

Healthy Living by Dr. Hansen

Sleep Tips To Achieve Adequate Natural Sleep

Before the invention of the light bulb, the average adult slept 9 hours per night. The single greatest cause of poor sleep is EXCESSIVE EXPOSURE TO LIGHT. This inhibits the production of melatonin, the "sleep hormone". Any small amount of light on your skin or eyes inhibits sleep. Just a single candle burning in a room (20 lux of light) inhibits sleep by decreasing melatonin.

Normal sleep involves a few cycles each night. In most adults these cycles last 60 to 90 minutes. Each cycle involves several stages gradually going to the deepest stage followed by a light stage and then a brief period of awareness before entering the next cycle. IT IS NORMAL TO AWAKEN SEVERAL TIMES DURING THE NIGHT BETWEEN SUCCESSIVE CYCLES OF SLEEP. Often a sound or full bladder will completely awaken you. When that happens do not worry, it is normal, you can return to the next cycle of sleep. Relax. If a sudden thought or anxiety concerns you, write it down to address in the morning, then go back to sleep. A simple technique to help you return to the next sleep cycle is to observe your breathing, taking slow deep breaths.

To achieve adequate, restorative, natural sleep do the following:

- **Keep to a regular bedtime, AFTER DARKNESS.**
- **Sleep in absolute darkness.** Remove or eliminate electrical devices that emit light from your bedroom.
- Keep it quiet, wear ear plugs if necessary. Try soothing background noise ("white noise") such as recorded ocean waves, gentle rain, or trickling streams if that seems to help, quiet is usually better but white noise can cancel out other sounds that inhibit sleep.
- Do not watch TV or expose your skin or eyes to bright light prior to bedtime.
- REMOVE THE TV FROM THE BEDROOM.
- USE DIM LIGHTS IN the house in the evening to decrease light exposure
- Do not exercise heavily for at least 4 hours before bedtime
- Avoid artificial sweeteners
- Avoid caffeine (chocolate, tea, coffee, soda, other caffeinated beverages) within six hours of bedtime
- Do not eat after 7 PM
- Avoid food additives (they are in most packaged foods)
- Do not take naps after 3 PM.
- Try meditation before bedtime. (Body scan technique or just observe slow deep breaths).
- Avoid alcohol within three hours of bedtime, if you drink alcohol drink 8 ounces of water for each glass of wine, bottle of beer or ounce of liquor consumed to avoid dehydration.
- If overweight, lose weight.
- Exercise daily, walk 30 minutes per day, but no vigorous exercise close to bedtime.
- If you watch TV before bed (not a good idea) wear glasses that block blue light, to minimize the suppression of melatonin (the "sleep hormone").
- Use an alarm only as a back-up, if you need an alarm to wake up you are not getting enough sleep. If you have an early appointment in the morning that requires awakening earlier than your normal cycle, go to bed earlier. Prepare your clothes and breakfast in advance for a quick easy departure.

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Sleep medications: these are not good for daily use, most sleeping pills do not provide for natural deep sleep. Many can cause "rebound" with daily use and can lead to addiction.

The worst pills are benzodiazepines (Dalmane, Valium, Halcion, Librium) and other drugs that also affect the "GABA receptor" such as Ambien (zolpidem), Lunesta (eszopiclone) and Sonata (zalepon). These do not produce deep restorative sleep because they interrupt sleep architecture (the sleep is not natural, the exception may be Sonata). They can lead to addiction within a few weeks, can cause dizziness, drowsiness, memory problems, confusion, hallucinations, and other side effects, and should not be used with alcohol. Sleep walking, sleep eating, sleep driving, and other abnormal-dangerous behaviors have been reported with many sleep medications. Barbiturates are also very addictive and dangerous.

"An analysis of data of clinical trials submitted to the FDA concerning the drugs zolpidem, zalepon, and eszopiclone (Ambien, Sonata, and Lunesta) found that these sedative hypnotic drugs more than doubled the risks of developing depression compared to those taking placebo pill. All studies have been funded by the drug companies without independent research."

Some insomniacs are helped by small doses of magnesium at bedtime on an empty stomach.

Benadryl (diphenhydramine is the generic) helps you to fall asleep but will not produce long lasting sleep.. It has fewer complications than the other sleeping medications. Use only occasionally, it is in Tylenol PM.

Melatonin is probably the safest over the counter preparation but should not be used every night. Effective doses are 0.5 mg, 2 hours before bedtime. Increase by increments of 0.5 mg to effect on a nightly basis until you feel rested the next morning. But again, you must take the measures encouraged above first and only rely on a medication if necessary once in a while, not for prolonged periods of use, especially if younger than age 60. CAUTION; Use only pills manufactured in the lab, not animal extracts which can expose you to dangerous viruses from infected animals. Check the label or ask the pharmacist.

*"An extensive review of the medical literature regarding the management of insomnia in the elderly found that **there is considerable evidence of the effectiveness and durability of non-drug treatments for insomnia in adults of all ages and that these interventions are underutilized.** Compared with the benzodiazepines, the nonbenzodiazepines (including Sonata, Lunesta, Ambien) sedative-hypnotics appeared to offer few, if any, significant clinical advantages in efficacy or tolerability in elderly persons. It was found that newer agents with novel mechanisms of action and improved safety profiles, such as the melatonin agonists, hold promise for the management of chronic insomnia in elderly people. Long-term use of sedative-hypnotics for insomnia lacks an evidence base and has traditionally been discouraged for reasons that include concerns about such potential adverse drug effects as cognitive impairment (antegrade amnesia), daytime sedation, motor incoordination, and increased risk of motor vehicle accidents and falls. In addition, the effectiveness and safety of long-term use of these agents remain to be determined."*

Why is sleep so important? Sleep deprivation for even one night causes elevation in interleukin 6 levels the following day. Interleukin 6 suppresses immune function and excessive levels cause bone and tissue damage (especially cardiovascular, that means heart attack and stroke). Sleep deprivation increases stress hormones (cortisol), decreases

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prolactin and growth hormone, and decreases the nightly production of ATP. ATP is the basic energy source for our cells. Sleep deprivation slows healing of wounds after surgery or injury.

The consequences of sleep deprivation include suppression of the immune system, the growth of fat rather than muscle (weight gain), possible harm to brain cells, acceleration of the aging process, memory impairment, delayed and impaired healing, increased risk of traffic accidents and injury, and an increased risk of depression. Sleep deprivation is a known risk factor for type II diabetes, obesity, and hypertension, which in turn increase the risk of cardiovascular disease (heart attack and stroke). Sleep deprivation contributes to inflammation in the body, which contributes to multiple diseases and shortens life. Sleep deprivation, through many mechanisms, likely increases the risk of many forms of cancer.