THE BENEFITS of SLEEPING

Quality sleep is essential to healing, proper immune function and mental health. Lack of sleep has been associated with depression, anxiety and decreased cognitive function. In cancer patients, poor sleep can take a significant toll on quality of life.

All cancers

Does having sleep apnea mean a **greater risk of developing** any kind of cancer?



IS THERE A LINK BETWEEN SLEEP AND CANCER?

Researchers are studying whether lack of sleep may be a factor in the development of cancer. Researchers are working off of an understanding of how sleep problems alter the balance of

Prostate cancer

Are men with insomnia **more likely to develop** prostate cancer?



How to sleep well

- Sleep only when sleepy
- If you can't fall asleep within 20 minutes, get up and do something boring until you feel sleepy
- Don't take naps
- Get up and go to bed the same time every day
- Don't exercise at least 4 hours before bedtime
- Develop sleep rituals:
- Listen to relaxing music
 Read something soothing for
 15 minutes

- Have a cup of caffeine free tea

- Do relaxation exercises

• Avoid caffeine, nicotine and

• Have a light snack before bed:

yogurt, bananas, whole-wheat

cereal with skim milk, half a peanut butter sandwich and

alcohol at least 4-6 hours

- Good options include

 Make sure your bed and bedroom are quiet and

• Only use your bed for

sleeping and sex

before bed

cherry juice.

comfortable

Does sleeping less than 6 hours a night **increase your risk** of developing polyps?

two hormones that influence cancer cells: cortisol and melatonin. So far, researchers have explored these questions:



Breast cancer

Is insufficient sleep a factor in the **recurrence and more aggressive forms** of breast cancer among post-menopausal women?

of cancer patients experience • sleep disturbances.

Up to **50%**

Up to **80%**

Up to

80%

of patients experience

> of head and neck cancer patients suffer from SECCP apnea.

^{Up to} 10 years

is the amount of time some breast cancer patients have experienced sleep disorders after completing treatment.

Cancer patients are

CANCER PATIENTS OFTEN SUFFER FROM LACK OF SLEEP

2x more likely as people without cancer to experience insomnia.



Almost **30%**

of patients reporting **cancer-related fatigue** were diagnosed with sleep apnea.

Factors that contribute to sleep problems in cancer patients

- **Psychological stress** of a cancer diagnosis
- Pain and other symptoms of the cancer
- Side effects of treatment, such as nausea, incontinence and hot flashes
- Schedule changes associated with treatment
- **Medications to treat cancer** may produce insomnia as a side effect
- Inflammation resulting from treatment and the cancer itself

THE BASICS OF SLEEP

Sleep is essential to forming and consolidating memories. It plays a central role in forming new connections between neurons.

Americans spent

\$32.4 billion

in 2012 on sleep-related aids, from room noise machines to specialty pillows.

8.6 million

Americans reported taking medication to sleep better in July 2013.

50-70 million

adults in the U.S. have a sleep or wakefulness disorder.

7-8 hours

is the recommended amount of time adults should sleep every night.

Nearly 30%

of adults reported an average of 6 hours or less of sleep per day.

Methods to help improve sleep



Light and stimulant therapy: Using special lamps, specifically dosed and timed light exposure helps regulate circadian rhythms and establish a regular sleep-wake cycle.



Cognitive behavioral therapy:

- **Relaxation techniques,** such as deep breathing, guided imagery and progressive muscle relaxation.
- **Stimulus control,** which involves limiting time awake in bed and viewing the bed only as a place for sleep.
- **Sleep hygiene,** such as avoiding heavy meals and television before bed and going to bed at the same time every night.

70-80% of all patients have benefited from cognitive behavioral therapy (not just cancer patients).

50% reduction in the need for cancer patients to take sleep medications. Some methods include:



Mindfulness-based stress reduction:

This therapy focuses on reducing stress and improving psychological well-being. Mindfulness is defined as nonjudgmental awareness of the present moment and is used to better deal with stressful situations.

SOURCES: WebMD, National Cancer Institute, Stanford University, The Wall Street Journal, The University of Texas MD Anderson Cancer Center, Mercola.com, Dr.Weil.com, Journal of Clinical Oncology, Centers for Disease Control and Prevention, Mayo Clinic





Sleep restriction procedures: Setting a strict bedtime and wake-up time reduces the available sleep time into a fixed window. The sleep time is adjusted to account for waking up in the middle of the night, with the ultimate goal of sleeping through the night. This regimen may create daytime sleepiness at first, which helps reset the body's internal clock.

Naturopathic therapies: Consult with a naturopathic oncology provider before beginning supplements.

- **Magnesium:** Oral magnesium supplementation may improve symptoms of fatigue in persons with low magnesium levels.
- **Ginseng:** A ginseng supplement may help enhance mental activity as well as physical endurance.
- **Coenzyme Q10:** This vital nutrient is involved in cellular energy production throughout the body.
- **Cordyceps:** A traditional Chinese medicinal mushroom that may help fight fatigue and boost energy levels.

