### **Integrative Health Sleep Improvement Practices**

Written by Ashley Mason, PhD Edited by Sarah Patterson, MD Edited for general use

Much like other general health practices, optimizing your sleep will not cure your condition or reverse damage that may have happened in your body, but it can significantly improve your day-to-day experience of your symptoms.

Some of the most basic steps you can take to promote healthy sleep are rather simple, but others may pose challenges to your current routines.

# **Sleep Hygiene**

Sleep hygiene refers to factors that promote healthy sleep. There are many components of sleep hygiene, and several are on the list below. The following sections of this guide describe the proper practices for each of these sleep hygiene components.

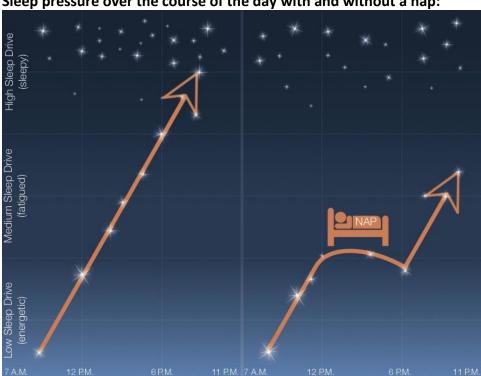
- Sleep timing and napping
- Exercise and daylight exposure
- Alcohol and caffeine
- Timing of medications and eating
- Bedtime routines
- Bedroom environment

### **Sleep Timing and Napping**

Although it is tempting to sleep in after a poor night of sleep, or to go to bed early in the hopes of getting more sleep, maintaining a consistent sleep schedule is much more helpful in the long-term. Naps will nearly always decrease your ability to sleep the next night and provide no guarantee that you will feel better in the moment. Here is what you can do to promote a consistent sleep time in each 24-hour period:

- We first control our sleep time by setting our wake time. This is because we cannot control when we fall asleep, but we can control when we wake up, by using an alarm.
- This means that you should use an alarm clock to wake up at the same time every day.
   This means that seven days a week, you wake up and get out of bed at the same time each day.
- Over time, your body will start to wake up at your wake time quite naturally.
- Try not to nap during the day. Keeping yourself from going into deep sleep during the day will be less likely to impact your sleep at night. Sleeping deeply during the day reduces what sleep clinicians call "sleep pressure," which is the pressure you build during the day that helps you to fall asleep and stay asleep at night. You can think of this as spending energy the more energy you spend during the day, the easier it is to fall asleep and stay asleep. If you take naps during the day, you reduce sleep pressure, which makes it more difficult to fall asleep at the start of the night and stay asleep throughout the night.

If you are going to nap, it is ideal if you nap in the early afternoon, but no later than 3 PM. If you need to take a brief nap, set an alarm for 25 minutes. This means your entire "opportunity" is 25 minutes, and means that when you lay down to take a nap, you should set an alarm to go off 25 minutes later.



# Sleep pressure over the course of the day with and without a nap:

### **Exercise and Daylight**

Getting regular exercise and exposure to sunlight are important for regulating sleep patterns. The timing of these activities, however, matters.

- Get some sunlight in the first half of the day, preferably at least 30 minutes. This helps your body to stay in its daily rhythm.
- It's best to exercise at least 30 minutes each day, and to do so at least three hours in advance of your usual bedtime. Exercising too close to bedtime can make it hard to fall asleep.

#### **Alcohol and Caffeine**

It is often tempting to use alcohol to help yourself to fall asleep, and caffeine to help yourself feel awake in the morning.

 Alcohol decreases the amount of time that it takes to fall asleep, but it also causes you to wake up more during the night and powerfully suppresses the amount of rapid eye movement (REM) sleep that you get. One of the simplest steps you can take to improve your sleep is to part ways with alcohol altogether for a few weeks and note how you feel in the morning. Chances are, you will feel better. You can then add alcohol back into

your life occasionally, taking care to note how it impacts your sleep, and if it is worth that impact. You may find that consuming alcohol earlier in the day has a lesser impact on your sleep.

- Caffeine can help you feel more alert and awake, and it does so by blocking the receptors for a chemical in your brain called adenosine. We build up sleepiness over the course of the day by accumulating adenosine in its receptors in the brain. Therefore, when caffeine blocks adenosine, it blocks an important sleepiness signal and causes us to feel more alert and awake. When the caffeine in our system decreases, we can experience a "caffeine crash" this is when the adenosine floods the receptors that have become available again.
- Caffeine takes a good deal of time to leave your system: It has a half-life of about 5-7
  hours. This means that if you drink a cup of coffee with 100 mg caffeine in it, about 50
  mg of that caffeine will still be circulating in your body 5-7 hours later, which can still
  prevent you from experiencing enough sleepiness to go to sleep.
- Decaffeinated beverages, such as decaffeinated coffee, can contain as much as 15% to 30% of the amount of caffeine in their regular form; keep this in mind when making choices about caffeinated beverages.

## **Timing of Medications and Eating**

You may take medications to help manage symptoms of health conditions. They may have impacts on your sleep, or they may not. Eating larger meals at night can also disrupt your sleep. Here are some steps you can take to reduce the effects of medications and food on your sleep:

- Take your daily medications at the same time each day. This supports your body's daily rhythms.
- Talk with your prescribers about the best time of day to take your medications. Some medications may have an alerting effect and are best taken in the morning, others may be more sedating and may be better suited for later in the day.
- Some medications for heart conditions, blood pressure, or asthma and allergies (including over the counter varietals) can disrupt sleep. Talk with your prescriber or pharmacist about your medications' effects on sleep.
- Do not eat large meals and beverages at night. A small smack is alright, but larger meals require digestion processes, which can interfere with healthy sleep. Try to ensure that your earlier meals, such as breakfast and lunch, are your larger meals.

#### **Bedroom Environment**

Although some aspects of your bedroom environment are certainly hard to change, such as the time that the garbage truck makes noise outside of your window on a Tuesday morning, there are other aspects that you might be able to modify. Here are some actions you can take to improve your sleeping environment:

- Cool down your sleeping room. Optimal sleeping temperatures are no higher than 68 F.
- Use breathable bedding. This means using cotton sheets, cotton blankets, and cotton sleepwear. It also means avoiding comforters of any kind, wool blankets, or other bedding that traps heat. Nighttime is a key time for temperature regulation – did you

know that your body is at its coolest core temperature about two hours before you wake up in the morning? If you are waking up too hot or too cold during the night, there is a meaningful chance that you can swap your bedding or sleepwear to reduce sleep disturbance.

- Use blackout shades or an eye mask and minimize light sources in the bedroom. Use tiny pieces of black electrical tape to cover pesky lights or unplug light-emitting devices altogether.
- Use earplugs or a white noise machine if you find that noises tend to wake you up. Using earplugs or a white noise machine can take some getting used to, but if you are a light sleeper, taking this step can reduce the number of times you wake up in the night.

### **Stimulus Control**

Stimulus control is one of the most important steps to improve your sleep quality. When combined with sleep hygiene practices, listed above, stimulus control is particularly effective. Stimulus control refers to a set of practices designed to strengthen the association between your bed and sleep. The key components of stimulus control are:

- Only get into your bed when you are sleepy. This means that you only get into your bed
  when you believe you can fall asleep. Sleepiness is different than fatigue; when you are
  sleepy, you can fall asleep. Fatigue is a state of low mental or physical energy, whereas
  you know you are experiencing sleepiness if it is difficult for you to stay awake. If you're
  fatigued, you can rest on the couch or another comfortable non-bed place.
- If you cannot fall asleep, get out of your bed and do a pleasant activity for about 20 minutes. This is ideally a "treat" activity, something you really enjoy it has to be better than tossing and turning in bed, and better than being anxious or frustrated while in bed unable to sleep. After 20 minutes have passed, pause your activity, and check in with your body. Do you feel sleepy? If so, you can return to bed. If not, continue the activity for another 20 minutes, and check in again at that time. Only return to bed when you are sleepy.
- It may be tempting to rest in your bed when you are experiencing pain or other symptoms that may be related to your autoimmune diagnosis. This is understandable! It's important, however, to rest somewhere else. We do not want to associate your bed with being in pain or other symptoms; it's better for you to rest on a couch or in another part of your home when experiencing pain or other symptoms.

The American College of Physicians has recommended behavioral treatment, specifically, Cognitive Behavioral Therapy for Insomnia (CBT-I) as the first-line treatment for sleep problems.

### Cognitive Behavioral Therapy for Insomnia (CBT-I) Resources

There are several excellent resources that you can consult to improve your sleep if you are experiencing sleep problems.

 Quiet Your Mind and Get to Sleep, by Rachel Manber and Colleen Carney. This book guides you through the CBT-I treatment program, chapter by chapter. It helps you

- create and maintain healthful sleep routines. It also provides resources to work with anxiety about sleep, as well as anxiety about other things in your life that might be getting in the way of you getting good sleep.
- Find a clinician who can provide Cognitive Behavioral Therapy for Insomnia (CBT-I) using the Society of Behavioral Sleep Medicine directory: https://www.behavioralsleep.org/index.php/directory/all.
- Try a Cognitive Behavioral Therapy for Insomnia (CBT-I) app, such as the freely available <a href="Insomnia Coach">Insomnia Coach</a>, developed by the US Department of Veterans Affairs. This app can help you track your sleep and implement changes using a CBT-I framework.