

Practical Strategies For Improving Your Sleep



GENERAL INFORMATION ABOUT SLEEP

Your body clock

Your sleep/wake cycle is regulated by an internal body clock. Your body clock is primarily controlled by a hormone called Melatonin. Increases in Melatonin will make you feel sleepier and decreases in Melatonin will make you feel more awake. Your body clock is designed to work within a regular 24-hour sleep/wake cycle called a “circadian rhythm.” The primary thing that maintains a regular sleep cycle is your schedule and routine. Other things, such as light, also influence your body clock. Sunlight in the morning will help decrease Melatonin (making you feel more awake) and darkness at bedtime will help increase Melatonin (making you feel sleepier).

Two modes of sleep: REM and Non-REM

Rapid eye movement (REM) sleep:

- eye movements
- loss of muscle tone
- faster brain waves
- increase in heart rate and respiration rate
- most dreams happen in this stage
- During this stage, it is believed that information from the previous day is categorized and memories are stored in your brain
- Some research also suggests that creative problem solving is enhanced during REM sleep

Non-REM sleep

- decrease heart rate
- decreased body temperature
- slower brain waves
- moves through 3 stages from light to heavy sleep

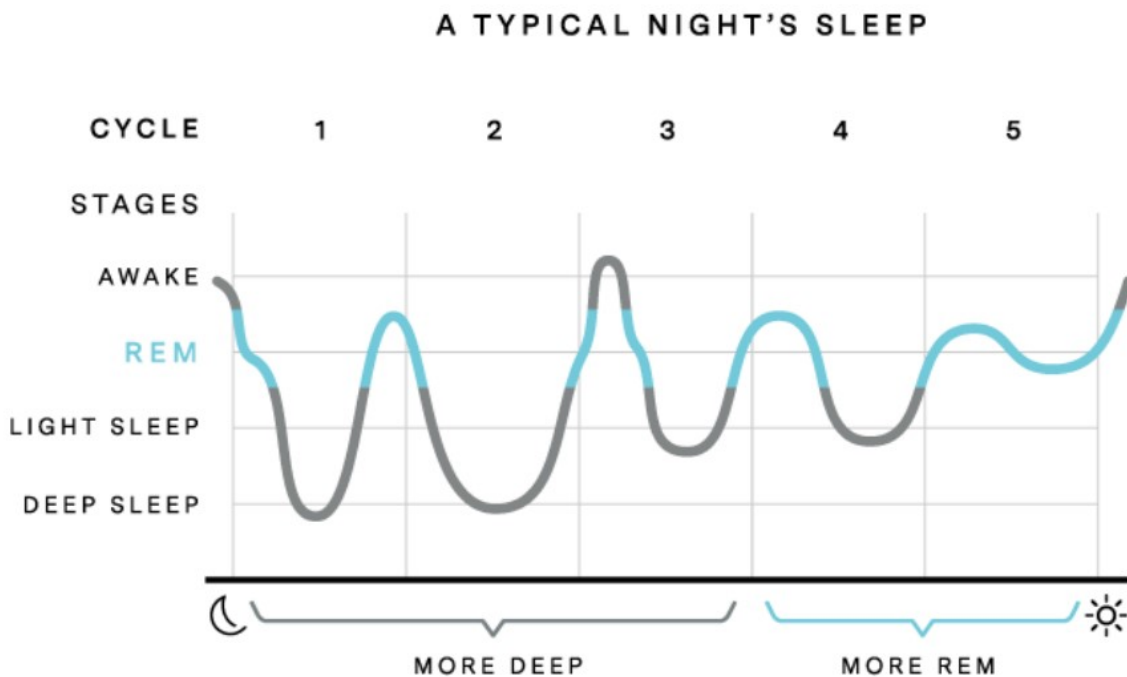
Stages of Non-REM sleep

- Stage 1: Very light sleep from which you can be awakened easily; sometimes you may feel awake during this stage

- Stage 2: Light sleep, during which your muscles relax; breathing slows; heart rate slows; and body temperature drops
- Stage 3: Deep sleep (also called Slow Wave Sleep) during which your brain waves slow down; blood pressure drops; growth hormones are released; your body grows new tissue and repairs itself; your brain flushes out waste. **This is the most important stage of sleep!**

Normal sleep cycle

During a normal sleep cycle, a person will transition between REM and Non-REM stages of sleep several times through the night. More slow wave sleep typically occurs in the 1st half of night and more REM sleep occurs in the 2nd half of the night.



What is the purpose of sleep?

All animals sleep, so we know it is important, but we are not completely sure of its purpose. There is evidence that memories of the day's events are stored during sleep, that your body repairs itself during sleep, and that waste is flushed out of your brain during sleep.

The relationship between pain and sleep

People with chronic pain often report that pain makes it difficult to sleep well. Studies also show that poor sleep can also result in increased pain. An article by Finan et. al. (2013) reviewed a large number of studies that looked at the relationship between pain and sleep. They determined that poor sleep is a stronger predictor of future pain than pain is of future sleep disturbance.

Sleep apnea

Sleep apnea is a common sleep disorder in which you stop breathing over and over during the night. Sleep apnea can only be diagnosed with a sleep study, where you stay overnight in a sleep lab. If you think that you have sleep apnea, then you need to get a sleep study. Talk to your family doctor about it. If you are diagnosed with sleep apnea, then it can be treated very effectively. One treatment for sleep apnea is a CPAP machine (which stands for “Continuous Positive Airway Pressure”). It is a mask that you wear at night which keeps you breathing at a regular pace. A CPAP machine can be inconvenient, but if you have sleep apnea, and you don’t use your CPAP, then you won’t get quality sleep, even if you use all of the strategies in this handout.

STRATEGIES FOR IMPROVING SLEEP

Sleep scheduling

Wake up at the same time every day

The primary way to stay on a healthy 24-hour sleep/wake cycle is to maintain a regular bedtime and rising time. The most importance part of the sleep/wake cycle is your wake-up time. If you wake-up at random times on different days, your body clock will never get set correctly, and the normal cycle of Melatonin production in your body will be disrupted. This disruption will throw off the regular rhythm of your internal body clock and cause insomnia at night and sleepiness during the day. **So, choose a regular bedtime and wake-up time and try to stick with that schedule every day.**

Don't sleep late on Saturdays and Sundays

Waking at the same time every morning will help keep your internal body clock in a healthy 24-hour rhythm. Sleeping late on Saturday and Sunday (or whatever days that you have off work) can disrupt this rhythm on the nights that you sleep in. It's best not to sleep in on your days off for more than an extra 30 minute or so.

Avoid long naps during the day

Short naps generally don't affect nighttime sleep quality for most people. But if you experience insomnia or poor sleep quality, napping might worsen these problems. If you take long naps, especially in the late afternoon or evening, then you will be less likely to sleep well at night. If you need to take a nap, try to do it before 3PM, and don't nap for more than 30 or 45 minutes. You can set an alarm to prevent yourself from napping longer.

Your bed is for sleeping

Don't spend a lot of time in bed when you are awake

To sleep well, you want your brain to be ready to go to sleep when you get in bed. If you spend a significant amount of time doing activities in bed, then your brain will begin to associate the bed with being awake rather than going to sleep. By increasing the association of being in bed with sleeping, you will be able to fall asleep easier and stay asleep longer.

Limit how much TV and other activities that you do in bed

If you watch a lot of TV or play on your cell phone or tablet when you get in bed, then your brain will think "now it's time to watch TV and/or play on the phone/tablet" instead of "now it's time to go to sleep." Also, remember that light will decrease melatonin production, so staring at your phone and tablet right before bedtime may interfere with falling asleep. The bed should be used primarily for sleep and sexual activity. Do your other activities in a chair or in another room.

It's okay to get out of bed if you are not sleeping

If you feel relaxed and calm, even if you aren't sleeping well, it's okay to stay in bed. But if you are tossing, turning, and getting frustrated, then get out of bed and go into another room. Focus on a quiet activity. Return to bed only when you feel sleepy. Repeat as many times as necessary. Even if you didn't sleep at all, go on with your day at your established rising time!

Focus on a quiet activity when you can't sleep

If you spend a lot of time awake and frustrated in bed, then your brain will start to associate the bed with frustration. If you can't sleep and start to feel frustrated, it's best to get out of bed, leave the bedroom, and focus on a quiet activity. The most effective quiet activities are those that can be completed in a relatively short amount of time. Activities like watching TV have no end, so they may not work as well. It's good to already have some quiet activities in mind when you go to bed, just in case you have a sleepless night. Avoid stimulating activities in the middle of the night!

- Some examples of quiet activities:
 - Crossword puzzle (etc.)
 - Listen to a guided relaxation exercise
 - Practice paced breathing
 - Do some easy, relaxed stretching
 - Read a magazine article
 - Light cleaning and/or straightening around the house

- Some examples of activities to avoid:
 - Action movies or intense TV programs
 - Stimulating computer games
 - Exciting novels
 - Energizing exercises
 - Stressful activities, like going through your bills

Be active during the day

Regular daily activities

If you are inactive during the day, you will probably have more sleep problems at night. For instance, people who have a regular work schedule tend to sleep much better than people who are not working. If you are not working, try to find some activities or hobbies that you can engage in on a daily basis. Try to do something productive each day. Set some daily goals and work on accomplishing them.

Regular exercise

If you exercise on a regular basis, you will very likely sleep better at night. Vigorous exercise that increases your heart rate and makes you sweat tends to work best for improving sleep at night. However, don't do vigorous exercise right before bedtime!

Some things to avoid

You may be doing some things that you are unaware of that can be interfering with your sleep. Eliminating these behaviors can help improve your sleep.

Don't have caffeine after mid-afternoon. It's best if you have no caffeine after lunch.

Caffeine is a stimulant. It makes you feel more awake. It can raise your heart rate and blood pressure and speed up your brain waves. Caffeine can stay in your body for 6 hours or more. Drinking ice tea with dinner and/or coffee after dinner will make it harder for you to get to sleep.

Don't drink too much alcohol at night

Alcohol can make you sleepy, but too much can result in a light and restless sleep. You will be less likely to get the amount deep slow wave sleep that you need. Alcohol can also increase how long caffeine will stay in your system. So caffeine and alcohol at night are a bad combination for getting good sleep.

Don't eat big meal before bedtime

Depending on what you eat at what time of day, the foods you consume can affect your sleep patterns. Eating a full meal right before bedtime may disrupt sleep and can cause other symptoms such as heartburn and weight gain. However, healthy snacks containing complex carbohydrates and/or protein before sleep (like a slice of apple, peanut butter cracker, piece of cheese, slice of sandwich meat, etc.) can help promote sleep.

Learn and use strategies for managing stress

Stress is major cause of sleep problems. Use all the strategies that you have to keep your stress level low during the day. Especially avoid stressful activities in the evening. For instance, if paying your bills is stressful, then don't do it before bedtime. Do it at another time of day.

Don't spend a lot of time on your phone or tablet before bedtime

Shut off phone and tablet screens before you get in bed. Remember that light decreases Melatonin production in your body (which makes you feel more awake), so looking at your phone or tablet right before bedtime can interfere with getting to sleep.

Don't try to force yourself to fall sleep

You can't force yourself to fall sleep. You can do things to encourage sleep, but it has to happen on its own. Trying to force sleep will usually do just the opposite, and keep you awake. Get out of bed and put your mind on something else if you get frustrated.

Control negative thoughts about sleep

Become aware of how you are thinking about your sleep problems. People with insomnia often have a lot of negative thoughts when they can't sleep, which can make sleep problems even worse. Try to self-coach yourself through bad nights of insomnia ("I'm probably getting more sleep than I think; I've had difficulty sleeping before and I got through it okay; This is really annoying, but it's temporary"). Focus your mind on something else, like your breathing or a quiet activity, when you can't sleep.

Preparing for sleep

Sleep medications

Take any sleep medications that were prescribed by your doctor at the same time every night, in coordination with your scheduled bedtime. When you first get a sleep medication, you may have to make adjustments each night until you determine the optimal time to take it.

Establish a bed-time routine

Establish a regular pre-bedtime “wind-down” routine to prepare yourself for sleep. Mentally prepare yourself for sleep by doing some quiet, relaxing activities before bedtime. This may be a good time to do some light stretches, a few minutes of reading, or some quiet meditation. Avoid stimulating or stressful activities before bedtime.

Don't get in bed if you don't feel sleepy

You can mentally prepare to go to sleep at your bedtime, but wait until you feel sleepy to get in bed.

Create an optimal sleep environment

When it's time for bed, it's important to create an optimal sleep environment. A dark and cool bedroom can help increase Melatonin so that you can fall asleep more easily. Then, when you get out of bed at your wake-up time, turn on the lights or open the windows to let sunlight in the house, which will help decrease Melatonin and help you wake up.

Relaxation

When you get in bed for sleep, focus on calming your mind, relaxing your muscles, and controlling your breathing. If you have already been practicing relaxation techniques, then you will have learned some skills that should help you. Be patient as you wait for sleep. Getting to sleep is not something that you can force to happen. You must allow it to happen.

The half-hour rule

Some people find it relaxing to read or watch TV in bed right before going to sleep. In this way, these calm activities can become associated with sleep. It's okay to do these types of activities on a limited basis. Try not to spend more than one half-hour with an activity in bed before attempting to go to sleep. If you tend to fall sleep with the TV on, then set a timer so it will eventually turn off.

Improving sleep efficiency by decreasing your time in bed

If all other sleep strategies have been ineffective, you can try the following sleep restriction strategy to increase sleep efficiency.

Sleep efficiency is a ratio between the number of hours in bed that you allow for sleep and the number of hours that you are actually sleeping. So if you are in bed for 8 hours, but only asleep for 4 hours, then your sleep efficiency is 50%.

Calculating sleep efficiency (sleep ÷ time in bed = % sleep efficiency)

Estimate the average number of hours that you sleeping each night:

Estimate the average number of hours that you are in bed each night:

Divide the number of hours asleep by the number of hours in bed:

_____ %

Prior wakefulness is the time between getting out of bed in the morning and going to bed at night. More hours of prior wakefulness will tend to increase your drive for sleep at night. So getting up earlier and/or going to bed later can increase sleep success at night.

Increasing sleep efficiency

You can use a simple sleep scheduling formula to increase sleep efficiency (the amount of time that you are sleeping while in bed). First, determine the average number of hours per night that you are sleeping. Add one hour to your average sleep hours, and only allow that many hours for sleep at night. This means that you get out of bed at the same time each morning, but you go to bed later. So, for instance, if you are averaging 5 hours of sleep per night, schedule your bedtime and wake-up time to only allow 6 hours in bed for sleep. If you are sleeping less than 5 hours per night, you can still allow 5.5 hours for sleep each night. As you begin to sleep more efficiently, you can begin adding more hours in bed until you reach your sleep goal (7 to 8 hours). This technique takes discipline, but can be very effective.

Summary

Regular wake-up time

Maintaining a regular wake-up time is one of the most important strategies for improving sleep. Decide on a regular wake-up time, and get out of bed at that time every day (including Saturday and Sunday) regardless of how many hours of sleep that you got the night before. If you don't have a regular wake-up time, all of the other sleep strategies probably won't help much.

Your bed is for sleeping

Don't spend a lot of time in bed when you are not sleeping, or you will begin to associate the bed with being awake. Avoid spending too much time with your phone, tablet, TV, and other activities, while in bed. If you are not sleeping and feeling frustrated in the middle of the night, don't stay in bed. Get up, go into another room, and focus on something else.

Cut out the caffeine early in the day

Drinking caffeinated coffee, soft drinks, or ice tea in the evenings won't help you sleep.

Stay active during the day

A lot of inactivity during the day will interfere with sleep at night. Regular daily activities and exercise will help you sleep better at night.

Manage your stress

If you are experiencing a lot of stress then you will probably not sleep well. Use all the strategies that you have to keep your stress level from getting out of control.

Don't try to force sleep

Getting to sleep is not something that you can force to happen. You must allow it to happen.

Stick with these strategies

Try not to get discouraged and negative about sleep. For these strategies to be effective, you must use them consistently. If they aren't working after a few weeks then talk with your PRIDE counselor.