org>
- <https://sleepfoundation.org>
- <http://www.mayoclinic.org/health-y-lifestyle/adult-health/in-depth/sleep/art-20048379>
- <http://www.better-sleep-better-life.com/benefits-of-sleep.html>
- <http://my.clevelandclinic.org/health/articles/common-sleep-disorders>
- <https://www.thepaleomom.com/wp-content/uploads/2014/02/Melatonin-and-Cortisol.jpg>

### Other News:

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

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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 Karinda Polk, graduate student in the College of Nursing and Health Professions, Physical Therapy Program.