

Sleep Hygiene

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A common contributing factor to disturbed sleep is “Inadequate Sleep Hygiene”. Some people are very busy right up to bedtime. They are tired and pushing themselves to function all day often with very little time to wind down and allow the adrenalin to wear off before trying to fall asleep. Some consume caffeinated or alcoholic beverages or smoke before bed. Caffeine and nicotine are stimulants. Alcohol metabolizes at the rate of about a drink per hour resulting in a rebound alerting effect as it wears off. Some watch TV, computer, video game or cell phone before bed. These are essentially bright flashing lights that stimulate the brain and suppress your natural melatonin. Some people receive text messages or other electronic notifications at all hours of the night. Sometime the bedroom is too noisy, bright, or hot. Some people sleep with pets that frequently disturb their sleep. Some check the clock every time they wake up. Some people get up and go to the bathroom every time they wake up.

Traditionally, sleep hygiene refers to regular meals, exercise, bedtimes and wake times; avoiding naps during the day or evening; avoiding caffeine, nicotine and alcohol in the evening; avoiding heavy meals before bed although a light carbohydrate snack an hour before bed can be helpful; and winding down before bed while avoiding TV, computer and video games the last hour before bed. Most sophisticated insomniacs that we see in the Sleep Clinic are already trying to follow these traditional sleep hygiene measures.

Insomnia is largely the result of reinforced habits. There are other behavioral strategies from cognitive-behavioral therapy that should be incorporated into a healthy sleep routine to augment your good sleep conditioning. For most patients that are unsuccessful at improving their insomnia with sleep hygiene, these are often the critical components that are missing. Some of these components are “worry time”, relaxation techniques, using an alarm, and not looking at the clock during the night.

Here is the link to our standard “[Program For Improved Sleep](#)” that we have used successfully at the Kelowna Sleep Clinic for many years. This is definitely the place to start working on improving your sleep and for some this may be all you need to do to become a good sleeper again. For those that need more help, the [On-line Insomnia Management Program](#) (OIMP) goes into a much more detailed *cognitive-behavioral* program customized for your particular insomnia.

When you look at the *Program for Improved Sleep* for the first time, the natural thing is to focus on things you have already tried. Keep in mind that the reason you are looking at this website is most likely because your sleep is still not as good as you would like. Therefore, whatever you have tried before is probably not enough. Make sure you focus on the things that you have not consistently done before because this is likely what it is missing in your program. In particular the “bolded” and “underlined” recommendations are critical components, and you should do all of them at the same time if you want to become a good sleeper. The other recommendations are optional but may also be helpful to optimize your sleep quality. Do them if you find them helpful.



The following is some of the rationale behind each of the sleep hygiene behaviors:

Maintain regular bed and wake times – Regular sleep times help your biological clock stay in your current “time zone”. We live in a 24-hour world but our biological clock averages about 24 hours and 10 minutes. We need bright light in our eyes within an hour of our normal wake time to prevent our biological clock from delaying 10 minutes that day.

Sleeping-in allows your biological clock to delay which then delays the onset of melatonin release in the evening resulting in your biological sleepiness arriving later. Even though this may be only 10 minutes per day, if this happens daily, over time it can result in your biological clock becoming significantly delayed making it harder to fall asleep at night at your usual time.

Avoid napping during the day or evening – If you like to “siesta” and can arrange the time for a regular nap everyday then this should be fine assuming you do not have trouble sleeping at night. If you cannot schedule this for every day, then an irregular nap and sleep schedule may negatively affect your sleep quality. If you are normally a good sleeper but find yourself sleepy during the day because you went to bed late or were up earlier than usual, having a nap during the day is probably not going to affect your sleep too much that night if it is no longer than an hour and not later than about 4 or 5 pm.

However, if you have difficulty sleeping at night, napping during the day or evening will “take the edge off” your sleepiness making it harder to sleep when you go to bed that night. You want to save up that sleepiness to help “bulldoze” you into sleep at night.

The exception is if you become sleepy while driving or doing other “safety critical” activities. Under those circumstances you are already impaired. If you are driving, you should pull over as soon it is safe do so to a place well off the road and have a nap. If you are working in a safety critical job, it is important to inform your coworker or supervisor so you can be relieved

of your duty.

Set aside some "worry time" – A lot of people with insomnia are in the habit of thinking, worrying, planning and problem solving in bed. This may activate their mind and keep them awake. It may also fuel the dream content and disturb sleep quality. To make a point, I tell my insomnia patients that from now on it is "illegal to think in bed!" That usually gets a chuckle and then they ask me, "How?" To begin with, if you have something you need to think about, you need to think about it and it will be very hard not to. Instead of doing it in bed, set aside some worry time or "thinking time" in the evening before your wind down time. Sit at a desk or table, not where you wind down, and think about everything that needs thinking about, worry about what needs worrying, plan what needs planning, and generally "take care of business." Then you may need to write it down, make a list, put a note on a calendar or write in a journal. Do whatever it takes so that you can give yourself permission to "forget about it" for the rest of the night. You need to consider yourself "off duty" until the alarm goes off the next morning. Then you take the next hour or two before bed to wind down and help insulate your sleep from what was going on during your day.

Wind down before bed – When you are tired and pushing yourself to get through the day, you are essentially living on "adrenalin". This can make it hard to relax and fall asleep. Even when you fall asleep, your body may still be in the "fight-or-flight" mode making your sleep quality light and disrupted. You need to take at least an hour to wind down before bed to allow the adrenalin to wear off. This time should be dedicated to doing things you find relaxing and enjoyable like reading, listening to relaxing music, or doing some kind of craft or puzzle. You are not trying to accomplish anything. You are not doing chores, paying bills, or anything you find frustrating or annoying. Preferably you are not watching TV, computer or video games during this time.

Avoid TV, computer, videogames and cell phones before bed – These devices are all essentially bright, flashing lights. Depending on the device, even a screen that looks static may have a 30 to a 144 cycle per second refresh rate. Even though some people fall asleep watching TV, the flashing is neurologically stimulating on some level and can affect sleep quality. In addition, the brightness tends to delay the onset of your melatonin. Melatonin helps your body become physiologically ready for sleep and affects your biological clock. Bright light will tend to delay your biological clock and sleep onset.

Use a relaxation technique to help you fall asleep – Even though you have done your worry time, written things down you do not want to forget, and given yourself permission to be "off duty" you still may have things on your mind. A relaxation technique will help you turn your mind off so you can fall asleep. A relaxation technique is a type of meditation or self hypnosis that you do in your mind without moving, with the lights off and eyes closed, and with permission to fall asleep while you are doing it. It helps you blank your mind or focus your thoughts on things that are conducive to relaxing and falling asleep. Relaxation does not really put you to sleep. It helps keep your mind out of the way while you are waiting for sleep to happen naturally.

Cool, dark, quiet environment – Generally, people sleep better in a cool rather than warm environment. Often, people prefer a warm environment for getting undressed and into bed. However, once they fall asleep under the covers, they overheat if the room is warm. Even if

they are not aware of waking during the night, they will have more arousals, position changes and disturbed sleep than if they went to sleep in a cool environment and then warmed up to a comfortable temperature under the covers.

In good sleepers, your body temperature hits its peak in the late afternoon or early evening and then drops as you become physiologically ready for sleep. The bigger the temperature drop, the deeper the dive into sleep although the change is only about 0.5 – 1 degree.

People with insomnia tend to have less of a temperature drop and therefore less of a dive into deeper sleep. Exercise in the late afternoon or early evening, or a hot bath or hot tub an hour or two before bed warms your core body temperature resulting in a bigger temperature drop by bedtime and a deeper dive into sleep. This is facilitated by a cool sleep environment because your minimum body temperature does not occur until the middle of the night.

Darker is better. Even dim light tends to suppress your natural melatonin levels if your eyes are open. Reduced melatonin levels will tend to delay the onset into sleep. For most people reading helps them wind down before bed even though they are using a light. However, light when you are trying to sleep can be disturbing. We can register some light through our eyelids although we are uncertain about the impact on melatonin levels. However, people with insomnia tend to be very attached to “what light means”. To most, light means something is going on and they should pay attention to it, thus disturbing their sleep. More so, light in the morning usually means it is getting close to time to get up. I find it amusing when patients tell me that they wake up with the sun. In reality, they wake up or “surface” a number of times during the night especially towards morning to see if it is time to get up yet. If it is dark, they go back to sleep. If it is light, they wonder what time it is. Once they start checking the time then they may start thinking about what they are going to do the next day and have trouble returning to sleep. However, it is not light that woke them up. It is light that keeps them awake. The bottom line is that if you want to sleep better, get black-out curtains so you cannot see the light sneaking around them in the morning. Better yet, keep your eyes closed until the alarm goes off. The only reason to open your eyes is to gather and process data about your environment when you should be sleeping.

Quiet is generally better too although people used to some background noise may find some environments too quiet. Then they start to hear their pulse or the house creaking and remain vigilant. It is usually the sudden noises like the neighbor’s vehicle starting, the distant dog barking, or the children or spouse getting up to go to the bathroom. Nothing you need to deal with, but your vigilant mind still disturbs your sleep. Sometimes the best thing is a constant, masking white noise like a fan near your head with or without ear plugs. You end up “insulated” from your environment. Because you can’t distinguish outside sounds anymore you eventually give up trying to and then relax and fall asleep. Some people are uncomfortable or feel insecure if they cannot hear what is going on in the house during the night. This is one of the reasons why they have insomnia. They choose not to let their guard down at night. Perhaps their children need to be older before they can relax during the night. Perhaps they need to have confidence in their physical security with a house alarm or a big dog. The bottom line is that you have to figure out what you need to feel secure at night so you don’t have to be vigilant. Once that is in place you can relax and learn to sleep better.

Avoid caffeine, nicotine and alcohol – Caffeine is a stimulant found in coffee, tea, green tea, all energy drinks and some sodas. It is found in medications like 222's, Tylenol #1, and Tylenol #3. The half life of caffeine is around 6 hours. If you have 2 cups at 9 am, there may still be about half a cup worth of caffeine in your body at 9 pm. Although you may still be able to sleep, it surely does not help your sleep. Caffeine taken later than noon is likely to have a significant affect on your sleep quality.

Nicotine has a fairly complicated effect in the body. In general, the net effect is stimulation although it can have some relaxing effects as well. The effect is felt within seconds and the half life is about 2 hours. Because it is a stimulant it can make it harder to sleep. Because it is highly addicting, withdrawal effects can make it harder to sleep. Some more highly addicted smokers will even wake up at night to smoke thus reinforcing the habit of waking up during the night.

As mentioned earlier in this article, although alcohol is sedating and can help you fall asleep, it metabolizes at the rate of about a drink an hour. As it wears off there is a rebound alerting effect that disturbs sleep. Alcohol suppresses REM sleep. As it wears off there is a rebound increase in REM with more vivid and sometimes disturbing dreams. Alcohol causes more relaxation in your pharyngeal muscles resulting in a greater tendency to snoring and [*obstructive sleep apnea*](#). Because alcohol is sedating, it takes longer for your brain to wake up from an apnea resulting in longer apneas and bigger drops in oxygen. This is a potentially dangerous scenario in people with significant obstructive sleep apnea especially if they have underlying heart disease.