

Healthy Sleep



Sleep and Chronic Disease

- Diabetes

- Research has found that insufficient sleep is linked to an increased risk for the development of Type 2 diabetes.
- Specifically, sleep duration and quality have emerged as predictors of levels of *Hemoglobin A1c*, an important marker of blood sugar control.
- Recent research suggests that optimizing sleep may be important means of improving blood sugar control in diabetics.¹

1. Knutson KL, Ryden AM, Mander VA, Van Cauter E. Role of sleep duration and quality in the risk and severity of type 2 diabetes mellitus. *Arch Intern Med* 2006;166:1768–1764.

Sleep and Chronic Disease

- Cardiovascular Disease

- Persons with sleep apnea have been found to be at increased risk for a number of cardiovascular diseases.
- Notably, hypertension, stroke, coronary heart disease and irregular heartbeats (*cardiac arrhythmias*) have been found to be more common among those with disordered sleep.²

2. Kasasbeh E, Chi DS, Krishnaswamy G. Inflammatory aspects of sleep apnea and their cardiovascular consequences. *South Med J* 2006;99:58-67.

Sleep and Chronic Disease

- Obesity

- Epidemiologic studies revealed an association between short sleep duration and excess body weight.
- This association has been reported in all age groups—but has been particularly pronounced in children.

3. Taheri S. The link between short sleep duration and obesity: We should recommend more sleep to prevent obesity. *Arch Dis Child* 2006;91:881–884.

Sleep and Chronic Disease

- Depression

- While sleep disturbance has long been held to be an important symptom of depression, recent research has indicated that depressive symptoms may decrease once sleep apnea has been effectively treated and sufficient sleep restored.^{4,5}

4. Zimmerman M, McGlinchey JB, Young D, Chelminski I. Diagnosing major depressive disorder I: A psychometric evaluation of the DSM-IV symptom criteria. *J Nerv Ment Dis* 2006;194:158-163.
5. Schwartz DJ, Kohler WC, Karatinos G. Symptoms of depression in individuals with obstructive sleep apnea may be amenable to treatment with continuous positive airway pressure. *Chest* 2005;128:1304-1306.

Sleep Disorders

- Insomnia

- Definition: An inability to initiate or maintain sleep.
- Difficulty initiating or maintaining sleep may often manifest itself as *excessive daytime sleepiness*, which characteristically results in functional impairment throughout the day.

Sleep Disorders

- Narcolepsy

- Excessive daytime sleepiness (including episodes of *irresistible sleepiness*) combined with sudden muscle weakness are the hallmark signs of narcolepsy.
- The sudden muscle weakness seen in narcolepsy may be elicited by strong emotion or surprise.
- Episodes of narcolepsy have been described as “sleep attacks” and may occur in unusual circumstances, such as walking and other forms of physical activity.

Sleep Disorders

- Restless Legs Syndrome
- RLS is characterized by an unpleasant “creeping” sensation, often feeling like it is originating in the lower legs, but often associated with aches and pains throughout the legs.
- This often causes difficulty initiating sleep and is relieved by movement of the leg, such as walking or kicking.

Sleep Disorders

- Sleep Apnea

- Snoring may be more than just an annoying habit – it may be a sign of sleep apnea.
- Persons with sleep apnea characteristically make periodic gasping or “snorting” noises, during which their sleep is momentarily interrupted. Those with sleep apnea may also experience excessive daytime sleepiness, as their sleep is commonly interrupted and may not feel restorative.
- Gentle air pressure administered during sleep (typically in the form of a nasal *continuous positive airway pressure* device) may also be effective in the treatment of sleep apnea.

How much sleep do you need?

Life Stage	Age	Hours
Newborn	0-2 mo	12-18
Infant	3-11 mo	14-15
Toddler	1-3 yrs.	12-14
Preschool	3-5 yrs.	11-13
School- Age	5-10 yrs.	10-11
Teens	10-17 yrs.	8.5-9.25
Adults	18 and up	7-9

Sleep Hygiene Tips

1. Go to bed at the same time each night and rise at the same time each morning.
2. Make sure your bedroom is a quiet, dark, and relaxing environment, which is neither too hot nor too cold.

Sleep Hygiene Tips

3. Make sure your bed is comfortable and use it only for sleeping and not for other activities, such as reading, watching TV, or listening to music. Remove all TVs, computers, and other “gadgets” from the bedroom.

Sleep Hygiene Tips

4. Physical activity may help promote sleep, but not within a few hours of bedtime.
5. Avoid large meals before bedtime.

What if I can't sleep?

- There may be a number of things contributing to inability to sleep.
- Try keeping a sleep diary and note the following things
 - Time you go to bed.
 - Time you go to sleep.
 - Time you wake up.
 - Time you get out of bed.
 - Any naps.
 - Exercise.
 - Alcohol Consumption
 - Consumption of caffeinated beverages.

What if I can't sleep?

- Once you have documented your sleep habits, you may notice a pattern in your insomnia.
- Target those habits that interfere with your sleep.
 - Example: You may notice that days when you have more than one cup of coffee, you have difficulty falling asleep.
- Remember, high quality sleep is key to a healthy lifestyle!