

Stress and Sleep

The Effects of Stress on Your Sleep

- Not all insomnia is due to stress, but people under stress can have insomnia. Stress causes insomnia by making it difficult to fall asleep and to stay asleep, and by affecting the quality of your sleep.
- Stress causes hyperarousal, which can upset the balance between sleep and wakefulness. Laboratory evidence shows that short sleep durations of 4-5 hours negatively impacts physiological and neurobehavioral functioning. For example, the body won't have time to complete all of the phases needed for muscle repair, memory consolidation and release of hormones regulating growth and appetite.
- In the case of insomnia related to stress, alleviating the stress can often improve the insomnia.

How do you know if your sleep difficulty is the result of stress, or something else?

- Ask "when did it start?" Does the sleep problem come and go along with the stress or does it persist at other times in your life? Use the Sleep Skills Diary to help you identify the contributors to your sleep difficulties (as well as things that help you sleep).
- Identify other common contributions. For example, are you frequently anxious whether or not you are under unusual stress? Is it hard for you to "wind down" at the end of the day? Are you frequently infuriated? Or do you feel depressed? If so, chronic depressed mood and anxious feeling are likely contributing to the sleepless situation and you will want to address these to improve things.

How much sleep do I really need?

- There is no "magic number" -- sleep needs are *individual* and are related to the *basal sleep need* (the amount of sleep our bodies need on a regular basis for optimal performance) and *sleep debt* (the accumulated sleep that is lost to poor sleep habits, sickness, awakenings due to environmental factors or other causes). Studies suggest that healthy adults have a basal sleep need of seven to eight hours every night, but it's more complicated because there is an interaction between the basal need and sleep debt. For instance, you might meet your basal sleep need on any single night or a few nights in a row, but still have an unresolved sleep debt that may make you feel more sleepy and less alert at times, particularly in conjunction with *circadian dips* (times in the 24-hour cycle when we are biologically programmed to be more sleepy and less alert, such as overnight hours and mid-afternoon).
- To determine how much sleep you need, it's important to assess not only where you fall on the "sleep needs spectrum," but also to examine what lifestyle factors are affecting the quality and quantity of your sleep such as schedules and stress. Pay attention to your own individual needs by assessing how you feel on different amounts of sleep. In trying to determine what is best for you, also ask yourself: Are you productive, healthy and happy on seven hours of sleep? Or does it take you nine hours of quality sleep to get you feeling good? Do you have health issues or are you at risk for any disease that might make more sleep necessary? Are you experiencing sleep problems? Do you depend on caffeine to get you through the day?

Creating a Positive Sleep Environment and Routine

Once you have figured out that you are not getting the sleep you want or need, it's time to develop a strategy of change so that you can reach your goal of feeling better and functioning better. Below are a number of adjustments that you can make TODAY to your environment and/or behavior that can help improve your sleep health:

Environmental changes to improve sleep:

- Wear earplugs: residence halls can be noisy places and people have very different sleeping schedules. Loud roommates, snoring roommates, music blaring at midnight three rooms over, you get the picture....
- Wear an eye mask to block out unwanted light at night and in the morning.
- Get a mattress pad: dorm beds can be uncomfortable and noisy. A pad can help.
- How's your pillow? Older pillows harbor mold and other allergens that can negatively impact the quality of sleep you get. An outdated, out-of-shape pillow can also make it hard to get comfortable at night.
- Make/buy room darkening window shade(s). Search online for "blackout blinds."
- Use a fan. It helps with a hot/stuffy room and the hum of a fan (or white noise machine) helps you fall asleep.
- Be strict and follow this rule: Bed is for sleeping and sex ONLY. It is not a desk, a TV chair, etc.

Lifestyle changes to improve sleep:

- Establish a regular bed and wake time. Going to bed and getting up at the same time every night is best, even on weekends, but sometimes that can be difficult. So, try to go to sleep at around the same time Sunday - Thursday. Friday and Saturday try to get to bed no later than two of hours after your regular weekday bedtime.
- Establish a consistent relaxing "wind-down" bedtime routine, ideally 30-60 minutes before your regular bedtime (see above). For example, take a warm bath or shower and then listen to soothing music or nature sound, read a book for pleasure, write in a gratitude journal, or do a yoga or meditation DVD. Do your routine away from bright lights and avoid any rousing activities such as studying, time on the computer, paying bills, other "chores", competitive games, and difficult conversations with others.
- Finish eating any large meals 2-3 hours before bedtime.
- Avoid nicotine altogether, but especially close to bedtime. Nicotine is a stimulant and can cause difficulty falling asleep, problems waking in the morning, and may cause nightmares.
- Avoid caffeine within 6-8 hours of bedtime. Coffee, caffeinated tea, sodas with caffeine, and chocolate typically remain in the body for 3 to 5 hours, on average, but for some people it can affect them up to 12 hours later.
- Avoid alcohol close to bedtime. It disrupts sleep, causing awakenings, early waking, and a less restful sleep.
- Exercising regularly can make it easier to fall asleep, but complete your workout 3 hours before bedtime. Exercising sporadically or too close to bedtime can make it more difficult to fall asleep.
- Stop napping! If you must nap, limit it to 30 minutes or less. Otherwise, it affects your ability to sleep at night.
- If you can't go to sleep after 30 minutes of trying, don't stay in bed tossing and turning. Get up and involve yourself in a relaxing activity, such as listening to soothing music or reading, until you feel sleepy. Remember: Try to clear your mind; don't use this time to solve your daily problems, go online, etc.
- Improve your time management so that you can protect your sleep. The Office of Learning Skills has great tools and tips for time management: www.mtholyoke.edu/learningskills/handouts.html.
- If you feel stressed-out and like you don't have time to wind down before bed because you are up late every night doing homework, then it's time to take a look at your schedule. Maybe you need to drop that extra course you decided to take this semester, or extracurricular activity, if you are overextended.
- If your insomnia is related to stress, academic or personal issues, consider making an appointment at Counseling Service (x2037) or seeing an off-campus counselor (the Counseling Service can help with that).
- Buddy up! Make a pact with your roommate, friend, or romantic partner to help each other adopt healthy sleep habits. Be each other's accountability partner!
- Listen to a nature sounds CD or a meditation CD or do a relaxation exercise while you try to sleep. It gives your mind something to focus on to quiet mental chatter while you fall sleep.

Maladaptive Thoughts and Sleep

Maladaptive, negative, “irrational,” or “faulty” thoughts related to sleep are those thoughts that cause stress and worsen and maintain sleep difficulties.

Examples:

- “I know I won’t sleep well tonight.”
- “I’m going to toss and turn and be wide awake like I usually do.”
- “It’s going to take me forever to fall asleep.”
- “If I wake up in the middle of night, I’ll never get back to sleep.”
- “I am powerless against my insomnia.”
- “Sleep is very difficult for me.”
- “Having to sleep is a terrible thing.”
- “I’ll be a wreck tomorrow if I don’t sleep.”

Why do we have these thoughts?

Many experiences of having negative thoughts, experiences, and emotions related to sleep, overtime, essentially make you *phobic of sleep*. The result of this accumulation of negative thoughts and the poor sleep that results from them leads your mind to regard sleep as a *danger and threat*. The mind then automatically evokes negative thoughts and emotions to “warn you” of the perceived danger (sleep), just like with other real (or imagined) dangers. So unintentionally you may have “programmed” your mind to regard sleep as a danger by persistently thinking negative sleep thoughts.

Steps to addressing maladaptive thoughts:

1. Identifying Maladaptive Thoughts: What other thoughts cross your mind as you are trying to sleep or during other times when you are thinking about your sleep? Write them down.
2. Analyze the thoughts. Ask yourself, about each thought, “What evidence do I have that supports this thought?” Are the thoughts themselves primarily responsible for not sleeping?
3. Replace the thoughts with healthier (and more realistic) thoughts and limit your worrying to specified times.
4. Use the Thought Record to help with this.

Developing coping thoughts/strategies to help your sleep:

1. Develop Positive Sleep Thoughts: The first step in making this change is to develop positive sleep thoughts. *Positive Sleep Thoughts* help to “reprogram” the negative or maladaptive sleep thoughts by helping you (accurately) perceive sleep as something good instead of a danger and threat. Remember, unlike the maladaptive sleep thoughts that are not actually true facts, positive sleep thoughts are all true facts about sleep -- assuming that you’ve created a reasonably good sleep environment, good sleep-preparation behavior, and are not ill or taking sleep-undermining legal or illegal drugs.
 - “Sleep is pleasant, relaxing and even blissful.”
 - “Sleep is to be enjoyed. It is a time of rest and rejuvenation.”
 - “Falling asleep quickly is easy and effortless.”
 - “Falling back to sleep if one wakes up during the night is effortless and occurs quickly.”
 - “It’s easy to relax and stay relaxed in bed.”

Use these examples as a starting place for developing your own positive sleep thoughts and *write them down*. Now you are ready to move them into your mind to “replace” those deeply entrenched negative, irrational sleep thoughts that were dominating your evaluation of sleep.

2. Technique for Countering Negative Sleep Thoughts: Allow yourself to freely worry and engage in negative sleep thinking up to twice a day. For example, designate two 10 minutes sessions each day in which you can freely worry about sleep difficulties and think negative sleep thoughts. Then, try to stick to it and not to worry at other times in your day. Use these two “worry sessions” as a time to also recall (or to formulate) and say positive sleep thoughts. For instance, when you think something negative about sleep that has been building up in your mind, such as “Trying to sleep tonight will be so stressful and anything but relaxing,” after this thought, remind yourself that this is a *worry* and a *perception* but that it is not a *FACT* of your life. Then consciously say a positive sleep thought to counter the negative sleep thought, such as “Sleep is pleasant, relaxing and even blissful.”

The following tips may be helpful:

- Use the Thought Record to help identify and develop sleep thoughts (automatic/negative and positive).
 - Say the sleep thoughts out loud. I think doing so gives them more reality in one’s mind.
 - Think about the positive sleep thoughts as you say them and what they mean. Don’t just say them as a parrot would.
 - Don’t repeat the same positive sleep thoughts over and over. Come up with new ones even if they are just slightly different. I think it helps to properly evaluate sleep from as many different perspective and ways as one can.
- a. Reduce Time of Sessions
After a few days of doing twice daily sessions, you may find that your worrying about sleep decreases somewhat and, as a result, you are sleeping a little better. Or it may take more time. Everyone is different. Over more time, when you begin to notice fewer and less powerful negative sleep thoughts, you can start to lower the amount of time that you allot for each session by one minute a day. Eventually, you will be able to eliminate the sessions entirely because your negative sleep thoughts will be almost entirely gone away and (hopefully) you will be sleeping much better. Of course you will have the occasional setback or relapse which is normal and to be expected. When this occurs, begin the sessions again and gradually reduce them until you get things back under control again.

Self-monitoring: Keeping a Sleep Skills Diary

Keeping a sleep diary can help you figure out the reason you are having difficulty sleeping. It can also help you figure out under what conditions you attain your maximum restoration.

Look at days when you reported fewer awakenings and desired bedtime and wake time. For example, do you see any connections between caffeine, alcohol or exercise? Use the sleep diary to look for connections between good sleep days and bad sleep days. Experiment with changing your sleep habits and see what the effects are.

Week of:	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Bedtime							
Wake time							
Number of awakenings							
No caffeine within 2* hrs of bedtime							
No alcohol within 2* hrs of bedtime							
No smoking within 2* hrs of bedtime							
Exercise at least 2* hrs before bedtime							
Woke up on time (aim for same routine each day)							
Went to bed on time (aim for same routine each night)							
No naps during the day							
Not hungry when going to bed							
No heavy meals within 2* hrs of bedtime							
Got out of bed when awake for more than 30 minutes							
Other Strategy (describe):							
Sleep Quality Choose a number between 0 and 10 0 = didn't get any sleep at all 10 = no sleep problems and awoke fully rested							

* **Note:** Avoid caffeine, alcohol, smoking, heavy meals or exercise 2 hours before bedtime may not be enough time for some people to experience sleep benefits. Start by avoiding these experiences within 2 hours of bedtime. If few sleep benefits are experienced then gradually increase the time period until quality of sleep improves.

Thought Record

DATE	SITUATION Who? What? When? Where?	MOOD(S) What did you feel? Rate each mood from 0-100%	AUTOMATIC THOUGHTS What was going through your mind just before you started feeling this way?	EVIDENCE THAT SUPPORTS THE THOUGHT <i>Factual</i> evidence that supports the thought	EVIDENCE THAT DOES NOT SUPPORT THE THOUGHT Objective data and facts	ALTERNATIVE/BALANCED THOUGHTS Write thought and how much you believe each alternative thought (0- 100%)	RATE MOOD(S) NOW Rerate the moods listed in the 3 rd column as well as any new moods (0-100%)

Relaxation Strategies

1. Progressive Relaxation

<http://ase.tufts.edu/counseling/tuas/> offers several audio guides

2. Mindfulness Practice

Four great audio guides are at <http://ase.tufts.edu/counseling/tuas/>

There is a weekly mindfulness meditation group on Wednesdays 4:30 PM - 5:30 PM at the Sanctuary in Eliot House. More information x2054

3. Toe Tensing

This one may seem like a bit of a contradiction, but by alternately tensing and relaxing your toes, you actually draw tension from the rest of the body.

1. Lie on your back, close your eyes.
2. Sense your toes.
3. Now pull all 10 toes back toward your face. Count to 10 slowly.
4. Now relax your toes.
5. Count to 10 slowly.
6. Now repeat the above cycle 10 times.

4. Deep Breathing

Audio track at <http://www.umm.edu/sleep/audio/track-6.WMA>

- By concentrating on our breathing, deep breathing allows the rest of our body to relax itself. Deep breathing is a great way to relax the body. Steps:
 1. Lie on your back.
 2. Slowly relax your body. You can use the progressive relaxation technique.
 3. Begin to inhale slowly, through your nose if possible. Fill the lower part of your chest first, then the middle and top part of your chest and lungs. Be sure to do this slowly, over 8 to 10 seconds.
 4. Hold your breath for a second or two.
 5. Then quietly and easily relax and let the air out.
 6. Wait a few seconds and repeat this cycle.
 7. If you find yourself getting dizzy, then you are overdoing it. Slow down.
 8. You can also imagine yourself in a peaceful situation such as on a warm, gentle ocean. Imagine that you rise on the gentle swells of the water as you inhale and sink down into the waves as you exhale.
 9. You can continue this breathing technique for as long as you like until you fall asleep.

5. "Quiet Ears"

Listen to the quiet ears track at <http://www.umm.edu/sleep/audio/track-7.WMA>

The steps are also outlined below:

1. Lie on your back with your eyes closed.
2. Place your hands behind your head. Make sure they are relaxed.
3. Place your thumbs in your ears so that you close the ear canal.
4. You will hear a high-pitched rushing sound. This is normal.
5. Listen to this sound for 10-15 minutes.
6. Then put your arms at your sides, actively relax them and go to sleep.

6. Imagery Relaxation

What is imagery relaxation?

Imagery relaxation is a simple way to use your mind and your imagination to create for yourself a state of mind that's peaceful, pleasant, relaxing, restful, and refreshing.

Today's group forest imagery relaxation:

- The relaxation we did in the seminar today is located here:
<http://students.georgiasouthern.edu/counseling/relax/forest/forest1.mov>

Others audio sources for imagery relaxation:

- "Guided Imagery Meditation to Help You With Healthful Sleep"
http://www.healthjourneys.com/kaiser/healthfulSleep_flash.asp
- "Floating on a Cloud" <http://www.youtube.com/watch?v=1iRd45dirYk>
- "Deep Relaxation Through Guided Imagery" <http://www.youtube.com/watch?v=aXg7SKUG000>
- "Guided Meditation: A 'Time-out' Visualization Meditation to Heal and Refresh"
<http://www.youtube.com/watch?v=QT5w5rBUaxw&feature=relmfu>

7. Autogenic Relaxation

Autogenic techniques are somewhat similar to progressive muscle relaxation, but you are not going to contract any muscles as you did with progressive muscle relaxation. Instead, you are influencing and decreasing muscle tension by conscious repetition of a few phrases while scanning the body from head to toe.

A few reminders first...

- Wear comfortable clothes and take off your shoes.
- Preferably do autogenic relaxation in a private, quiet area.
- It is helpful to use abdominal breathing techniques during the relaxation.
- Take a slow, deep, and relaxing breath before moving on to the next body part.

Online sources for autogenic relaxation:

<http://www.youtube.com/watch?v=Q6f-tovTi4E>
<http://www.youtube.com/watch?v=xcaRPOgOrmU>
<http://www.youtube.com/watch?v=74aXSxyi8oo>

... and many more you can find by searching "videos" for autogenic training or autogenic relaxation