



# PharmaZzz

Non-Medication Therapy for Insomnia

Patient Workbook

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## What is Non-Medication Therapy for Insomnia?

Non-Medication Therapy for Insomnia (NMTi) is a method for treating insomnia, or problems with sleeping, by making changes to habits and thoughts that have a negative effect on sleep. Research has shown that NMTi may work better than sleep medications for treating insomnia especially long-term insomnia.

Insomnia lasting more than three months is often caused by poor sleep habits, false beliefs about sleep and/or excessive worry about sleep. NMTi works by teaching people how to change these habits and unhelpful thoughts. Throughout the program you will learn how to develop good sleep habits, understand how your beliefs and attitudes can affect your sleep, and how to develop a regular sleep pattern. Your pharmacist can help guide you through this program.

### Sleep

Throughout the night, our sleep goes through a number of stages. The first three stages include the lighter stages of sleep, N1 and N2, as well as the deepest stage of sleep, N3. The last stage of sleep involves rapid eye movement (REM) and is the stage where dreaming occurs. An average adult enters REM sleep about 70-100 minutes after falling asleep. Once we have gone through N1 to N3 and REM sleep, we briefly wake up before starting over again with the first stage. Depending on how long one sleeps, this cycle repeats about four to six times over the night. Most of our deep sleep occurs during the first two rounds. REM sleep gets longer as the night goes on.

#### *How much sleep do we need?*

The amount of sleep we need depends on a number of factors. These include our biological clock, body temperature and age. Our biological clock decides if we are normally early or late risers and is largely affected by the sun. This is why we often get tired earlier in the evening during winter time when it gets dark earlier. The rise and fall of our body temperature throughout the day also affects how sleepy we feel, with a fall in temperature just before bed and a rise in temperature in the morning. As we age, the amount of sleep we need and quality of sleep change. We often experience deeper and more satisfying sleep in our younger years while

shallower sleep becomes more common in our later years. As all of these factors can be different for different people, there is no standard for how much sleep we need. Some people may only need five hours while others may need more than nine hours.

### Insomnia

Insomnia is a common health problem affecting an estimated 3.3 million Canadians. It is generally defined as a difficulty falling asleep or staying asleep. If your main problem is falling asleep, you may have sleep-onset insomnia, whereas if your main problem is staying asleep, you may have sleep-maintenance insomnia. Some people have mixed insomnia and have difficulties both falling and staying asleep.

People with insomnia also often have complaints the next day, such as being tired and / or irritable, having headaches or having difficulty concentrating at work or school.

#### *What Causes Insomnia?*

A few bad nights of sleep every now and then are normal for everybody throughout their lifetime. For some people, however, a few bad nights can turn into months and years of insomnia.

## Quiz: What Type of Insomnia Do You Have?

1. I have trouble:

Falling asleep  Staying asleep  Both

2. During the night I am most often kept awake by:

Noise  Light  Racing thoughts  Worries  Bodily pain  Other: \_\_\_\_\_

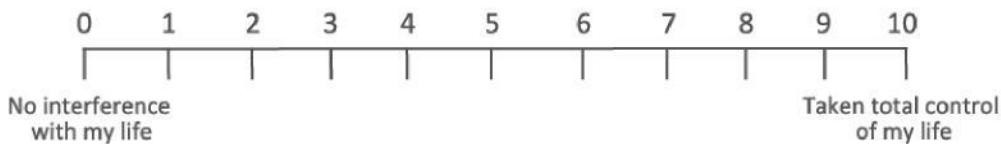
3. I have had insomnia for \_\_\_\_\_ (years/months/weeks) and I have troubles sleeping \_\_\_\_\_ nights per week

4. This means that I have experienced insomnia for \_\_\_\_\_ nights.

5. After a bad night I feel:

Tired  Fatigued  Irritable  Decreased concentration  Other: \_\_\_\_\_

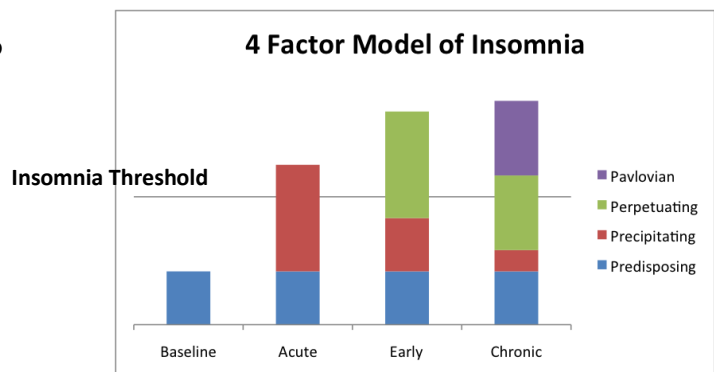
6. On a scale of 0-10, I feel the severity of my insomnia is:



Four factors are thought to be involved in the development of chronic insomnia: predisposing, precipitating, perpetuating and Pavlovian. Predisposing factors are things that increase your risk of developing insomnia, such as being older or female. Precipitating factors are events that initially cause the insomnia, such as an illness or new job. Perpetuating factors are the things we do to deal with a bad night's sleep, such as sleeping in. Pavlovian factors are habits that are learned over time, such as feeling awake when you go into the bedroom because you are used to watching television in the bedroom.

When we first develop sleep disturbances, predisposing and precipitating factors are the main issues. For example, starting a new job may cause short-term sleep problems, but as you adjust to the job your sleep patterns will usually return to normal. However, when sleep problems

continue for a long time, it is most often perpetuating and Pavlovian factors that are responsible. For example, if you tried to correct your sleep problem by taking naps, going to bed early, and sleeping in, it is no longer the new job that is responsible for your insomnia, now it is the changes you have made in your behaviour which are "perpetuating" the problem.



<b>Predisposing Factors</b>
<ul style="list-style-type: none"> <li>• <b>Being female</b></li> <li>• <b>Over 60 years of age</b></li> <li>• <b>Mental illness</b></li> <li>• <b>Highly anxious personality</b></li> <li>• <b>High energy personality</b></li> </ul>
<b>Precipitating Factors</b>
<ul style="list-style-type: none"> <li>• <b>Birth of a child</b></li> <li>• <b>Death of a loved one</b></li> <li>• <b>Stress of new job</b></li> <li>• <b>Onset of new illness</b></li> </ul>
<b>Perpetuating Factors</b>
<ul style="list-style-type: none"> <li>• <b>Spending extra time in bed</b></li> <li>• <b>Napping during the day</b></li> <li>• <b>Irregular wake times and bedtimes</b></li> </ul>
<b>Pavlovian Factors</b>
<ul style="list-style-type: none"> <li>• <b>Activities other than sleep in bed – watching TV, using smartphones, reading, etc.</b></li> <li>• <b>Working or thinking about work in the bedroom</b></li> <li>• <b>Worrying about sleep</b></li> </ul>

## Sleep Medications

Sleep medications can be used for short periods of time but they are not recommended for long-term use. Long-term use of sleep medications can result in physical and mental dependence and increase the risk of motor accidents and falls. Tolerance may also develop to sleep medications, making them not work as well over time. Ideally, sleep medications should be taken only when needed and for no longer than two weeks at a time.

### ***Types of Sleep Medication (also known as hypnotics)***

There are different kinds or classes of medications used to help people sleep. The most commonly used classes include benzodiazepines, non-benzodiazepine hypnotics, antidepressants, and antipsychotics. Popular nonprescription products include antihistamines, melatonin and valerian.

#### **Benzodiazepines**

Benzodiazepines (BZDs) are one of the most commonly prescribed medications for sleep. They may also be used to treat anxiety. Tolerance may develop with as little as four weeks of regular use. This means that the drug becomes less effective over time and you may have to take more of the drug to get the same effect. When quitting benzodiazepines, you should slowly decrease the amount you're taking to avoid withdrawal effects. BZDs may also interfere with your sleep, suppressing stage N3 (deep sleep) and REM sleep during which dreaming occurs. This may result in less satisfactory sleep.

#### ***BZD Sleep Medications:***

- Flurazepam (brand name Dalmane),
- Temazepam (brand name Restoril),
- Triazolam (brand name Halcion),
- Oxazepam (brand name Serax),
- Clonazepam (brand name Rivotril),
- Lorazepam (brand name Ativan).

**Possible side effects:** hangover effect (with some of the BZDs), dizziness, drowsiness, memory loss, not performing as well as usual at work or school.

**Withdrawal effects:** anxiety, rebound insomnia (worsened sleep), agitation, and in severe cases, seizures

## **Non-BZD Medications for Insomnia**

Non-BZD hypnotics work similarly to benzodiazepines but may not interfere with your sleep patterns as much and may have a lower risk for withdrawal effects and dependency.

Because of this, they are becoming increasingly popular. The exact risk of withdrawal effects is unknown, therefore it is recommended that these medications also be slowly reduced before stopping them if they have been used for a long time. Similar to benzodiazepines, you may also develop a tolerance to these medications after using them for a long time.

### **Non-BZD Sleep Medications:**

- Zolpidem (brand name Sublinox),
- Zopiclone (brand name Imovane)

**Possible side effects:** Difficulty waking fully in the morning, bitter taste, dry mouth

**Withdrawal effects:** May be similar to benzodiazepines

### **Antidepressant Sleep Medication**

Antidepressants are usually used to treat mood disorders, such as depression. Some antidepressants have a sedating effect and are used to treat sleep problems. Tolerance to antidepressants may be less than with other sleep medications and they may be helpful for treating insomnia in patients with co-existing medical conditions. However, with the exception of trazodone and doxepin, there is little evidence supporting the use of antidepressants in insomnia patients who are not depressed. Due to the number of side effects that can occur when using antidepressants, they are not recommended for long-term use for insomnia.

### **Antidepressants Used for Insomnia:**

- Amitriptyline (Elavil),
- Doxepin (Silenor, Sinequan),
- Trazodone (Desyrel)

**Possible side effects:** Confusion, constipation, dry mouth, irregular heart beat, weight gain, dizziness, blurred vision, nausea

### **Antipsychotic Sleep Medication**

Antipsychotics are not approved by Health Canada for treating insomnia. However, due to their sedating effects many doctors have begun prescribing certain antipsychotics for insomnia. These medications may be useful in insomnia patients who would also benefit from other effects of the medicine. However, there is a lack of evidence for the benefit and safety of using these medications only for the treatment of insomnia.

### **Antipsychotics Used as Sleep Medications:**

- Quetiapine (brand name Seroquel)
- Methotrimeprazine (brand name Nozinan)

**Possible side effects:** headache, drowsiness, dizziness, constipation, dry mouth, weight gain

### **Antihistamine Sleep Medication**

Antihistamines are often the active ingredient found in over-the counter non-prescription sleep medications. These are the same medicines that are used to treat allergies. Antihistamines are not recommended for regular use as tolerance is easily developed, making them not work as well after a few days, and side effects are common. They can also interfere with your quality of sleep and may leave you feeling groggy in the morning.

### **Antihistamines Used As Sleep Medications:**

- Diphenhydramine (brand names Benadryl, Benylin, Nytol, Tylenol PM, Advil PM, Sleep-eze)
- Doxylamine (brand name NyQuil)
- Dimenhydrinate (brand name Gravol)

**Possible side effects:** Drowsiness, dizziness, dry mouth, nausea, nervousness, confusion

**Melatonin**

Melatonin is a hormone produced in our bodies. It is responsible for regulating our circadian rhythm, or biological clock. In general, its effectiveness for insomnia is questionable but it may be of benefit in elderly patients who tend to produce less melatonin. Melatonin may also be useful for managing symptoms of jet leg when traveling eastward by at least five time zones. It is a safe medication and may be tried with little risk

**Possible side effects:** daytime drowsiness, headache, dizziness.

**Valerian**

Valerian is an herb sometimes used to treat insomnia. As there are few studies testing valerian, more research is required to prove its effectiveness. It is considered safe to use for up to 28 days but long-term effects are unknown. Valerian seems to be well tolerated but there have been reports of benzodiazepine-like withdrawal symptoms. Therefore, it is recommended to slowly reduce the dose if you have been using it regularly.

**Possible side effects:** headache, stomach upset, mental fog, dry mouth, morning drowsiness

**Hypnotic Tapering Schedule**

Program Week	Dose	Medication-Free Nights?

# Non-Medication Therapy for Insomnia (NMTi)

NMTi consists of five strategies to help you sleep better. Sleep restriction therapy, stimulus control therapy and sleep hygiene are the main components of therapy while cognitive restructuring and relaxation techniques may be optional. These strategies are described in the sections below.

## Sleep Restriction Therapy

You have probably noticed that you do not spend all of your time in bed actually sleeping. You may lie in bed for hours before falling asleep or wake up in the middle of the night, unable to fall back asleep. The goal of sleep restriction therapy is to have you sleep most of the time you are in bed. This is done by limiting the amount of time you are in bed to the average amount of time that you spend sleeping every night. You will be required to keep a daily sleep log (diary) to record the time you go to bed and get up in the morning and how long you are awake while in bed. This information will be used to set your time in bed schedule and track your progress while you are working through the program.

For most people, this means a later than usual bedtime so it is likely you will be more tired during the day at first. Being more tired will help you fall asleep faster and stay asleep throughout the night. Therefore, it is important to follow your bed and wake times no matter how tired you feel. Napping should also be avoided. If you do nap you should push back your bedtime for that night by the length of your nap. For example, if your bedtime is 12:00am and you napped a half hour, you should go to bed at 12:30am that night. In order to help you stay awake until your new bedtime, it is useful to think of activities you can do during your extra time in the evening.

At each session you and your pharmacist will calculate your sleep efficiency (SE) to determine how soundly you are sleeping throughout the night. If your SE is high, meaning you are spending most of your time in bed sleeping, your bedtime will be increased by 15 minutes for the next 2 weeks. It is increased by only 15 minutes

because a larger increase could make your sleep worse again. This procedure is continued until you are sleeping soundly throughout the night and do not feel tired during the day.

### Weekly Time In Bed (TIB) Prescription

Week of Program	TIB Prescription
Two	
Three	
Four	
Five	
Six *	

\* Add additional sessions as needed

### Think of Things You Can Do While Waiting for Later Bedtime

1.
2.
3.
4.
5.
6.



## Stimulus Control Therapy

Have you ever felt very tired in the evening but as soon as you went to bed were wide awake? Many people with insomnia are conditioned to associate their bedroom with the feeling of being awake. This can occur because they regularly do activities in the bedroom, such as watching TV or reading, or when they lay in bed awake for long periods of time and experience feelings of frustration, anger, or anxiety while trying to fall asleep. The aim of stimulus control therapy is to re-associate your bed and bedroom with feelings of sleepiness. The following guidelines will help you condition your body to associate your bedroom with sleep, which will make falling asleep easier in the future.

While practicing stimulus control, it is important **not** to watch the clock as this can interfere with your sleep and cause anxiety. If you find yourself 'trying' to fall asleep, it is best to leave the bedroom, especially if you feel anxious or frustrated. Avoid eating food and smoking during this time as that may cause you to wake up later on. As in sleep restriction therapy, it is a good idea to have activities planned for when you are awake during the night. This should be something quiet and relaxing e.g. reading magazines, listening to music, relaxation exercises (see page. 20).

### ***Dealing with Excessive Daytime Sleepiness***

During the first week or two of the program it is likely that you will have some daytime sleepiness. There are a number of ways that you can deal with excessive daytime sleepiness if it is a concern:

1. Begin sleep restriction therapy over a weekend, long weekend or time when you don't have other commitments.
2. Begin sleep restriction during a vacation or time taken off work.
3. Use exercise and caffeine during the day to keep you awake. However, avoid exercising within three hours of bedtime and caffeine within six hours of bedtime.

### **Stimulus Control Guidelines**

**Do not go to bed until your prescribed bedtime regardless of how sleepy you feel.**

**If you find yourself unable to fall asleep, get up and go into another room. Stay up until you feel sleepy - 30, 60 or 120 minutes.**

**Get up at the same time every morning, regardless of how well you slept the previous night**

**Use the bed or bedroom only for sleeping or sexual activity**

**Avoid daytime napping**

## Sleep Hygiene

The things you do during the day as well as the environment you sleep in can have a large impact on your sleep. Take the quiz on the following page to see if any of your daytime activities may be interfering with your ability to sleep at night. If you respond 'yes' to any of the questions, see the corresponding sleep hygiene guideline.

## QUIZ: Sleep Hygiene / Bedroom Environment

1. When you are tired, do you go to bed early and /or sleep later in the morning?  
 Yes  No
2. Do you get out of bed at a different time most days of the week?  
 Yes  No
3. Do you spend most of your day not being physically active?  
 Yes  No
4. Are bright lights or noise distractions during the night?  
 Yes  No
5. Is your bedroom excessively cold or warm during the night?  
 Yes  No
6. Do you ever go to bed hungry?  
 Yes  No
7. Do you drink liquids before going to bed?  
 Yes  No
8. Do you drink or eat large amounts of caffeine during the day?  
 Yes  No
9. Do you often drink alcohol in the evening?  
 Yes  No
10. Do you find yourself worrying after you go to bed?  
 Yes  No
11. Do you smoke before bedtime or during the night?  
 Yes  No
12. Do you often find yourself trying to fall asleep after going to bed?  
 Yes  No
13. Do you find yourself watching the clock throughout the night?  
 Yes  No
14. Do you nap during the daytime?  
 Yes  No

## Sleep Hygiene Guidelines

- 1. Limit the amount of time spent in bed to the amount you need to feel refreshed.** Spending longer amounts of time in bed than necessary can result in more shallow and interrupted sleep.
- 2. Get up at the same time every day.** This will help your body regulate its sleep-wake cycle and make falling asleep easier.
- 3. Exercise regularly.** Exercise makes falling asleep easier and makes your sleep deeper. Avoid exercising within three hours of your bedtime.
- 4. Make sure your bedroom is comfortable and free from light and noise.** This will reduce the likelihood of you waking up during the night.
- 5. Make sure your bedroom is a comfortable temperature during the night.** Excessively warm or cold sleep environment may disturb sleep.
- 6. Eat regular meals and do not go to bed hungry.** Hunger may disturb sleep. A light snack at bedtime (especially carbohydrates) may help sleep, but avoid greasy or “heavy” foods.
- 7. Avoid excessive liquids in the evening.** Reducing liquid intake will minimize the need for nighttime trips to the bathroom.
- 8. Cut down on all caffeine products.** Caffeinated beverages and foods can cause difficulty falling asleep, awakenings during the night, and shallow sleep. Even caffeine early in the day can disrupt nighttime sleep.
- 9. Avoid alcohol, especially in the evening.** Although alcohol helps tense people fall asleep more easily, it causes awakenings later in the night.
- 10. Don't take your problems to bed.** Plan some time earlier in the evening for working on your problems or planning the next day's activities. Worrying may interfere with falling asleep and produce shallow sleep.
- 11. Smoking may disturb sleep.** Nicotine is a stimulant. Try not to smoke during the night when you have trouble sleeping.
- 12. Do not try to fall asleep.** This only makes the problem worse. Instead, turn on the light, leave the bedroom, and do something different like reading a book. Return to bed only when you are sleepy.
- 13. Put the clock under the bed or turn it so that you can't see it.** Clock watching may lead to frustration, anger, and worry which interferes with sleep.
- 14. Avoid naps.** Staying awake during the day helps you to fall asleep at night.

Sleep Hygiene and Bedroom Environment Task List	
<b>Things I Need To Stop Doing</b>	
1.	
2.	
3.	
<b>Things I Need To Start Doing</b>	
1.	
2.	
3.	
<b>Things I Need To Change</b>	
1.	
2.	
3.	

## Cognitive Restructuring

Many people with insomnia have thoughts about their sleep that may worsen their sleep problems. Thoughts are very powerful and they can change our feelings and behaviors. Sometimes our thoughts may make things seem much worse than they actually are. This can lead to unhealthy sleep habits because of unfounded fears about what will happen during the day if we don't get a good sleep at night, as well as increasing anxiety and frustration in the bedroom.

### ***Negative Sleep Thoughts***

Negative sleep thoughts (NSTs) are any thoughts that cause undesirable emotions regarding sleep, bedtime and the effects of sleep loss. These include feelings of anxiety and frustration that can lead to further sleep loss. The aim of

cognitive restructuring is to identify NSTs and change these thoughts into more accurate and positive thoughts.

### ***Underlying Fears***

Negative sleep thoughts are usually associated with an underlying fear, or something of which we are unconsciously afraid. This fear is the main source for the feelings of anxiety, anger and frustration. For example, the statement "if I don't sleep tonight I will be grumpy tomorrow" may actually mean "if I don't sleep tonight I won't get along with my wife," which may be associated with the underlying fear of being left by your wife. Identifying underlying fears is important in order to understand our emotions.

## ***Facts About Sleep and Insomnia***

1. Needing eight hours of sleep is a myth. The amount of sleep required to feel refreshed varies between individual people. Some require only five to six hours of sleep while others may require nine to ten hours. Don't base how much sleep you need on a number but rather on what makes feel good in the morning
2. Taking naps, going to bed early and sleeping in may make you feel better for one night but will make falling asleep the next night more difficult. If you continue to keep making up for bad nights of sleep by taking daytime naps, going to bed early or sleeping in you are supporting your insomnia.
3. While it is possible that long-term lack of sleep can have a negative effect on your health, worrying about this can make your insomnia worse. Instead, try to think of positive ways you can reduce your anxiety about sleep.
4. You can control your ability to sleep through your behaviours and attitudes. It may require effort but the opportunity is there if you are willing to try.
5. When you don't sleep well, you may feel more fatigued the next day. However, it is likely you will still be able to perform your daily activities. Think of other occasions when you slept poorly and still managed to cope just fine through the day.
6. Sleeping pills may make you feel groggy the next day and can actually have a negative effective on daytime functioning. They also reduce the quality of sleep you get after taking them.
7. Lack of sleep may contribute to your bad mood during the day. However, there are many other factors which can affect mood from specific events that occur during the day to underlying mood disorders. Try not to hold your sleep disturbances solely accountably for your mood.
8. It is not necessarily true that sleeping poorly one night means you will not sleep well the following night. If you experience one night of bad sleep you can practice sleep-promoting behaviours to avoid future bad nights.
9. Using a sleep (diary) can help you determine what may trigger a good or bad night of sleep. If you pay attention to your habits you will likely notice trends with your sleep.
10. Many factors influence how we feel throughout the day. Your health, nutrition, stress level and even the weather can all affect your level of functioning. Try not to overemphasize the effects of sleep on your daytime activities.
11. Research shows that non-medication therapy for insomnia can be more effective than sleep medication for treating insomnia. However, it is widely underused as there is a lack of trained clinicians to provide the service. Medications may be effective for short-term but generally become less effective over time.
12. Try not to let insomnia take control of your life. Spending time with friends and family will likely improve your sleep and reduce your stress and anxiety levels.

## ***Recognizing Negative Sleep Thoughts***

The first step in cognitive restructuring is being able to recognize negative sleep thoughts. There are a number of types of negative thoughts. These include all-or-nothing thinking, overgeneralization, catastrophic thinking, and jumping to conclusions. Once you are aware of common types of negative thoughts, it is easier to identify when you may be having a negative sleep thought. Negative sleep thoughts can also be identified by checking in on your emotions. When your emotions turn from positive to negative, it is likely that there is a negative thought behind the change.

**Thought stopping** is a technique that can be used when you have noticed you are having negative thoughts. It involves saying the word “STOP” either out loud or in your head. By saying the word stop, it forces you to bring attention to the current thoughts you are having.

At this point, you can use a technique called **marvelling**, which involves appreciating the emotional tone of your thoughts without buying into them. With cognitive restructuring, we are not trying to stop you from having negative emotions, but rather to bring awareness to the inaccuracy of negative thoughts. Therefore, marvelling is an important part of understanding how certain events make us feel while realizing these emotions may not be appropriate reactions.

## ***Reframing Negative Sleep Thoughts***

Once a negative thought has been identified, the next step is to reframe the thought by assessing its accuracy. Writing the thought down is the first step as it allows us to view our thoughts more objectively. After writing a thought down, a number of techniques can be used to look at the thought more accurately.

### **Common Negative Sleep Thoughts**

1. I know I won't sleep well tonight
2. I'm going to toss and turn and be wide awake
3. It's going to take me forever to fall asleep tonight
4. I'll be a wreck tomorrow if I don't sleep
5. I have to get eight hours of sleep
6. I need to take sleeping pill to sleep
7. My lack of sleep is going to make me sick

### ***Evaluation by Asking Questions***

A thought can be evaluated for accuracy and importance by asking yourself a series of questions.

### **Thought Evaluation Questions**

- What is the evidence for this thought?
- What is the evidence against this thought?
- Is this thought really true?
- Am I overemphasizing a negative aspect of this event?
- What is the worst thing that will happen?
- Is there anything that might be positive about this situation?
- Am I using any common negative thoughts?
- How do I know this situation will turn out this way?
- Is there another way to look at this situation?
- What difference will this make next week, month, or year?
- If I had one month to live, how important would this be?

<b>Categories of Negative Thoughts</b>	
<b>Negative Thought</b>	<b>Example</b>
1. All-or-Nothing thinking: Often using words like “never, “always” and “every”	“I will <b>never</b> fall asleep tonight”
2. Overgeneralization: Making irrational generalizations based on one isolated case	“I failed a test today. I’ll be asked to leave my college because I am stupid.”
3. Catastrophic Thinking: Exaggerating the significance of an event and expecting the worst possible outcome	“I went for my regular physical checkup today and the doctor wants me to get bloodwork done. There must be something seriously wrong with me”
4. Jumping to Conclusions: Involves predicting outcomes before there is enough evidence (fortune-telling) or assuming what others are thinking (mind-reading)	“My boss wants to meet with me this afternoon. He probably thinks I am doing a poor job and wants to fire me”

### ***The “Double Standard” Technique***

We are often much harder on ourselves than we are on others and have unrealistic standards for ourselves. The “double standard” technique involves asking yourself if you would say the same thing to a close friend or family member who was in a similar situation. For example, if you catch yourself thinking that you are going to lose your job if you don’t get a good night’s rest, stop and ask yourself if you would say the same thing to someone else. This technique helps us to identify when we are being unrealistic in our predictions about the effect of poor sleep on our performance the next day.

### ***Reflection***

Another way to evaluate the accuracy of your thoughts is by reflecting on past experiences. This can be done by asking yourself if you have had this experience (e.g., a bad night’s sleep) and what happened after the experience. You might find the reflection worksheet on the next page a helpful way to evaluate your thoughts.

### ***Restructuring Negative Sleep Thoughts***

Once negative sleep thoughts have been identified and evaluated for accuracy, the next step is to change the thought into a more accurate and positive thought. Create a positive mantra by removing negative words and replacing them with more positive words. For example, instead of saying “if I don’t sleep tonight I will lose my job,” replace it with “if I don’t sleep tonight I will still do a good job”.

Ultimately, you may use any approach that you find useful to make positive changes to your thoughts. However, initially it may be helpful to use cognitive restructuring worksheets (example on page 17) to guide you through the process.

## Evaluating Thoughts Through Reflection

Calculate total number of nights with insomnia:

\_\_\_\_\_ average # of nights with insomnia/week **X** \_\_\_\_\_ duration of insomnia in weeks  
 = \_\_\_\_\_ total # nights with insomnia

*Ex: insomnia 5 nights/week X insomnia duration of 6 months (26 weeks) = 130 nights*

Negative Thought	Certainty of event	Probability based on certainty	Actual # of events
<i>Ex: If I don't sleep tonight, I will lose my job</i>	0.8 (I'm 80 % certain this will happen)	0.8 x 130 nights of insomnia = <b>104 times</b> would have lost job if true	Number of times job lost = <b>0</b>



## Cognitive Restructuring Worksheet

### Situation:

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### Emotions: (0–10)

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### Negative Thought:

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### Underlying Fear

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### Categorize the Thought (ex: all-or-nothing, catastrophizing)

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### Evidence for the Thought:

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### Realistic Probability

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### Alternative Thoughts

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### How to Cope

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## Relaxation Techniques

If you find yourself unable to relax when you are going to sleep, relaxation techniques may be useful for you. The purpose of these techniques is to allow the body to be as comfortable as possible while you observe your thoughts and emotions. They should not be used to try to reduce anxiety, as this is more likely to have the opposite effect, that is, increase anxiety. It is a good idea to practice these techniques during the daytime before trying to use them at night. Once you become comfortable with them you can try using them in the evening. If these techniques do not help after a couple weeks, it may be best to stop using them. Three common relaxation techniques are breathing exercises, guided imagery and muscle relaxation. You may also use any other technique you find relaxing.

### ***Diaphragmatic Breathing***

Breathing exercises include diaphragmatic breathing which focuses on breathing with the diaphragm instead of the chest. Breathing from the diaphragm helps people relax and supplies more oxygen to the body through deeper breaths. You can practice diaphragmatic breathing by placing one hand on your stomach and one hand on your chest. Breathing in through the nose and out through the mouth, you should be able to feel your stomach expanding on the inhale and collapsing on the exhale while the chest remains still.

### ***Guided Imagery***

Guided imagery is a relaxation technique that helps people become relaxed and focused by imagining a place, event, or thing that causes feelings of relaxation. It is based on the theory that the mind and body are connected, which is demonstrated by the body's response to the imagination. For example, when instructed to imagine a lemon using all of their senses, people often notice their mouths filling with saliva. You can practice guided imagery by closing your eyes and imagining a place, event or thing that makes

you feel relaxed. You should focus on imagining the look, smell, feel, sounds and tastes that would be encountered. Alternatively, many recordings are available if you prefer to be guided by someone else.

### ***Progressive Muscle Relaxation***

Progressive muscle relaxation involves tightening then relaxing different muscles throughout the body. The goal of progressive muscle relaxation is to identify the feel of muscular tension and learn to let it go. Each muscle group is tightened for 5-7 seconds followed by release of tension for 15-20 seconds. It is important not to rush the release of tension as this is where we learn what it feels like to be relaxed. Each exercise is performed twice before moving on to the next muscle group. Follow the guide on next page.

## Progressive Muscle Relaxation Exercise

<b>1. Feet and calves</b>	Point toes downward
<b>2. Shins</b>	Flex feet upward
<b>3. Thighs</b>	Contract thigh muscles by extending legs
<b>4. Buttocks</b>	Tense and squeeze
<b>5. Stomach</b>	Pull in stomach as much as you can
<b>6. Back</b>	Arch your back while keeping your shoulders
<b>7. Chest</b>	Take a long deep breath, tighten your chest
<b>8. Hands</b>	Squeeze hands into fists
<b>9. Biceps and triceps</b>	Bring forearms up
<b>10. Shoulders</b>	Tighten and squeeze shoulders back
<b>11. Neck</b>	Turn head to the right, then the left, then down
<b>12. Mouth</b>	Open jaw as much as you can, then smile as wide as
<b>13. Tongue</b>	Touch tongue to the roof of your mouth, then the
<b>14. Eyes</b>	Open eyes as wide as you can. Shut eyes tightly
<b>15. Forehead</b>	Raise your eyebrows as high as you can

## Relapse Prevention

Having a bad night of sleep occasionally is unavoidable and it will happen multiple times throughout everyone's life. It doesn't have to turn into months or years of bad sleep again. Remember your sleep patterns are under your control and you can prevent insomnia from becoming a chronic problem by following these guidelines:

1. Go to bed at the same time each night and get up at the same time each morning for at least five days per week.
2. Allow yourself up to two days per week to sleep in but these should be set days, for example, on the weekend.
3. On days that you sleep in, allow only one extra hour of sleep.
4. Never sleep in after a bad night's rest or on a non-scheduled day.

If you do encounter a stretch of bad nights, use the following techniques to get your sleep back on track and prevent your insomnia from recurring.

1. Try to figure out what triggered the sleep disturbance. There is likely a cause for your sleep problem. If you identify the cause, you may be able to treat your sleep problems by dealing with the cause. It is also useful to learn what your triggers are in order to avoid these situations in the future.
2. Do NOT compensate for sleep loss by going to bed early, sleeping in or napping. If you begin doing this after bad nights of sleep it can start the cycle of perpetuating insomnia. (See page 4.) If you have a bad night of sleep, continue to get up and go to bed at your regular times. Also avoid napping during the day. You may be

tired during the day but you will sleep more soundly the following night. If you try to make up for your sleep loss you may have troubles falling asleep the next night and begin to feel anxious and frustrated.

3. Begin practicing stimulus control procedures. This includes only engaging in sleep and sexual activity in the bedroom, only going to bed when you're tired and leaving the bedroom if you can't fall asleep. It is important to make sure you don't start associating your bedroom with the feeling of being awake again.
4. If sleep disturbances continue for more than one week, consider starting sleep restriction therapy. It may be possible that you have begun spending too much time in bed. Use a sleep log to determine your average total sleep time and restrict your time in bed to this value.

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