URSA PSYCHOLOGY



# Sleep is a vital part of our physical, mental, and emotional wellbeing.

Sleep is one of the pillars of our health. When we sleep, although our eyes are closed, many of our muscles are relaxed, and we enter into different states of consciousness, the body and brain are still quite active. Researchers have found, for example, that sleep plays a very important role in:

- **a.** Flushing out toxins that accumulate in the brain during our waking hours.
- **b.** Learning or forming new neural pathways, which help us with establishing our new memories and making decisions.

Sleep affects every part of the body and serves a protective role. Chronic lack of sleep is associated with increased risk of both physical and mental health concerns. Sleep also helps us to process information better and to be more flexible in our thinking. As such, it allows us to problem solve more effectively.

Without adequate sleep we are more frustrated and irritable, more reactive to stress, less able to interpret emotional situations, and less able to use appropriate coping skills. The amount of sleep we get is connected to our ability to regulate our behaviour by being attentive and using our reasoning skills to respond in different ways than we typically would. This ability called "inhibitory control" is a crucial component of our ability to achieve goals.

The most famous experiment of inhibitory control was called the marshmallow test. Toddlers, whose ability to regulate their behaviour is just developing, had a marshmallow placed in front of them and were told that if they waited to eat it until the experimenter returned they would get another. Inhibitory control helps us to work towards bigger goals (two marshmallows vs. one) that are less immediate (when the experimenter returns vs. right now).

For example, a relationship between inadequate sleep and obesity exists because with less inhibitory control we are more likely to make decisions based on immediate gains (i.e., eating high fat/ high sugar "comfort" foods that activate the reward centers of the brain) versus long-term goals (i.e., eating a balanced diet that supports lasting health). In addition, being awake for more hours in a day means that we have more opportunities to eat.

# What does a "normal" sleep look like? Are your expectations for your sleep unrealistic?

Many people believe that 8 is the magic number when it comes to sleep and that getting less or more than 8 hours of sleep a night is harmful. While it's true that the average person needs between 7 and 9 hours of sleep per night, this is a population health guideline and everyone is different. Some people can thrive on less than 7 hours of sleep per night while others require more than 9 hours of sleep to function at their best. Sleep needs vary based on age, health, activity level, genetics, and our individual circadian rhythm or internal clock.

# So, how can you tell how much sleep per night is right for you?

Be an experimenter in your own life and start asking yourself questions like:

- Do I constantly feel sleepy?
- Am I able to concentrate and accomplish my daily tasks?
- Are there times of the day when I am more tired than during other times?
- Do I feel rested when I wake in the morning?

One recommended way of assessing what your optimal amount of sleep is to set aside 3 days - usually this works best while on vacation- and allow yourself to sleep for as long as your body needs. You then take the average of your time slept over the three days.

Everyone's sleep is different and it is perfectly normal to get less than your optimal amount of sleep on occasion. It is perfectly normal to feel tired during the day some days. The occasional "bad night's sleep" is not cause for concern; rather it is chronically inadequate sleep that can put you at risk.

Educating yourself about sleep and managing your expectations related to your sleep is actually one of the easiest ways to start getting better sleep. It helps you to worry less about your sleep, particularly right before bedtime, which means you can fall asleep easier.

## Six Additional Ways to Improve Your Sleep

Whether you simply want make sure you are consistently getting a great night's sleep, or if you've been struggling with sleep for some time, here are six changes you should make if you haven't already.

## 1. The bedroom is for sleeping (and sex)

- Is your bedroom a relaxing environment conducive to sleep?
- What is your bedroom/your bed associated with?

Our brains form connections when one stimulus is repeatedly paired with another. For instance, if we always respond to work e-mails while lying in bed our brains learn to associate the bed with work. Responding to work e-mails typically means we have to be alert and ready to plan. It might cause us some anxiety or frustration depending on the situation. Soon our brains will go into "work-mode" when we get into bed even if we are not looking at work e-mails and it may be difficult to wind down and fall asleep.

Your bedroom should be associated with relaxation and sleep. Work on creating a peaceful environment with minimal stimulation where you generally only engage in activities that you find calming. Avoid reading, working, studying, and watching television in bed because these are all associated with the mind being active.

Your bedroom should ideally be a dark, quiet, and slightly cooler environment that is free of screens. Blue-wavelength light, which is emitted by our laptops and our smartphone, and most high-efficiency lighting is disruptive of sleep. Research has found that blue light suppresses melatonin production for longer than other, warmer types of light and interferes with our circadian rhythms. No screen time within ~2 hours of bedtime is recommended.

If you do not fall asleep after what you perceive to be ~20-30 minutes (don't watch the clock!), get out of bed. People often think they are making things worse by getting out of bed, but that is not the case. You do not want your bed to be associated with sleeplessness. Go to a quiet spot in your home and do something very boring. Reading a well known and boring book (or even an appliance manual) is often recommended. When you start to feel sleepy go back into bed, then repeat if necessary.

#### 2. Establish a bedtime routine

- How are you winding down?
- How are you cuing your body that it is time to sleep?

On top of ensuring that our bedroom is associated with relaxation and sleep, as bedtime approaches it is important to provide cues to your brain and body that you should be winding down. This transition period is vital. Just like body builders need to warm up before lifting heavy weights in order to avoid injury, we need to wind down in order to be most successful in going to sleep. This should start ~30 minutes before your goal bedtime. The routine you develop should be enjoyable so you look forward to it each day.

Examples of activities that you might include in your bedtime routine include having a hot bath, keeping a gratitude journal, changing into your favourite PJs, light reading on the couch, listening to soothing music, lighting a candle, doing a short guided meditation or brushing your teeth.

## 3. Light in the daytime, darkness in the bedroom

Are you helping to set your body's sleep/wake cycle?

Making sure to expose yourself to natural light during the daytime whenever possible helps to maintain your body's natural sleep-wake cycle. Getting some sunlight everyday, particularly earlier in the day is beneficial. This might mean going for a walk on a break at work, eating lunch outside in the summer, or sitting in front of a window in the winter. Your bedroom should also be dark to cue your brain and body into sleep. It is also helpful to reduce light exposure for at least an hour before bedtime, use dimmer lighting, and avoid screens.

## 4. Foods, liquids, etc. to avoid

In general, it is best to avoid eating a big meal or anything heavy close to bedtime. Having a small, light snack prior to bedtime is just fine so long as the snack isn't spicy or sugary. And, while it is good to stay hydrated, avoid drinking substantial amount of liquids close to bedtime as this can result in frequent waking to head to the bathroom.

Is caffeine interfering with your sleep?

Caffeine is a stimulant that increases alertness. Avoid consuming caffeine for at least 4 hours prior to bedtime.

### Is alcohol interfering with your sleep?

While alcohol is a depressant that decreases alertness it has also been shown to cause people to wake more frequently in the night and get less restful sleeps. Alcohol is also associated with increased anxiety in the morning. Avoid consuming alcohol for at least 3 hours prior to bedtime and always drink responsibly.

Is smoking interfering with your sleep?

Smoking is both a stimulant and a drug meaning that it increases alertness and that it causes withdrawal symptoms, which can lead to waking too early. Smoking can also lead to sleep problems like sleep apnea. Avoid smoking for at least 4 hours prior to bedtime and, if possible, reduce or eliminate smoking altogether.

## 5. Exercise regularly

Are you using exercise appropriately to improve your sleep?

We know that exercise is vital for our wellbeing, but what is less well known is how beneficial exercise can be specifically for sleep. Exercise releases various neurotransmitters, which act on our reward circuits and can give us a euphoric feeling. This helps to alleviate worries and facilitates and strengthens our body's ability to handle stress. Exercise also tires us out and at the end of the day our bodies want to rest. Getting regular exercise (around 30 minutes 5x per week) is recommended. Exercise in the afternoon is associated with the greatest sleep benefits. Do not exercise within ~4 hours of bedtime to avoid nighttime wakefulness.

## 6. Being mindful and being consistent

Are you going to sleep when you are sleepy?

Being mindful of how your body is feeling is important when it comes to getting a good sleep. Tune into your body at night and ask yourself if you're feeling tired. If so, head to bed. If not, maybe you need to increase the time you are spending engaged in nighttime routine activities (e.g., reading, listening to music, meditating). If you force yourself to "try to sleep" when you are not tired you will only end up awake, frustrated, and mentally associating those states with your bed. In this way cultivating some flexibility is important.

#### Is your wakeup time appropriate?

However, a certain degree of consistency is also necessary. Establishing a consistent waking time, even on weekends, helps the body to fall into and maintain a regular sleep pattern that works for you.

#### Are you napping during the day?

In general napping during the day should be avoided. Napping interferes with your natural sleep-wake cycle and can make it harder to fall asleep at night. However, sometimes when we have a poor night's sleep a nap can help us to feel better. In this situation naps should be limited to 30 minutes or less (set an alarm!) and should be taken earlier in the day (i.e., 6-8 hours prior to bedtime).

## Sleep is not a luxury, it's a necessity.

Sleep is an essential pillar of our overall well-being, impacting every aspect of our lives—from physical health to emotional balance and cognitive function. Understanding the importance of sleep and recognizing the signs of sleep deprivation can empower us to make informed decisions about our sleep habits. By implementing practical strategies like maintaining a consistent sleep schedule, creating a restful sleep environment, and being mindful of our body's needs, we can improve the quality of our sleep and, in turn, enhance our daily lives. Remember, sleep is not a luxury but a necessity, and prioritizing it is one of the most beneficial steps we can take toward a healthier and more fulfilling life.