We all know what happens when we do not get enough sleep—we are irritable, our minds are foggy, and getting through the day becomes a bit more challenging than when we are fully rested. Lack of sleep also affects our mood, concentration, and makes us more susceptible to physical accidents. Advancements in sleep research over the last decade have lead to the discovery of the important role of sleep in memory consolidation; in addition, recent evidence suggests sleep allows the brain to cleanse itself of toxic molecules. Dr. Nedergaard and her colleagues at the University of Rochester Medical Center in New York found increased flow in cerebrospinal fluid in sleep states versus wake states in the brains of mice through the glymphatic system, also referred to as the brain’s "plumbing" system, which is in charge of flushing out toxic molecules (e.g., beta-amyloid proteins) that have been implicated in neurodegenerative diseases. These findings implicate that the brain undergoes a cleansing process during sleep, and further supports the idea that sleep is crucial to maintaining good health.

So the bottom line is that sleep is good. But what exactly is meant by "good," and does sleep change over the lifespan? Research has shown that a person’s sleep needs do change over his/her lifespan. Children and adolescents need more sleep than adults, with a suggested 7-9 hours of sleep per night as being ideal. Counter to the myth that we need less sleep as we age, older adults in fact need roughly the same amount of sleep as younger adults. The problem is that older adults often do not get the sleep that they need. For example, many older people have difficulty falling asleep, do not sleep as deeply, and as a result wake up more throughout the night—all of which may lead to more napping throughout the day. Older adults also tend to experience a shift in sleeping habits, often feeling tired and going to bed earlier in the evening, and then waking up earlier in the morning. Possible explanations for these changes include the findings that older adults produce less melatonin (a sleep-promoting hormone), may be more sensitive to changes in their environments (and thus awaken more often, e.g., in response to noises), and may have more chronic medical and psychiatric problems that affect their sleep compared to younger adults.

Contrary to popular belief, poor sleep is not a normal part of the aging process, and can lead to a number of problems. Older adults who report poor nighttime sleep are more likely to suffer from attention and memory difficulties, depressed mood, increased nighttime falls, and use more prescription or over-the-counter sleep aids. While changes in sleep patterns as we age are normal, having frequent disturbed sleep and waking up tired every morning is not a
normal part of aging. Poor sleep has a major impact on overall quality of life. When sleep is disturbed, scheduling an appointment with a physician or sleep specialist may help to pinpoint causes of the disturbance and formulate appropriate treatments.

Recommended suggestions for improving sleep quality include: keeping a regular schedule (keeping the same sleep and wake times), trying not to nap as much during the day, exercising at regular times each day, getting some sunlight in the afternoon daily, being mindful about what you consume (e.g., caffeine intake), avoiding alcohol and/or cigarettes to help you sleep, creating a comfortable and safe place to sleep (a dark, quiet, and well ventilated room is suggested), having a bedtime routine, using your bedroom only for sleeping (if you cannot fall asleep get out of bed and return when you are sleepy again), and trying not to worry about your sleep.

In summary, research on sleep continues to show that getting enough zzz’s is a key component to healthy living in all ages. So maybe next time you hit the snooze for the 8th time you’ll feel a little less guilty.

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