LEARN TO IMPROVE YOUR SLEEP

CAPS

THE UNIVERSITY OF SYDNEY
Sleep affects our daily functioning and our physical and mental health. Difficulty sleeping is a common problem that can lead to poor concentration, irritability, drowsiness and poor coordination, so it is important to be aware of the many factors that can affect your sleep patterns. The benefits of healthy sleep include: improved mental performance, less anxiety, improved mood and energy levels. This information will focus on practical strategies that you can use to improve both the length and the quality of your sleep.
Test your knowledge with the ten most fascinating and weird sleep facts.

If you didn’t score too well read on! … Sleep is an essential period of physical rest when most parts of our bodies repair and restore themselves. Periods of deep sleep coincide with the release of growth hormones in children and young adults. Getting a sufficient amount of sleep, regularly, is crucial for maintaining good physical and mental health. For most adults, the optimal amount of sleep appears to be 7-8 hours per night. Teenagers need about 9-10 hours of sleep.

We all have an internal “body clock” (or circadian rhythm) that regulates our sleep. Our bodies are able to do this by being attuned to the cycle of day and night. When light reaches the photoreceptors in the retina (at the back of the eye) a signal is sent to a key section of the brain, which synchronise our body temperature, blood pressure and the sleep/wake cycle. For more information read about our biological clocks.

When we are asleep, our brains progress through a cycle of five phases of sleep. Each sleep cycle lasts about 70-90 minutes, and is made up of phases of lighter and deeper sleep and periods of dreaming (known as REM sleep). Our brains go through several of these cycles each night, with an increase in the period of dreaming before we wake in the morning.

REM sleep (REM means “Rapid Eye Movement”) – is the phase of sleep when we are dreaming and our brains are very active. This complex neurological process is most important for restoring our mental functioning, and influences memory and concentration.

Several natural chemicals in our brains, known as ‘neurotransmitters’, control whether we are awake, drowsy or asleep. Other substances, such as caffeine, medication and alcohol, can interfere with the signals sent by these chemicals and have disruptive effects on our sleeping patterns.
COMMON MYTHS ABOUT SLEEP

Myth 1: Getting just 1 hour less sleep per night won’t effect your daytime functioning.

Fact: You may not be noticeably sleepy during the day, but even slightly less sleep can affect your ability to concentrate, to think properly and to respond quickly.

Myth 2: Your body adjusts quickly to different sleep schedules.

Fact: It can take more than a week for your body clock to adjust after traveling across several time zones or switching to the night shift.

Myth 3: You can make up for lost sleep during the week by sleeping in on the weekend.

Fact: Although this sleeping pattern will help relieve part of your sleep debt, it will not completely make up for the lack of sleep. Also, sleeping later on the weekend can affect your biological clock so that it is much harder to go to sleep at the right time on Sunday night and get up early on Monday morning.

(adapted from the website: Helpguide.org).

Now, all these myths and facts are interesting, but you may be thinking that you don’t need as much sleep as other people! Well, consider the following information based on scientific research.

THE EFFECTS OF SLEEP DEPRIVATION AND CHRONIC LACK OF SLEEP

If you haven’t been getting a good night’s sleep, you are likely to experience some or all of the following:

– A tendency to doze off when inactive, e.g. in lectures or while watching TV
– Poor concentration and memory problems
– Reduced creativity and problem-solving skills
– Difficulty making decisions
– Being less able to cope with stress
– Moodiness, irritability, anxiety and depression
– Reduced academic performance and sporting performance
– Impaired motor skills and increased risk of accidents, e.g. when driving
– Reduced immunity to colds, ‘flu’s and other infections

If you still aren’t convinced – try this face memory quiz and this reaction time test!
The way you feel during your waking hours depends on how well you sleep at night. If you experience occasional or chronic sleep problems, it is important to learn ways to avoid the common enemies of good sleep. You can experiment with these sleep-promoting techniques and find the combination that works best for you. Having 7-8 hours of sound sleep may not be possible every night, but it is attainable most of the time. Sleeping healthily will mean that you will be mentally sharper and more productive, feel emotionally balanced, and have more energy each day.

1. **Ensure a quiet and comfortable bedroom.**
   - Maintain a comfortable temperature in your bedroom. A cooler room, along with just enough blankets to stay warm is recommended. Keep lighting dim, and remember to turn off your computer and your mobile phone when you are preparing to go to sleep.

2. **Keep to a regular sleep/wake schedule, even on the weekends.**
   - Go to bed at a set time each night and get up at the same time each morning. Disrupting this schedule may lead to insomnia. Sleeping-in on weekends also makes it harder to wake up early on Monday mornings because it re-sets your sleep cycles for a later awakening. Also, avoid napping to ensure you are tired at bedtime. You can also use a sleep diary to monitor your sleep habits.

3. **Exercise regularly, but not before bed.**
   - Try to exercise 20 to 30 minutes every day. Daily exercise often helps people sleep better, because it alters our metabolic rate and our “brain chemistry” in healthy ways. Regular exercise also has a positive effect on your mood and levels of stress or anxiety. For maximum benefit, engage in vigorous exercise (walking, jogging, swimming) about 4 to 5 hours before going to bed, so that your core body temperature drops sufficiently before sleeping.

4. **Minimise caffeine, alcohol and nicotine 4 hours before bed.**
   - Stimulants such as caffeine and nicotine will interfere with your ability to sleep. Everyday substances such as tea (including green tea), chocolate, coke and even some prescription and non-prescriptions medications contain caffeine. Although alcohol is a “relaxant” and often causes drowsiness, it actually reduces the duration of deep REM sleep, resulting in fragmented, rather than restful sleep. Also, smokers tend to sleep very lightly and often wake up early because of nicotine withdrawal.

5. **Eat a balanced diet.**
   - Avoid spicy foods and heavy meals before going to sleep. However, going to bed hungry can also interfere with the ability to sleep. Milk contains tryptophan, which acts as a natural sleep inducer. Try a warm glass of milk about an hour before going to sleep. Almonds are also thought to be a sleep inducing foods as they contain magnesium (a muscle relaxant) in addition to tryptophan. See the Learn To Eat Healthily pages.

6. **Develop a sleep routine.**
   - Establish relaxing pre-sleep rituals that will give your body cues that it is time to slow down and sleep. For example, a warm bath, reading, or listening to relaxing music can make it easier to fall sleep. You can train yourself to associate certain restful activities with sleep and make them part of your bedtime ritual. A variety of relaxation techniques can help you achieve a relaxed state including: slow breathing, progressive muscle relaxation, yoga and tai chi. Refrain from using your bed to watch TV, pay bills or do work. For help with relaxing see the CAPS ‘Relaxation & Meditation’ c.d which is available, free, on-line.

7. **Sleep until sunrise.**
   - If possible, go to bed before midnight and wake up at or soon after sunrise. Sunlight helps the body’s internal ‘body clock’ reset itself each day. Interestingly, sleep experts recommend exposure to an hour of **morning sunlight** for people who have problems falling asleep at night. Considering sitting in the morning sun over breakfast.
8. Don’t lie in bed awake (sleep only when sleepy). If you can’t get to sleep, don’t just lie in bed. Do something else, like reading or listening to music, until you feel tired. Try getting up and doing something boring, in dim lighting, until you feel sleepy.

9. Learn to manage unhelpful thoughts. Anxiety and excessive worry about being unable to fall asleep can actually contribute to insomnia. Sometimes we can get caught up in a cycle of thinking that we won’t be able to fall asleep, which is self-perpetuating. There are many cognitive and behavioural techniques for overcoming negative thinking associated with insomnia.

10. See a doctor if your sleeping problem continues. If you have trouble falling asleep night after night, or if you always feel tired the next day, then you may have a sleep disorder and should seek medical advice. Most sleep disorders can be treated effectively, and you will be able to make positive and lasting changes and to ensure a good night’s sleep regularly.

In conclusion, the following website provides individually tailored suggestions about ways to improve sleep - based on your self-assessment - using a detailed sleep profiler.

You may also find the Harvard University website portal on sleep well worth a visit!