Insomnia patient handout
Adapted from Uptodate and REFRESH clinical trial.

The following are different techniques for improving insomnia (sleep hygiene, stimulus control, progressive muscle relaxation and sleep restriction).

Sleep hygiene

Sleep hygiene refers to actions that tend to improve and maintain good sleep.

**During the Day**
- Exercise regularly. Even a 20-minute walk during the day can help you relax. Don't exercise in the evening.
- Limit naps if you can. If you must nap, limit your nap to 30 minutes.

**Before Bedtime**
- Avoid alcohol, caffeine, chocolate, and nicotine in the late afternoon and evening.
- Limit liquids in the evening before going to bed.
- Turn off the TV one hour before bedtime. Listen to quiet music or take a warm bath.
- If you worry or "can't turn your brain off" when you try to sleep, make a list of things you need to do before you go to bed so you can stop thinking about them.

**At Bedtime**
- Go to bed and get up at the same time every day, even on weekends.
- A bedtime snack of warm milk, turkey, or a banana may make you sleepy.
- Use your bedroom only for sleep and sex, no reading, watching TV, or working.
- If you are a "clock watcher," turn your clock so that you cannot see its face.
- To fall asleep, lie in the position that you normally find yourself in when you wake up.
- Go to bed at the same time with your spouse.

**If you can’t fall asleep**
- If you haven't fallen asleep in 15 minutes, go to another room. Listen to quiet music. Avoid things that stimulate your mind (TV, exciting books). Reading self-help books may help you feel drowsy. Go back to bed when you feel sleepy. If you still can't fall asleep, get up again and repeat as necessary.
- If you wake up during the night, don’t worry about it, this is very common. If you can’t get back to sleep, follow the procedure above.
- Try journaling. Write down what you did today and your plans for tomorrow. Also try thinking of three specific things that you are grateful for that happened today.
Stimulus Control

People with insomnia may associate their bed and bedroom with the fear of not sleeping or other arousing events, rather than the more pleasurable anticipation of sleep. The longer one stays in bed trying to sleep, the stronger the association becomes. This perpetuates the difficulty falling asleep. Stimulus control therapy is a strategy to disrupt this association.

1. Go to bed only when sleepy.
2. Do not watch television, read, eat, or worry while in bed. Use bed only for sleep and sex.
3. Get out of bed if unable to fall asleep within 20 minutes and go to another room. Return to bed only when sleepy. Repeat this step as many times as necessary throughout the night.
4. Set an alarm clock to wake up at a fixed time each morning, including weekends.
5. Do not take a nap during the day.

Progressive Muscle Relaxation

Progressive muscle relaxation may be done before each sleep period

Progressive relaxation is based upon the theory that an individual can learn to relax one muscle at a time until the entire body is relaxed. Beginning with the muscles in the face, the muscles are squeezed gently for one to two seconds and then relaxed. Then, going top to bottom, the same technique is used for the jaw and neck, upper arms, lower arms, fingers, chest, abdomen, buttocks, thighs, calves, and feet. This cycle can be repeated for approximately 45 minutes, if necessary.

Sleep Restriction Therapy

Some people with insomnia have long awakenings during the night and some try to deal with their poor sleep by staying in bed longer in the morning to "make up" some of their lost sleep. This additional sleep later in the morning may make it more difficult to fall asleep that night, resulting in the need to stay in bed even longer the following morning. Sleep restriction therapy breaks this cycle by limiting the total time allowed in bed, including naps and other sleep periods outside of bed which then increases the drive to sleep. This knits together fragmented sleep and improves sleep efficiency (the percentage of time in bed that you are asleep), allowing for a deeper and more restful sleep. The actual length of sleep is not as important as the depth of sleep, many people are refreshed after only 5 hours of sleep.

Sleep restriction therapy involves decreasing the time spent in bed so that you match the time in bed to the time asleep. You can guess, but it is best to do a sleep diary to work it out, and until you are sleeping well. The first few weeks are difficult, stick with it and you brain will re-learn how to deep sleep again. This initial highly restricted period is temporary and is often around two weeks long. It is important to follow the schedule every single night.

Baseline

You are currently going to bed at around __________, you are getting out of bed around __________, and only actually sleep for __________ hours.
You are approximately _________% efficient, ideally you want 85-90%.
Weeks 1 and 2

For the first two weeks of the programme your hours allowed in bed per night is ___________
Your bedtime is ___________ and your time out of bed is ___________
Note: The amount of time in bed is initially set to the amount of time asleep at the baseline step.

**Instructions**

1. Follow your lights out and get out of bed times prescribed above.
2. Do not take sleep medication or herbal sleep preparations.
3. Avoid naps as this can affect the effectiveness of the sleep protocol.
4. Try and think of quiet activities you can do in the extra time you are awake in the evenings (i.e., don’t listen to loud music or work on the computer as these type of stimulating activities will wake you up when you want to be winding down.
5. Limit use of caffeine, alcohol, cigarettes and other substances that can affect sleep.
6. Keep a DAILY SLEEP DIARY for the next two weeks, to record your sleep pattern.
7. Please be careful with driving or operating machines as your coordination can get impaired for the next few days.
8. You may allow an extra hour in bed on the weekends if absolutely necessary but this may delay the programme.
9. You have to be out of bed by _____ regardless of the length or quality of your sleep that night.

Weeks 3 and 4.

At this point you may adjust the time in bed. If you are sleeping very efficiently then you may increase the time in bed. If on the other hand you sleep starts to become less efficient then you may decrease the time in bed to retrain your brain again. Follow the recommendations below for the adjustment:

<table>
<thead>
<tr>
<th>Sleep efficiency</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤85%</td>
<td>restrict time in bed by 30 min</td>
</tr>
<tr>
<td>85-90% and feeling good during the day</td>
<td>no change</td>
</tr>
<tr>
<td>85-90% and sleepy during the day</td>
<td>allow 30min extra time in bed</td>
</tr>
<tr>
<td>&gt;90%</td>
<td>increase time in bed by 30min</td>
</tr>
</tbody>
</table>

Sleep efficiency is calculated by taking the time asleep and dividing by the time in bed. E.g. time asleep of 4 hours and time in bed of 5 hours equals an efficiency of 80%.

Weeks 5+

From this point follow the below flow chart on the next page to adjust you sleep at every two weeks (week 5, 7, 9 etc). Do not adjust more frequently than this. We are aiming for “good sleep,” as per the below definition.

**Good Sleep Definition:**
- Mostly taking less than 30 minutes to fall asleep
- Fragmented sleep is not usually a major problem
- Usually not waking for longer than 30 minutes during the night
- Feeling reasonably refreshed the next day/No major impairment on daytime functioning because of a poor sleep
HOW WELL ARE YOU SLEEPING?

Sleeping has improved?

Sleeping well (see 'Good Sleep' definition)

Programme has helped to improve sleep
Functioning well the next day after a night's sleep

Continue sleep schedule as is

Falling asleep in less than 30 minutes and awake for less than 30 minutes overnight but impairment in daytime functioning the next day (nodding off, sleepy, fatigued)?

Adjust schedule by adding 30 minutes to the time allowed in bed (by adjusting bed time rather than waking time)
I.e. If your bedtime is currently 11:30 pm each night, adding 30 minutes to your allowance means your bedtime will now become 11 pm each night

Sleeping has improved but not quite enough? I.e. Taking more than 30 minutes to fall asleep at night and/or awake for longer than 30 minutes during the night

Adjust schedule by reducing time allowed in bed by 30 minutes (by going to bed later, rather than getting up earlier)
Do not reduce time in bed to less than 5 hours
I.e. If your bedtime is currently 11:30 pm each night, reducing your bedtime allowance by 30 minutes means your new bedtime each night will be 12 midnight

Sleeping has not improved?

No change in your sleeping?

Adjust schedule by reducing time allowed in bed by 30 minutes (by going to bed later, rather than getting up earlier)
Do not reduce time in bed to less than 5 hours
I.e. If your bedtime is currently 11:30 pm each night, reducing your bedtime allowance by 30 minutes means your new bedtime each night will be 12 midnight

Sleeping worse - feeling sleep deprived the next day (nodding off, sleepy)?

Adjust schedule by adding 30 minutes to the time allowed in bed (by adjusting bed time rather than waking time)
I.e. If your bedtime is currently 11:30 pm each night, adding 30 minutes to your allowance means your bedtime will now become 11 pm each night