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In this Review:

Aging and Sleep

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Learn about the relationship between age and sleep to understand what's normal—and what's not.

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As we age, our sleep patterns change, but our ability to sleep shouldn't. Your [brain needs sleep](#) to regulate your body, restore energy, and repair damage. Without a healthy amount of sleep, you're left vulnerable to health conditions that accelerate aging and make it difficult to safely age in place.

Key Takeaways

- Most older adults need at least seven hours of sleep every night.
- Roughly 50% of older adults struggle to fall and stay asleep.
- Studies report that anywhere from 20% to 60% of older adults take daytime naps.
- An estimated 46% of older adults take five or more prescription medications, which may negatively influence sleep. [3] [4]
- Regularly sleeping less than six hours per night may be linked to dementia and stroke-related brain changes as early as middle age. [2]

adults to experience less total sleep time, sometimes caused by more disruptions during sleep.

You may also experience less time in stage three non-REM and REM sleep, influencing how the brain recovers, learns, and stores memories. Many older adults find that [it takes longer to fall asleep](#) initially, but getting back to sleep is usually not an issue. Research has found that the time it takes to return to sleep after waking is consistent for both older and younger adults. [9]

Do older people need more sleep?

It's a common misconception that older adults sleep more than younger people. Adults of all ages need the same amount of sleep each night. But because older adults often experience poor sleep quality and continuity, they may need to spend more time in bed to achieve sufficient sleep duration overall and minimize the risk of daytime drowsiness.

The misconception that older adults need more sleep may be based on the prevalence of daytime drowsiness and excessive sleep. While not a normal part of aging, they are common. Excessive sleep is generally defined as ten or more hours of sleep per day or night. Research showed a 23% prevalence of excessive sleepiness among older adults (average age of 84), and many cases of daytime sleepiness are associated with frequent sleep disturbances during the night. Additionally, [20-60% of older adults report taking daytime naps](#), often to make up for sleep issues at night.

Unfortunately, too much sleep is linked to many of the same health conditions as too little sleep, like heart issues and increased falls risk. [25] Miner, Brienne, et al. The Epidemiology of Patient-Reported Hypersomnia in Persons with Advanced Age. Journal of the American Geriatrics Society. August 2019. Found on the internet at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6898735/> rnrn

A 2021 study summarized research findings that [link sleep deficiency with accelerated aging](#) and disease onset, including heart issues and cancer.

inflammation. The abnormal accumulation of damaged cells and inflammation as we age is called [inflammageing](#). [1] [11]

Sleep regulates the immune system and its inflammatory response, which is important in removing damaged cells. Those with sleep deficiency have a higher risk of inflammageing. Adults who reported six hours or less of sleep nightly show [more accumulation of tissue damage](#) than those who got the recommended seven hours of sleep. [23] One study showed [genetic damage in older adults](#) after only one night of four-hour sleep, which remained despite the participants getting enough rest the following night. [22]

Do older people need less sleep?

No, older people don't need less sleep. Seven hours of sleep is adequate for most older adults, but changes in sleep patterns can influence whether they get their recommended seven hours. [3]

Timing can shift in older adults as well. As you age, you'll find that your circadian rhythm shifts forward in time. This phenomenon is called phase advance and causes older adults to feel awake earlier in the morning and drowsy earlier in the evening than younger adults. [3]

Sleep issues in older adults

Both old and newer research shows that [many factors contribute to disordered sleep](#), and some are more common as we age. [15] [16] [17]

Some of the most frequent contributors to sleep concerns include:

- Back, neck, or joint pain
- Worry, anxiety, and depression
- Neurodegenerative disorders, like dementia and Alzheimer's
- Sleep apnea or disordered breathing at night

- Stimulating medications or medication interactions
- Decreased sunlight exposure
- Decreased physical activity

Many of these factors are controllable. Kriebel-Gasparro highlighted multiple ways daytime habits can contribute to nocturia, for example. Taking diuretic medications or fluids before bedtime (alcohol, tea, coffee) can have you running to the bathroom throughout the night. Take diuretic medications first thing in the morning, not in the evening, unless otherwise prescribed. And be sure to limit fluid intake, especially diuretic beverages like the ones listed above, in the evening.

“Other medications that can keep us awake include some antidepressants, like Prozac or Celexa, and cold medications, like Sudafed,” Kriebel-Gasparro said. “Of course, checking in with your health care provider, especially a geriatrician or geriatric nurse practitioner, to discuss any problems with sleep and strategies is essential for health.”

Sleep and chronic pain

Sleep and pain are connected by what is called a bidirectional relationship, which means they affect each other. As stated by Neuropsychopharmacology, [chronic pain can make sleep issues worse](#), while it is also true that inadequate sleep can play a role in worsening chronic pain. Finding ways to address chronic pain with the help of your healthcare provider is one way older adults can improve their sleep and their overall well-being. Creating a comfortable sleep environment, including switching to the [best mattress for back pain](#), may be a part of your plan for getting better sleep.

Sleep and depression

Sleep and [depression](#) have a two-way relationship. A review of relevant studies showed that [sleep disturbance is a major symptom of depression](#). But disturbed sleep, particularly during your mood-balancing REM sleep, can also be the cause of depression. [12] Naturally occurring

Researchers have agreed on the relationship between sleep and depression, but there's no consensus on how the two are linked or how to treat both issues best. There is some evidence specific to older adults, though. Research has found that older [adults with depression and insomnia](#) benefitted from [cognitive behavioral therapy for insomnia \(CBT-I\)](#) ⁱ, with significantly fewer symptoms at the 20-week follow-up visit. [13]

Sleep and dementia

“Disrupted sleep could increase the risk for neurodegenerative brain diseases,” warned [Ann Kriebel-Gasparro](#), DNP, president-elect of the Gerontological Advanced Practice Nurses Association. [Research](#) has connected disturbed sleep and sleep-disordered breathing (like sleep apnea) with a higher risk for different types of [dementia](#), a neurodegenerative condition that permanently impacts memory, thinking, and physical function. [14] Unfortunately, there is no cure for dementia, but there are [disease management strategies](#).

Kriebel-Gasparro explained that sleep disturbance can increase beta-amyloid, a protein that accumulates in the brains of people with Alzheimer's disease and other forms of dementia. Without adequate sleep, your body can't keep up with beta-amyloid protein removal, triggering disease onset. Neurodegenerative damage can start young. Middle-aged adults who sleep less than six hours per night show [changes in the brain](#) that have been linked to declining brain health and medical conditions, like dementia or stroke. [2]

Like sleep and depression, sleep and dementia also have a two-way relationship. The same research series stated that [altered sleep patterns are a hallmark sign of dementia](#), possibly due to changes in parts of the brain that control the circadian rhythm. This cyclical relationship is difficult to manage, but understanding it is the first step to developing the right treatment. [14]

Sleep tips: How older adults can get better sleep



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sleep. In most cases of insomnia, addressing sleep hygiene is the first approach. [17] For some sleepers, this may look like choosing the [best mattress for older adults](#) to accommodate changing comfort needs. Discovering the ideal mattress includes finding an option suited for your preferred sleep position, such as the [best mattress for side sleepers](#) or a medium-firm mattress for sleeping on your back.

We asked Kriebel-Gasparro about the advice she gives to her patients to improve their sleep. We also consulted the Journal of General and Family Medicine and the [Sleep Hygiene Index](#) (a clinical test that scores your sleep hygiene practices) to develop sleep hygiene tips to address common causes of sleep disturbance in older adults. [17] [18]

10 ways to improve your sleep hygiene are:

1. **Establish a regular sleep schedule:** Go to bed and wake up at the same time every day, and as soon as you wake up, get out of bed and start your day. Getting in and out of bed at different times daily can jumble your sleeping patterns.
2. **Avoid alcohol at night:** Alcohol can promote sleep for some people, but you'll be likelier to wake at night to use the bathroom. Try not to drink alcohol within four hours of bedtime.
3. **Avoid caffeine in the evening:** Caffeine can make it difficult to fall asleep, as well as lead to more bathroom visits during the night. One study found that caffeine disrupts sleep even after six hours, so it's best to avoid drinking coffee, tea, or soda after noon. [19]
4. **Eat regular meals:** Schedule three meals daily with light snacks if you feel hungry, but avoid eating heavy meals before bedtime.
5. **Limit fluid intake before bed:** If you need to use the bathroom often at night, avoid liquids before you sleep and prioritize water intake in the morning instead. If you have heart or circulation problems, talk to your doctor before starting this practice, as it can influence these conditions.
6. **Stay away from electronics before bed:** Watching the news or browsing social media can be stimulating, and sometimes upsetting, which will impact sleep quality. If you watch

comfortable temperature of about 75 degrees Fahrenheit. If your bed is uncomfortable, consider upgrading your bed with a [better mattress](#) or an [adjustable base](#).

8. **Exercise regularly:** Aerobic exercise in the morning, like walking and biking, improves the ability to fall asleep at night. But exercising to the point of sweating before bed may keep you awake.
9. **Get more sunshine:** Your brain regulates your sleep patterns using daylight, so step outside and open your blinds during the daytime.
10. **Manage your worries:** If your mind is racing before bed, list your to-dos to get them out of your head. You can address them in the morning when you're well-rested. If you need more support for your racing thoughts, consider [talking to a therapist](#) who can offer solutions.

When to talk to your doctor

It's time to talk to your doctor when your sleep habits worsen and you notice increased difficulty falling or staying asleep. It's especially important to talk to your doctor if you notice daytime behavior changing due to poor sleep, like altered mood, mental foginess, or feeling physically unsteady.

If you have a sleep diary or any sleep-tracking information, remember to take it with you when you see your doctor. Kriebel-Gasparro also recommended documenting any personal or family history of depression, anxiety, bipolar disorder, previous sleep disorder diagnoses, or history of brain trauma or concussion. "It is best to be honest with your provider, as they will be able to help you better if they know your history. Everything you share will be confidential," she said.

[Download our PDF sleep health packet](#) below to track your sleep.

Final thoughts

Not sure where to start? Print our Sleep Packet and start keeping your sleep diary, documenting each day honestly and completely. “If you have concerns about your sleep, be sure to speak to your provider for recommendations on lifestyle changes, medications, or supplements that can help you get quality sleep and improve your brain health,” said Kriebel-Gasparro.

Have questions about this review? Email us at reviewsteam@ncoa.org.

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