

Sleep, Your Body Clock, and Cancer

A PATIENT-FRIENDLY GUIDE

1. Why Sleep and the “Body Clock” Matter

Your body runs on a 24-hour schedule called the circadian rhythm (*body clock*).

It helps control:

- Sleep and wake times
- Hormones (*like melatonin and cortisol*)
- Immune system activity
- Cell growth and repair

Getting good sleep and keeping your body clock on track help your body **find and repair damaged cells**. This is just one reason why taking care of your sleep and circadian health really matters, especially for your overall well-being regarding **cancer risk, treatment, and recovery**.

2. How Poor Sleep May Affect Cancer Risk

Research suggests long-term poor sleep and circadian disruption may increase risk for some cancers (*like breast, prostate, and colorectal*). Possible reasons:

- **Weaker immune response:** Your immune system finds and destroys abnormal cells. Poor sleep reduces its effectiveness.
- **More inflammation:** Chronic sleep loss can raise inflammation in the body, which may increase the risk of cancer growth.
- **Hormone changes:** Night-time light and short sleep can lower melatonin (a sleep and “darkness” hormone that also may protect cells) and disrupt other hormones.
- **Metabolism and weight:** Poor sleep is linked to weight gain, insulin resistance, and a higher risk of diabetes, factors also linked to some cancers.

Remember, struggling with sleep doesn't mean you'll get cancer. Sleep is one important piece of your health, so try to be gentle with yourself as you work on these habits.

3. Night Shift Work, Light at Night, and Cancer

People who regularly work nights or rotating shifts have:

- More disrupted circadian rhythms
- Exposure to light at times the body expects darkness
- Irregular sleep and meal times

Some health organizations consider long-term night shift work a **“probable” cancer risk factor**, especially for breast cancer.

If you are or were a long-term night-shift worker, focusing on **healthy sleep and circadian habits now** is still helpful for overall health.

4. Sleep & Circadian Health During Cancer Treatment

Cancer and its treatments can strongly affect sleep:

- Pain, hot flashes, nausea, or night sweats
- Anxiety, depression, or worry
- Steroids, chemotherapy, hormones, and other medicines impact the body clock
- Hospital stays, nighttime checks, or noise
- Daytime napping and irregular routines

Poor sleep during treatment can:

- Increase fatigue and **“brain fog”**
- Worsen mood, anxiety, and quality of life
- Reduce motivation for activity and rehab
- Make it harder to cope with treatment schedules

Some early research suggests that keeping **regular sleep and circadian rhythms** may be linked with:

- Better **tolerance of treatment**
- Improved **energy and mood**
- Possibly better **long-term outcomes** in some cancers (*still being studied*)

5. If You Have or Had Cancer: Why Sleep Still Matters

Good sleep and circadian health can support you by:

- Improving **daytime energy** and reducing fatigue
- Helping with **mood, anxiety, and coping**
- Supporting immune function and healing
- Making it easier to stay active and eat well
- Improving overall **quality of life**

Many cancer survivors report long-term insomnia or fatigue. These can often be **treated**. Speak to your doctor about sleep and circadian care.

6. Practical Steps for Better Sleep & Circadian Health

You may not control everything (*like treatment schedules*), but small habits can still help.

▶ Light

- Get **bright light in the morning**: open the curtains and go outside for 10–30 minutes.
- In the evening (*1–2 hours before bed*), dim the lights and reduce screen brightness, or use night mode.
- Sleep in a **dark room**, if possible (*with an eye mask or blackout curtains*).

▶ Routine

- Keep a consistent **wake time** each day, even if bedtime varies.
- Aim for a wind-down routine 20–30 minutes before bed: relaxing, low-stimulation activities.
- Try to keep sleep and wake times within about **one hour** of your usual schedule.

▶ Activity and Meals

- Try some **daytime movement**, as tolerated (*short walks, gentle stretching*).
- Avoid large, heavy meals right before bed.
- Try not to eat or snack heavily in the middle of the night unless medically necessary.

6. Practical Steps for Better Sleep & Circadian Health *(Continued)*

▶ Sleep Environment

Keep the bedroom cool, dark, and quiet.

Use the bed mainly for sleep and intimacy, not work or long screen time. If in the hospital, ask for:

- Lights dimmed when possible
- Earplugs or an eye mask
- Bundling nighttime checks, when safe

▶ Naps

- Naps can be very helpful during treatment.
- If possible, keep them **short (20–40 minutes) and earlier in the day**, so they don't fully replace nighttime sleep.

7. When to Talk With Your Care Team

Let your cancer team know if:

- You **can't fall asleep or stay asleep** at least 3 nights a week
- You have **intense daytime fatigue** that limits normal activities
- You're snoring loudly, gasping, or stopping breathing during sleep *(or someone has noticed)*
- You have **restless, uncomfortable legs** at night or frequent jerking
- You feel **very sleepy in the daytime**, even with enough time in bed
- You feel **low or anxious** most days

They may:

Review medications that affect sleep Check for sleep disorders like sleep apnea

Adjust timing of treatments when possible refer you to:

- A sleep specialist
- A psychologist trained in **CBT-I (Cognitive Behavioral Therapy for Insomnia)**
- A supportive care / palliative care team for symptom control

8. What You Can Ask Your Clinician

You might bring this list to your visit:

- “How might my treatment affect my sleep?”
- “Is it okay for me to nap during the day? For how long?”
- “Given my cancer and medicines, what are safe options for sleep help?”
- “Could I have sleep apnea or another sleep disorder?”
- “Can I be referred to a clinician who works with sleep problems in cancer patients?”

Key Takeaways

- ✓ Sleep and circadian health are part of cancer care, not a luxury.
- ✓ Long-term poor sleep and circadian disruption can increase cancer risk and make cancer harder to cope with.
- ✓ Improving sleep can boost your energy, mood, immune health, and overall quality of life during and after cancer treatment
- ✓ If sleep is a struggle, you don’t have to live with it: talk with your care team about ways to help you sleep better.