



How Did You Sleep?

What Goes Into A Good Night's Sleep

Do you often feel drowsy and doze off during the day? Is it hard for you to fall asleep at bedtime? Are you a light sleeper who is awakened easily? Although it is not unusual to have a poor night's sleep occasionally, if your answer is "yes" to any of these questions you may be suffering from a sleep disorder or an underlying medical condition that is affecting your sleep.

"More than 50 percent of people age 65 and older experience a sleep disorder," says Phyllis Zee MD, PhD, director of the Sleep Disorders Center at Northwestern Memorial.

Researchers have found that while the quality of a person's sleep changes with age, a full night's sleep is still critical to an older adult's physical and mental health. Lack of sleep may adversely affect your judgment, concentration, reaction time and productivity, as well as increase your risk of accidents and illness. To understand why you may be sleeping less soundly and for shorter periods of time, it is important to know what occurs during a typical night of sleep.

The Stages of Sleep

During the day and night, the average adult's "biological clock" regulates waking and sleeping cycles. Different regions of the brain help the body keep time and create the urge to sleep. For most, this urge builds up during the day and peaks between 10 pm and midnight.

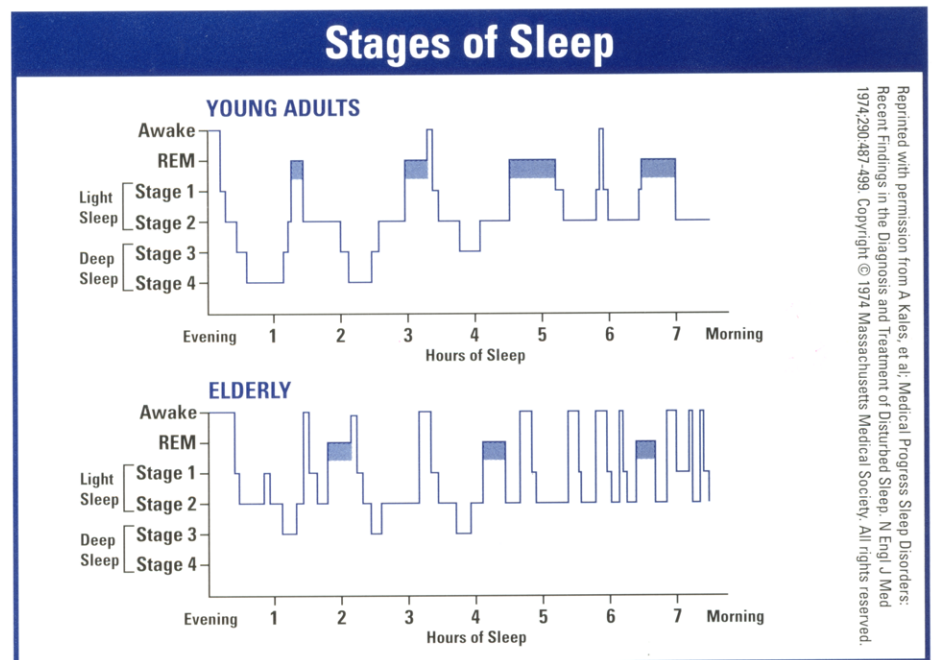
During the night, the normal sleep cycle progresses through five stages. In the two stages of light sleep (Stages 1 and 2), eye movements and muscle activity begin to slow down but a person is awakened easily. In the two stages of deep sleep (Stages 3 and 4), your body is physically rejuvenated. Eye movement and muscle activity stop and very slow brain waves (delta waves) appear. It is difficult to wake someone in the deep stages of sleep. REM (Rapid Eye Movement) is the fifth stage of sleep and first takes place 70 to 90 minutes after falling asleep. During REM, dreams occur and you are mentally rejuvenated. Breathing is irregular and shallow, eyes jerk rapidly, heart rate and blood pressure rise. A full cycle of all five stages completes itself every 90 to 110 minutes and repeats four or five times a night.

How Does Sleep Change As People Age?

Research studies show that even though older adults continue to need seven to nine hours of sleep a night, often they don't get enough rejuvenating sleep. This is because their ability to reach the deep, restful stages of sleep, and to sleep for long periods of time, decreases with age.

"Sleep problems are not necessarily a part of the normal aging process," says Dr. Zee. "Changes in a person's sleep may be caused by an underlying medical condition." Medications, food, smoking, alcohol, insufficient natural light and lack of exercise also may affect the quality and duration of sleep.

The next issue of *Healthy Transitions* will discuss common sleep disorders in older adults as well as provide tips for getting a good night's sleep.



Young adults typically cycle through each stage of sleep about every 90 minutes, with more deep sleep occurring in the first half of the night and more REM sleep in the last half. Older adults tend to cycle through the sleep stages more frequently than young adults, spending more time in light sleep (Stages 1 and 2) and less in deep sleep (Stages 3 and 4).