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## Advice/Support: Resources to Help Family Caregivers

Every day, many Americans find themselves in an unexpected new role. They become a family caregiver for a loved one suffering from chronic pain.

Experts estimate that chronic pain affects millions of Americans. Pain can interfere with daily activities, causing patients to lean heavily on family and friends.

Providing care for a loved one experiencing chronic pain presents challenges, such as making sure your loved one reports pain to his or her healthcare provider. Even with chronic diseases and conditions, pain should be taken seriously by doctors and physicians.

Suzanne Mintz, president and CEO of the National Family Caregivers Association, vouches for appropriate care because each person feels pain differently. Although it is a physical sensation, perceptions of pain are influenced by social, cultural and psychological factors. It can be difficult to make sure your loved one's pain is evaluated appropriately. However, there's little information and few resources available to help family caregivers cope with these problems. The National Family Caregivers Association has teamed up with the pain management education program *Partners Against Pain* to create Caregiver Cornerstones, a program providing information, encouragement and tools to family members.



The four Caregiver Cornerstones are:

- 1. Learning about pain management. Taking an active role in helping to manage a loved one's pain may help you feel more useful and worry less.
- 2. Caring for a person with pain. This includes making sure that patients receive proper assessment and follow their treatment plans.
- **3.** Caring for yourself. Being a family caregiver can be a demanding job. Allow others to help provide a support system.
- 4. Advocating for all people in pain. The Cornerstones program strives to raise awareness about the importance of access to effective pain care. Learn more about Caregiver Cornerstones at www.partnersagainstpain.com.

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### Why Do We Sleep? Science May Have Finally Figured It Out

Your brain is equipped with a waste management system that does most of its work while you slumber

Two centuries ago, the Scottish physician Robert Macnish theorized that the purpose of sleep was to "renovate the mind" by offering it a period of deep repose. The idea that sleep helps rejuvenate a weary brain had been around long before Macnish's time. But as recently as 20 years ago, sleep scientists still readily admitted that they did not understand the fundamental purpose of sleep.

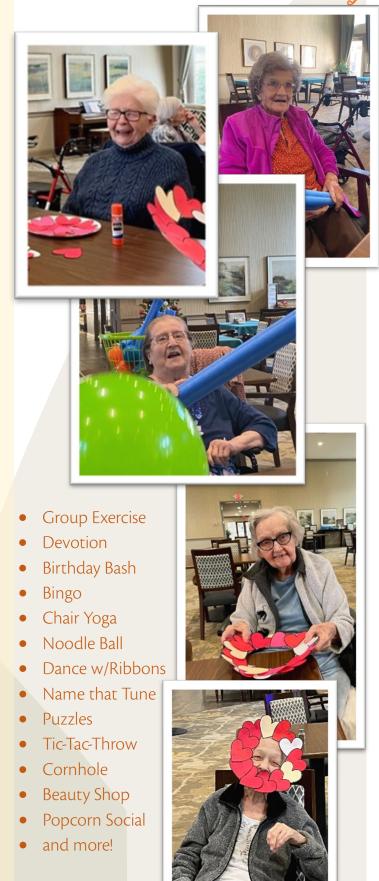
For decades, we'd recognized that some important biological processes take place during sleep, and that a lot goes wrong with us when we don't get our ZZZs. But none of this explained just why human beings — and pretty much every other type of beast, bird, or bug on Earth—spends such a large portion of their lives in slumber.

The discovery of a hidden brain system may finally provide the answer. The metabolic and cellular processes that keep you alive are not perfectly efficient. They produce waste. Fortunately, your body is equipped with a kind of waste management system. It's called the lymphatic system, and its network of fluids, nodes, vessels, and organs collects and removes all the cellular junk — as well as the bacteria, proteins, and any other unwanted detritus — that builds up inside of you.

"The universal biological need for sleep across multiple species may, at least in part, reflect the need for glymphatic clearance." We've known about the lymphatic system since the late 1700s. But until very recently, experts had failed to locate an equivalent system in the human brain. That changed a decade ago when a group of researchers, based mainly at the University of Rochester Medical Center in Rochester, New York, discovered a previously unknown "clearing system" in the brain. They called it the glymphatic system, and they showed how it helped collect cellular waste and flush it out of the central nervous system.

"The longer we're awake, the more cellular byproducts build up in the brain," says Jeanne Duffy, PhD, a neuroscientist and sleep researcher at Brigham and Women's Hospital in Boston, Massachusetts. "The glymphatic system washes these cellular byproducts out so they're not causing damage to brain cells." (continued on page 3)

# Making memories... a look back at January



### Why Do We Sleep? (continued from page 2)

According to a 2020 paper in the journal *Trends in Neurosciences*, the glymphatic system had gone undiscovered for so long because the arterial channels it uses to transport fluid and waste are only visible inside living brain tissue. It took high-resolution images, taken inside the brains of living mice, to reveal the existence of these channels.

"Another discovery, and arguably an equally important one, is that glymphatic clearance is primarily active during sleep," wrote the authors of that *Trends in Neurosciences* paper.

Improper waste clearance may explain the connection between poor sleep and chronic migraine headaches.As Duffy said, being awake causes an accumulation of cellular byproducts and other neurological junk. The purpose of sleep, it seems, is to give your brain's glymphatic system an opportunity to get rid of that junk. "The universal biological need for sleep across multiple species may, at least in part, reflect the need for glymphatic clearance," the Trends authors wrote.

In support of this hypothesis, recent studies have found that the glymphatic system clears amyloid beta peptides from the brain. The buildup of amyloid beta is thought to be a major driver of Alzheimer's disease, which is one of a handful of neurodegenerative conditions associated with poor sleep. Some researchers have also theorized that improper waste clearance may explain the connection between poor sleep and chronic migraine headaches — as well as sleep's ability to relieve migraines.

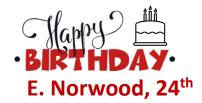
All this work has led some experts to call the glymphatic system the "missing link" between impaired sleep and neurological disorder. Its discovery may pave the way for new and more effective remedies for these conditions. While groundbreaking, the revelation of the glymphatic system doesn't change what we already knew: Sleep is important.

Pretty much everything that can go wrong with you is either more likely to happen or made worse by insufficient sleep. Still, the recognition that harmful garbage is building up in the brain may motivate some to make sleep a bigger priority. Asked if the old eight-hour rule is accurate, Duffy says that — by and large — the answer is yes. While some people can function all right after getting just five or six hours, their health will suffer for it.

"There seems to be a huge difference in how much sleep loss people can tolerate, rather than being a huge difference in how much sleep people need," she says. If you tend to sleep more on weekends or holidays, that's a sign you're probably not getting enough sleep, she adds. The time you spend in bed may seem like time wasted. But it's clearer than ever that important and health-sustaining work is going on in your brain and body while you get your shut-eye.

*Written by Mark Heid for Elemental.medium.com, Jan 19, 2022 (Mark writes about Health, Science and Psychology)* 







For full calendar of events visit: aspenofbrookhaven.com.

WINTER OLYMPICS 2022

February 4 - February 20

The Olympics remain the most compelling search for excellence that exists in sport, and maybe in life itself.

Fun fact: Snowboarding was first introduced as an Olympic Sport in 1998 during the Games in Nagano, Japan.



<u>LTVENINE A</u>

## More memories...





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