

World Sleep Day: The Effects Ageing Can Have on Sleep

You may see physical changes as you get older, but changes to our sleep patterns are also part of the ageing process. It is a common misconception that you need less sleep when you get older. In fact, our sleep requirements are the same throughout adulthood. At any age, those precious 7-9 hours per night are still what's required to be refreshed and ready for the next day. So what then, if the problem for seniors?

Many people believe that poor sleep is a normal part of aging, but it is not. In fact, many healthy older adults report few or no sleep problems. You may find as you age that you may tend to have more difficulty sleeping. It does not seem fair that you are much more likely to suffer sleepless nights as you grow older. But when you look at it from a purely physical point of view, the ageing and sleep deprivation relationship makes a lot of sense.

Approximately 50% of older adults complain of difficulty sleeping that can create a negative impact on their quality of life, mood, and alertness. Lack of sleep can cause depression, irritability, increased fall risk, and memory problems. The decreased ability to get sufficient sleep also has a lot to do with age related factors such as medical and psychiatric illness, life changes, environmental changes, increased medication use and sleep disorders. Also reduced activity levels or a sedentary lifestyle may also make the older person more likely to take naps during the day which, of course, will result in needing less sleep at night. In this article we will have a look at some of the considerations of sleep and ageing, how you can support healthy ageing and some tips to help the older adults get the sleep they really need.

Sleep Changes As You Age – Here Is Why

Sleep Architecture

As you age, it is important to understand how sleep changes throughout your life. Sleep occurs in cycles during the night time. There are normally about 4-5 cycles for an adult which consist of light sleep, deep sleep and rapid eye movement (REM) sleep or dreaming. Sleep experts call this sleep architecture. As you age, older people usually spend more time in light sleep, making it more fragmented, and less time in that deep restorative sleep where the immune system is strengthened all the vital healing and repairing is done.

Beginning at about 50 years of age, your body begins to grow weaker faster. Both inside and out, your body is simply not as healthy as when you were younger. Many

senior citizens have reported difficulty getting to sleep (sleep latency) or becoming sleepy earlier in the evening than ever before with earlier wake up times.

Since your body produces lower levels of growth hormone, your natural tendency to enjoy restful slow wave and deep sleep cycles is inhibited. You produce much less melatonin (sleep hormone) than when you were younger, meaning difficulty sleeping and waking up often during the night. Melatonin production tends to drop as we age, which may be one reason why there's a higher insomnia rates among the elderly.

Sleep Disorders

Sleep disorders, like Restless Leg Syndrome and Circadian rhythm disorder increase with age and make it hard to have a good night's sleep. Some of the most common sleep disorders are Insomnia, Circadian Rhythm Disorder, Breathing Related Disorders and Restless Legs Syndrome.

Insomnia

Insomnia is a particularly common problem with up to 15% of people in Ireland suffering from the condition which leads to ongoing difficulty falling asleep or staying asleep. Insomnia is more common among older people however and can lead to anxiety and depression.

Cognitive behavioral therapy for insomnia (CBT-I) is thought to be very effective and often the preferred method before sleeping pills especially for long term sleeping problems. CBT-I helps you to recognise and change negative beliefs that you have about sleep. It also helps you to develop good behavioral sleep habits. *Sleep disorders physiologist Breege Leddy runs the Insomnia Clinic at Bon Secours Hospital, Dublin and offers cognitive behavioural therapy (CBT) for insomnia. "Until CBT, the only treatment was sleeping medication," says Leddy. "But people are becoming more aware of the negative effects of sleeping medication and they don't necessarily want to go on it."*

There is a place for sleeping medication, but it should only be short term, Leddy believes. "They should only be prescribed at the lowest possible dose and for about two weeks at a time," she says. "Otherwise you have to keep upping the dose to get the same effect."

Insomnia is a medical condition and if suspected, or you find you are frequently too tired to function during the day, a visit to your doctor is advised.

Circadian Rhythm Disorder

Another factor that affect people as they get older is Circadian Rhythms, which co-ordinate the timing of all the bodily functions which includes sleep. As people age, their circadian rhythms become weaker. This is thought to happen because the suprachiasmatic nucleus (SCN) in the hypothalamus, deteriorates with age. The SCN detects light which signals to the brain and body and keeps them in sync with the 24 hour biological clock which is required for timely hormonal releases, body temperature and appetite to name a few. Elderly people, especially those in nursing homes or who are institutionalised, get very little sunlight and so can be more prone to this disorder. Getting sunshine first thing in the morning is particularly helpful where possible to reset the circadian rhythm or the use of a light therapy box may be a good option.

Snoring and Sleep Apnea

Sleep-related breathing disorders increase with age and represent a whole range of problems that range from simple snoring to sleep apnea. Snoring is more common with people who are overweight and it often gets worse with age. Loud snoring is often associated with a severe condition called Obstructive Sleep Apnea (OSA). It causes a cessation of breath, with a lot of sleep disturbances during the night, briefly waking the person to breathe. Lack of oxygen is deprived in the body and brain and often can lead to other cardiovascular diseases if left untreated. Treatment usually involves the use of a CPAP machine which allows a continuous flow of air pressure into the respiratory passages, helping you to breathe normally. If you or your partner snores loudly it may be a sign of Sleep Apnea and a visit to your doctor is advised.

Restless Legs Syndrome

Restless legs syndrome is a common condition in older adults and affects more than 20 percent of people 80 years and older. People with RLS experience uncomfortable feelings in their legs such as tingling, crawling, or pins and needles. It prevents the person from falling asleep easily and can also disrupt sleep during the night. It is thought that restless legs syndrome is connected with iron deficiency and it is also prevalent in the last 3 months of pregnancy.

Medical Problems

As we age there is an increase in medical problems. Women experience hormonal changes in menopause, disrupting sleep with hot flashes, and decreasing hormone levels. Both men and women can suffer from the debilitating diseases like alzheimer's. Chronic Sleep deprivation is a frequent accompanying symptom of those age-associated afflictions. Also, Diabetes, pain and chronic arthritis, asthma and immune disorders are all associated with sleep problems and disorders. Then there are other diseases like Parkinson's disease and multiple sclerosis that can cause sleeping problems. Pain from

debilitating diseases form over 100 different types of arthritis can contribute to difficulty getting good sleep. Studies show that as many as 80% of people with arthritis have difficulty sleeping.

What to do

First off, **identify where there may be problems causing your disturbed and light sleep.** What are the stresses of daily life that may be intruding on your sleep, or maybe you are trading sleep for more work? Do you often feel depressed? Do your personal relationships create anxiety and worry? Sometimes managing stress and anxiety are more complicated than just creating a bedtime routine or turning your phone off. Sleep problems and anxiety are highly treatable so never hesitate to ask for help or seek help from your doctor or mental health professional.

It is critically important to also consider that sleep deprivation may be due to unrecognised sleep disorders. If you feel you have slept well, but wake up feeling unrefreshed and sleepy during the day, then you may have underlying sleep disorders like sleep apnea. This lack of awareness compounds the consequences of ongoing sleep deprivation that may not be diagnosed for years. Once you talk to your doctor about your sleep problems, they may refer you to a sleep clinic to gather more information and determine treatment that may prevent long term health consequences that could otherwise occur if not diagnosed.

Learn to Sleep Well Early

It is best to identify, acknowledge and learn about the importance of sleep and how to get the best sleep before while you are a young adult and even for children. **As you age, your sleeplessness can create a vast amount of inflammation and the inability to eliminate toxins in the brain and body.** This ultimately is what leads to a greater risk of chronic diseases including Dementia, Alzheimer's and heart attacks and strokes.

Sleep for the Brain

When you get deep restorative sleep at night, your brain tissues reduce by up to 60% enabling a detoxification process to occur. This is what allows the Cerebral Spinal Fluid (CSF) to flush out your brain toxins, so quite literally, clearing your brain. As you age and with continuous sleepless nights or inadequate sleep, this may increase your risk to these neurodegenerative diseases in the brain like Alzheimer's, the number 7th world leading killer. In addition, **neurodegenerative diseases often interfere with the neurological processes that regulate sleep and allow for healthy sleep-wake cycles.**

Sleep for the Body

Inflammation, oxidative stress and gut microbiota alterations are a major factor

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from sleep deprivation and all contribute to the ageing process. Sleep fragmentation aggravates atherosclerosis, which is a condition in which plaque and cholesterol build up on artery walls due to inflammation and may eventually lead to heart disease. A study, led by researchers at Massachusetts General Hospital, was published in the journal [Nature](#), which demonstrates that adequate sleep protects against health issues by reducing inflammation in the body that can cause disease.

Age-Related Sleep Deprivation – 7 Tips To Get Better Sleep

While some sleep disorders may require a visit to the doctor, you can improve many symptoms on your own:

1. Set a sleep schedule and stick to it. Go to bed and wake up at the same time every day. Listen to your body. If you find yourself feeling drowsy on a consistent basis earlier than you have gone to sleep before, adjust your bedtime accordingly.
2. Get sunshine first thing in the morning to help reset your circadian clock and sync you into the natural daily rhythms.
3. Do not drink alcohol or eat for at least 3 hours before you go to sleep.
4. Check your medications. If sleeplessness is a symptom, ask your doctor if you can take that particular medicine earlier in the day.
5. Avoid using screens and TV at least 1 hour before bed. The blue light emitted from screens can block Melatonin production.
6. Create bedtime rituals. A relaxing bath with magnesium flakes or soothing music, stress and relaxation management techniques like mindfulness meditation, and any repeated, calming action can help you get to sleep quicker.
7. Tart cherries contain 50 times more melatonin than sweet cherries and are known to help with more deep restful sleep. Drink in the morning and evening.

Summary

- Older people experience changes to their sleep architecture which leaves this with less deep restorative sleep and more fragmented sleep.
- Beginning at about 50 years of age, your body begins to grow weaker faster.
- Since your body produces lower levels of growth hormone, your natural tendency to enjoy restful slow wave and deep sleep cycles is inhibited. You produce much

less melatonin (sleep hormone) than when you were younger, meaning difficulty sleeping and waking up often during the night.

- Sleep disorders and medical problems are associated with sleeping problems as a person gets older.
- Identify where there may be problems causing your disturbed and light sleep. It is critically important to also consider that sleep deprivation may be due to unrecognised sleep disorders.
- Many sleep problems will improve with changes that you can make on your own. While some sleep disorders may need a visit to the doctor or sleep specialist, there is a lot you can do naturally to help a healthy ageing process and improve your sleep with ageing.
- As you age, your sleeplessness can create a vast amount of inflammation and the inability to eliminate toxins in the brain and body.
- Sleep is vital to re-charge the brain. Neurodegenerative diseases often interfere with the neurological processes that regulate sleep and allow for healthy sleep-wake cycles.
- Sleep is vital to repair the body. Inflammation, oxidative stress and gut microbiota alterations are a major factor from sleep deprivation and all contribute to the ageing process.

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<https://www.arthritis.org/living-with-arthritis/comorbidities/sleep-insomnia/>

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Resources

Webmd:

<https://www.webmd.com/sleep-disorders/features/sleep-hygiene#1>

National institute of neurological disorders:

<https://www.ninds.nih.gov/disorders/patient-caregiver-education/understanding-sleep>

National institute on ageing:

<https://www.nia.nih.gov/health/good-nights-sleep>

Insomnia Clinic Dublin

www.bonsecours.ie/insomnia-clinic

Mater Private Dublin

<https://www.materprivate.ie/dublin/centre-services/all-services/sleep-disorders-clinic/>

SDSF - The Sleep Disorder Support Foundation

<https://www.sdsf.ie/>

The Aging Resource Center, Dartmouth-Hitchcock-10 tips for Healthy Ageing

[https://www.dartmouth-](https://www.dartmouth-hitchcock.org/aging_resource_center/ten_tips_healthy_aging.html)

[hitchcock.org/aging_resource_center/ten_tips_healthy_aging.html](https://www.dartmouth-hitchcock.org/aging_resource_center/ten_tips_healthy_aging.html)



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on Amazon <https://www.amazon.co.uk/How-Get-Good-Nights-Sleep/dp/1999801407>

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About Johann



Johann is a bestselling Author, Speaker, Online Trainer, Entrepreneur & Mum. She has featured many times in the media on radio, TV, newspapers and magazines. Johann's first book 'How to get a good night's sleep' has been a major success in Ireland and across the world. Johann gives seminars, workshops and online training in health & wellness and is a go to sleep expert. Johann helps empower, inspire and educate mums to take back their own power and control to live a better, healthier and happier life with better sleep and a healthier lifestyle. Johann believes that we can be our own health care advocate and anybody with the right attitude, knowledge and inspiration can sleep better and improve their quality of life.