Does Sleep Affect Cancer Risk?

Although there's not enough research that clearly links sleep with cancer risk, it's important for overall health and well-being. Getting a good night's sleep can benefit your health in many ways – physically, mentally, and emotionally. Long-term sleep problems can affect your risk of developing or worsening health problems.

- How sleep affects your health
- Does sleep affect cancer risk?
- Why do sleep problems happen?
- How to improve your sleep

How sleep affects your health

Getting enough sleep and getting quality sleep allows your body and brain time to rest and recover. It is important for your overall health. While you are sleeping, your body:

- Uses less energy
- Restores energy
- Repairs itself (if you're sick or have an injury)

During sleep, your body and brain activity decrease, which lowers blood pressure and controls body temperature. Meanwhile, other activities increase during sleep, such as production of hormones needed for growth and development.

However, many people have trouble sleeping. When sleep is disrupted or not long enough, your brain and body may not be able to function as they should. Any change in your usual sleeping habits can make it harder to do everyday activities.

Experts at the American Academy of Sleep Medicine say getting at least 7 hours of

sleep per night is good for adults. Children need more sleep, about 8-12 hours of sleep per night, depending on their age, activity level, and growth patterns.

Sleep cycle and sleep quality

The quality of your sleep matters too. Poor quality sleep, where sleep is interrupted or you don't go through all the phases of the sleep cycle, can also affect your health. In a normal sleep cycle, there are 2 main stages: **REM (rapid eye movement) sleep** and **non-REM sleep**. Quality sleep includes both non-REM sleep, which allows the body to relax and repair itself, and the deeper REM sleep, which supports brain activity and mental health.

Circadian rhythm and sleep patterns

Your sleep patterns are also influenced by your body's circadian rhythm, which acts as an internal clock. It follows a natural 24-hour cycle, helping to regulate when you feel awake or sleep.

When you don't get to sleep on time, or don't get enough sleep, your **circadian rhythm** can be disrupted. This can cause **circadian rhythm disorders,** such as temporary jet lag, shift work sleep disorder and delayed sleep-wake phase disorder. Some other problems related to changes in circadian rhythm include:.

- **Short sleep:** Not sleeping long enough
- **Long sleep:** Sleeping more than usual
- **Insomnia:** Difficulty falling or staying asleep
- **Hypersomnia**: Oversleeping or sleeping more than usual
- **Parasomnia:** Abnormal behavior during sleep, such as having night terrors or sleepwalking

Other sleep problems

Sleep problems might also be caused by health problems such as:

- **Sleep apnea:** Interrupted or paused breathing during sleep that causes snoring and frequent waking
- **Restless leg syndrome:** Uncomfortable sensations in the legs with an uncontrolled urge to move your legs around
- **Narcolepsy:** Extreme sleepiness and falling asleep during the day

Does sleep affect cancer risk?

The answer is not yet known. Researchers continue to study how sleep might affect cancer risk. Some studies suggest that the risk of cancer may increase when there are chronic sleep problems. This means the body's sleep cycle is disrupted, and the disruptions continue for long periods of time.

One theory is that chronic sleep problems may affect how well our immune system works. Quality sleep is known to strengthen the immune system, and a chronic lack of

can be done to find out if you have it and how serious it might be.

Sleep apnea can be mild (a few pauses of breath) to severe (a lot of pauses of breath). Some studies showed that people with moderate or severe sleep apnea might be at an increased risk of cancer. Scientists believe this is because paused breathing during sleep can cause the body to get stressed, and less oxygen may be available to the body's cells. This can lead to abnormal cell changes which may increase cancer risk.

Know Your Cancer Risk [1]

Take the ACS CancerRisk360™ assessment to learn more about what you can change to improve your health. By taking 5 minutes to answer a few questions, we will give you a personalized roadmap of actions with helpful resources you can use to lower your risk of cancer.

Why do sleep problems happen?

Sleep problems often occur because something causes changes in the circadian rhythm. This can be caused by:

- Lighting
- Temperature
- Anxiety and stress
- Certain medications
- Physical activity[2] or lack of getting enough activity
- Travel
- Physical health issues, such as pain, snoring, breathing problems, heartburn or reflux, hot flashes, and others
- Mental health problems
- Overnight work shifts
- Too little or too much sleep, such as napping during the day
- Alcohol[3], tobacco[4], and caffeine use

Symptoms of sleep problem include:

- Feeling more tired than usual during the day
- Feeling the need to rest and sleep more
- Having trouble getting to sleep or staying asleep
- Feeling tired even after sleeping
- Not being able to function as well

- Feeling jittery or restless when awake

How to improve your sleep

Managing sleep problems can be done through medications, but also by changing habits, such as being more physically activity. Sleep can also be improved by changing your sleep routine. It's important to have good habits before bedtime. This is often called **sleep hygiene**. Prior to sleep, making sure that lights, noise, temperature, and location are comfortable is key to having a good bedtime routine.

Adding relaxation techniques to your sleep routine can also help. The guided meditation in the video below is a great place to start.

The following video is brought to you by Healing Works Foundation.

A Guided Meditation for Healthful Sleep

Be guided to deeper and longer lasting sleep with visuals and relaxing music. It is best to listen to this meditation when you are in bed.

Watch on Vimeo [5]

In addition, you can help prevent or reduce sleep problems by:

- Being careful about what you eat and drink in the few hours before going to bed
- Staying active during the day and avoid napping if possible
- Tracking your sleep to monitor for problems with an app or wearable tracker
- Talking to your health care team about your sleep habits, including what you've tracked, to help understand the best ways to manage and improve your sleep

Learn more tips for managing sleep problems[6].

Hyperlinks

1. acscancerrisk360.cancer.org/
2. www.cancer.org/cancer/risk-prevention/diet-physical-activity/diet-and-physical-

activity.html
3. www.cancer.org/cancer/risk-prevention/diet-physical-activity/alcohol-use-and-cancer.html

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