

I-CAN SLEEP: Cognitive-Behavioural Therapy for Individuals with Insomnia and CANcer

Chapter 3

In this chapter you will:

- ◆ Review your progress using sleep restriction procedures and adjust sleep time.
- ◆ Learn stimulus control procedures as a means of re-establishing a positive association between your bed and sleeping

Goal for the chapter:

- 1) Master the technique of stimulus control

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Review Your Progress with Sleep Restriction

By this time, you will be into your second week of sleep restriction. Many people find this time very hard. You may be finding it difficult to stick to the sleep restriction rules. You may feel sleepier during the day than before you started. Understand that these are all natural reactions to using sleep restriction; changing old habits is hard. However, always remember that a little inconvenience now is a small hardship for long-lasting improvement in your sleep. Think about this procedure on a weekly basis and don't worry about whether the inconvenience will last forever because it won't.

Your sleep onset latency will probably shorten for most nights as well, since you are probably falling asleep soon after you allow yourself to go to bed. The daytime sleepiness you may be experiencing will gradually go away as you start to increase your time in bed and get a set routine. The next set of procedures will help you to stick with sleep restriction.

STIMULUS CONTROL PROCEDURES: CHANGING SLEEP HABITS FOR THE BETTER



Introduction to Stimulus Control

Stimulus control was developed by Dr. Richard Bootzin in 1972 and is now one of the most accepted treatments for insomnia. Although it can be used alone, stimulus control works best in conjunction with sleep restriction.

Stimulus control procedures have one primary objective: to re-establish and strengthen the association between sleeping and your bed. Many habits people have are incompatible with maintaining a regular and satisfying sleep routine. We reviewed some of these at the beginning of the last chapter (napping in the afternoon, using the bed for things other than sleep, etc.). For people with chronic sleep problems, the bed and bedroom are often associated with activities other than sleeping. The goal of stimulus control is to get you to phase out as many of these activities as possible. Since this may be difficult to do at first, we will provide you with tips and alternative activities to help you achieve your goal.

When reading, please don't feel as though any of your present habits or lifestyle choices are being judged. As well, don't feel as though you are just being told what to do without thinking about it. It is important that you explore these procedures on your own and test how well they work for you and why. We know, for example, that simply watching TV in bed is not enough to cause or even sustain long-term sleep disturbances. There are lots of people who can regularly watch TV, or nap during the day and still have satisfying sleep at night. Research shows, however, that most people with chronic insomnia tend to engage in many of these behaviours on a consistent basis. Furthermore, the fact that stimulus control works so well to improve sleep suggests that these behaviours are partially responsible for the poor sleep quality in some individuals.

It doesn't matter how your current sleep routine developed, all that matters now is that you are committed to changing your routine in an effort to achieve more satisfying sleep.

Step-by-Step Instructions for Stimulus Control Procedures

Unlike sleep restriction, the application of stimulus control is not guided by a formula. Rather, it is a set of guidelines and instructions on how to break certain habits which may work against good sleep, while at the same time reinforcing other sleep-friendly

behaviours. These guidelines reinforce and build on what you began to learn last week about the technique of sleep restriction. One of the goals of stimulus control is to re-establish and strengthen the association between your bed and sleeping. Table 3.1 summarizes the stimulus control procedures. It may be helpful to place this summary table in a visible area to remind you of the recommendations and the rationale behind each of them. We will go through each of these procedures in detail one at a time:

Step 1: Go to bed only when you are sleepy- There is no reason to go to bed if you are not tired enough to fall asleep. Getting into bed prematurely will only prolong the time you will spend lying in bed awake, getting frustrated. Going to bed early only gives you more time to worry about tomorrow's events, think about unpleasant memories, and ruminate over your sleep problem. All of these strengthen the association between your bedroom and not sleeping when your goal is the opposite.

Tips: If you are having difficulty judging how sleepy you are, you can use this scale to help you.

1	2	3	4	5	6	7
"feeling active and vital; alert; wide awake"	"functioning at a high level, but not at peak"	"relaxed; awake; not at full alertness; responsive"	"a little foggy; not at peak; let down"	"fogginess; beginning to lose interest in being awake; slowed down"	"sleepiness; prefer to be lying down; fighting sleep; woozy"	"sleep onset soon; lost struggle to remain awake"

This is the *Stanford Sleepiness Scale*. You can use it to gauge how sleepy you feel when you are thinking of going to bed. Using the various descriptions at each scale point, find the number that matches how sleepy you are. Generally, you should not think of going to bed unless you are at level 6 or 7 on the scale

Step 2: During your bufferzone, establish a set of regular presleep routines to signal that bedtime approaches. Do these activities in the same order every night. Allow yourself at least 60-90 minutes before bedtime to unwind. - Your goal with this procedure is to develop a ritual set of behaviours that for you clearly separates day and night. Thus, reserve a set of activities to do only before going to bed. Perform these activities every night

until they become a routine. Ensure that none of the activities in your presleep routine is contrary to inducing sleep.

Examples of such **counter-sleep activities** would be:

- (a) having a cup of coffee or tea
- (b) reading stressful or stimulating material
- (c) cleaning the house
- (d) being on the computer

Examples of **good pre-sleep activities** would be:

- (a) taking a warm bath
- (b) laying out clothes to wear for next day
(or any other activity which makes it easier for you to get up in the morning)
- (c) practicing relaxation techniques (to be discussed in more detail in next chapter)
- (d) drinking warm milk
- (e) reading a fiction novel

Tips: Ideally, your presleep routine should consist of mostly sleep-friendly or neutral activities. If your routine consists mostly of neutral behaviours, consider incorporating a few relaxing activities. This can be something as simple as reading a good book, or taking a bath. Ensure that your bufferzone is a time to wind down. In other words, consider activities that will clear any anxious thoughts out of your mind and will gradually put your body into a state of relaxation.

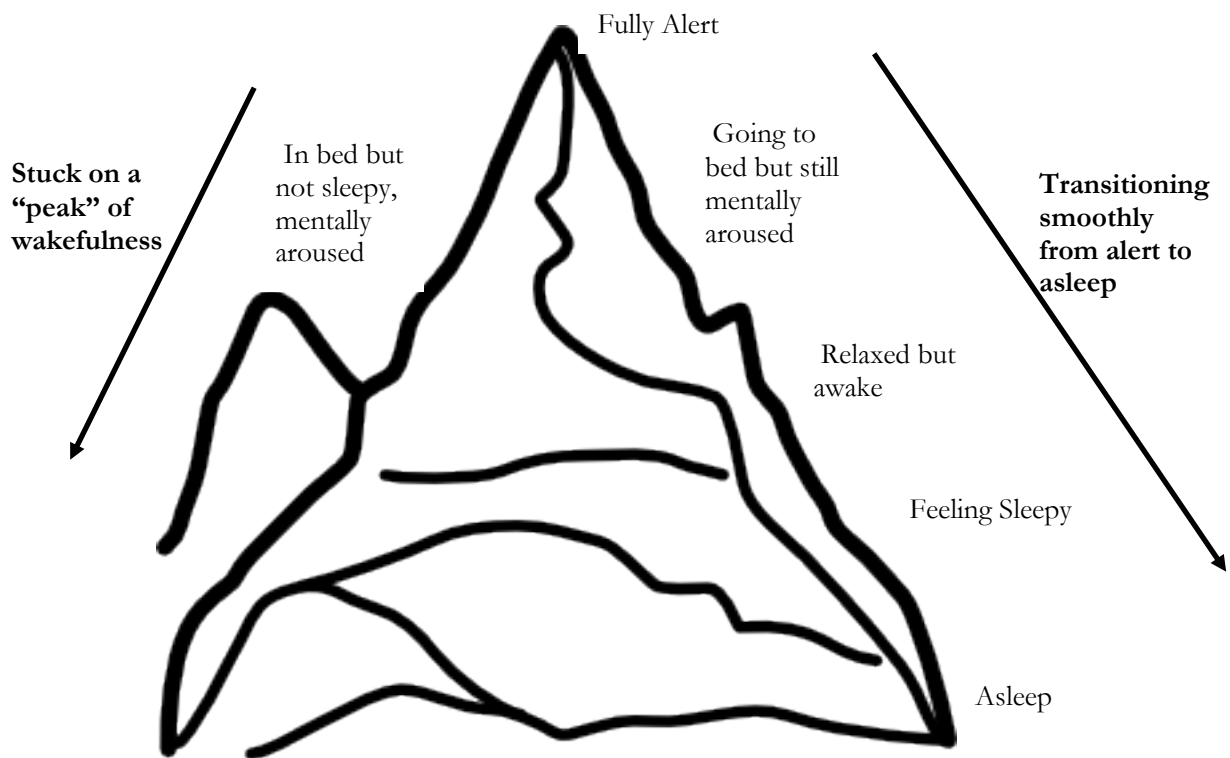
Step 3: Get out of bed if you can't get to sleep within a reasonable time period -

You may ask what is a reasonable time period? Most sleep specialists recommend 20 to 30 minutes, but the fact is that it depends on the individual and what is normal for you. You may choose to use the normal time it took you to fall asleep before your cancer diagnosis--assuming this was a satisfying amount of time-- to guide you in applying this rule. However, this may be unrealistic. Instead, we suggest you use your personal goal for sleep onset latency in Chapter 1. That is, if you indicated on your goal-setting form that your desired time to fall asleep is 25 minutes, then every time it takes you more than this time to fall asleep you should get out of bed.

Tips: One key signal that you should get out of bed is if you feel your mind 'turn on'. Most individuals with insomnia recognize this phenomenon. In the past, once you felt your mind become active, how easy was it for you to fall

asleep? My guess would be that once your mind became active it was next to impossible to fall asleep in a reasonable amount of time. Mental activity is an easy signal to recognize and respond to! It is important that you do not watch the clock every minute when applying this rule. This will only serve to draw your attention to your sleeplessness causing you to be more aroused. If you find yourself watching the clock, then this is probably a sign that you are not tired enough to sleep yet.

Another way to approach this is to think of the process of falling asleep as a continuum rather than an all-or-none event. Falling asleep is like travelling down the slope of a hill--the further down you go, the harder it is for you to get back to the top. After 15 minutes have passed, ask yourself: "Am I more sleepy now than I was 15 minutes ago?" If the answer is no, then get out of bed.



When you get out of bed you should get out of your bedroom altogether to remove yourself from all associations of sleeplessness. Return to your bufferzone activities or engage in some non-stimulating activity while up.

However, do not lie on the couch. Many people find that they can't get to sleep in their bed but when they lie down on the couch they can fall asleep quite quickly. What does this mean? Their bed and bedroom have become associated with an inability to sleep. The couch, on the other hand, starting out as a neutral object, has now become associated with sleeping. You may argue that since getting to sleep is the goal, sleeping on the couch should be all right. Unfortunately, doing so repeatedly will only reinforce the sleep-inhibiting quality of your bedroom and turn your otherwise neutral couch into a positive sleep-promoting object. So, unless you want to spend the rest of your life sleeping on the couch at night, it's probably best to **avoid sleeping on the couch** as much as possible.

Go back to bed only when you start to feel sleepy. Think of the mountain slope example again and the strategy of asking yourself: "Am I more sleepy now than I was 10 minutes ago?"

Step 4: **Repeat the procedure described in Step 3 (leaving the bed) every time you can't get to sleep in a reasonable amount of time after awakening throughout the night.** Following this rule is especially important since waking up from sleep is a commonly reported problem. This is also one of the most demanding rules to follow. Admittedly, getting out of your warm comfortable bed is difficult to do at 3:00 a.m.. However, just remember that there's no point to lying in bed if you are not sleeping.

Tips: To make it easier to get out of bed, try the following tricks: (1) Leave a warm bathrobe and pair of slippers at the foot of your bed so that exposing yourself to the cold room air will not be a deterrent to getting up; (2) plan to have your non-stimulating activities ready and available (e.g., put a movie in the DVD player, book on the table, etc.); (3) avoid clock watching to prevent from getting anxious or distressed at the thought of having to get up at an irregular hour.

When you get out of bed, make sure you don't return until a reasonable time has elapsed. As a rule-of-thumb, stay out of bed for at least 25 minutes. Try to follow this rule even if you think you can fall asleep before 25 minutes have elapsed. Don't confuse feeling fatigued with feeling sleepy. Getting out of bed at 3:00 a.m. may leave you feeling run down or sluggish, but this doesn't always translate into feeling sleepy. Also remember that the longer you stay up and prolong wakefulness, the faster sleep will come when you do get into bed.

Step 5: Do not use the bed or bedroom for any activity other than sleep (and sex). The reason for this rule is to get you to associate your bedroom with sleeping. Adhering to this rule will help you to break the association between your bed and not sleeping, and reduce the feelings of frustration, anxiety, and of helplessness that may have plagued you. In essence, your goal is to make your bed a friend rather than an enemy.

Tips: Another way to look at this rule is to think in terms of developing positive sleep *habits*. Most of the habits people have are formed by developing strong associations developing between a specific environment and a set of behaviours. For example, have you ever walked into the kitchen and suddenly felt hungry? The feeling gets even stronger when you open the refrigerator door! So, what is your response to this feeling? Probably you make yourself something to eat. This is because going to the kitchen and getting something to eat is a habit for most people. Being in the kitchen environment brings on feelings of hunger and serves as the cue or *stimulus* for a set of behaviours to occur (i.e., making something to eat).

Think of this example as a model for what you want to achieve with the stimulus control procedure. For people who sleep well, their bed acts as a cue to feel sleepy and fall asleep quickly (think of those people who tell you that they fall asleep as soon as their head hits the pillow). So, your goal is to see if you can reach the point where you walk into your bedroom and feel sleepy. The way to do this is to not do anything else in your bedroom other than sleep¹. Following the next rule will also aid in this.

Step 6: Get up at the same time every morning - Set your alarm clock for a specific time and get out of bed when it goes off. Do this regardless of how much or little you slept, and on both weekdays and weekends.

The reason for this procedure comes from scientific research showing that most animals, including humans, have an internal biological clock which regulates how much time we spend sleeping and how much time we spend awake for every 24-hour period. We introduced the concept of circadian rhythm in Chapter 2 ("circadian" is latin for 'about a day').

Circadian rhythms take some time to develop but once they do, they are a powerful force in our need to sleep. When an individual tries to compensate

for a poor night's sleep with bedrest and napping, the sleep rhythm is disrupted even more. You can see how a vicious cycle of disrupted sleep, fatigue, and napping can develop.

To help your circadian sleep rhythm return to a more regular cycle, it is important to minimize the number of disruptions to that rhythm. Maintaining a regular rising time is one important step towards doing this. Another way to think of this is to imagine that a regular wake-up time is an *anchor* which your otherwise irregular sleep rhythm can hold on to.

Tips: This can be another challenging rule to follow, particularly if you are currently off work and don't have regular daytime activities. However, this makes following this rule even more important because the temptation to stay in bed is greater when you have no job or other activity which takes up the normal 'business' day. To overcome the temptation of staying late in bed, you might consider planning a regular activity every morning after you get up at your scheduled time. For example, plan your daily stretching exercises or a morning walk for after you get out of bed. If you do any volunteer work or other out of home activity, arrange it to be in the morning. These are just suggestions and your own schedule and personal interests will determine how you may wish to approach this problem.

Step 7: **Avoid daytime napping** - The reasoning behind this rule is straightforward: basically, the longer you stay awake during the day, the easier sleep should come at night. Studies have shown that the amount of time people spend awake during the day can predict how long it will take people to fall asleep, and how long they will stay asleep, based on sleep pressure. For example, someone who is active for 15 hours of the day will take less time to fall asleep at night than if they were up for only 10 hours.

In addition to prolonging the onset of sleep, a nap can also rob your night's sleep of precious restorative slow-wave sleep. This is because when you nap, especially in the afternoon, your sleep resembles the first part of the sleep cycle which is highly concentrated in slow-wave sleep activity. Your body can only produce so much slow-wave sleep every 24-hour period and using it up in an afternoon nap means less deep sleep at night.

If you must nap, consider doing it in the morning. A morning nap is more of a continuation of the previous night's sleep and therefore it is less likely to interfere with the coming night. On the other hand, having an afternoon nap

is like starting your sleep period early. Napping and then waking up only serves to fragment your night's sleep, when you want to strive for concentrating your sleep into a continuous nighttime period.

Tips: Avoiding daytime napping is another hard procedure to follow for many people with cancer, especially in the early part of the program. They report that as the day wears on, their pain and fatigue increase with activity, making a nap in the afternoon seem necessary. However, there are strategies, such as pacing (e.g., spreading out activities into manageable chunks), that can be used to prevent a build-up of fatigue caused by too much activity at one time.

Another strategy is to find alternative activities to napping. For example, when you feel the urge to nap, go for a walk. Always choose an activity that takes you out of the house. Being in the house close to your bedroom or the couch may be too great a temptation.

The napping rule should be applied with a little common sense. For example, an occasional nap is not harmful, but regular napping will be counter-productive to your progress in the program. Furthermore, you should never drive a motor vehicle or operate hazardous equipment if you are feeling tired; in such cases, by all means take a nap!

SEVEN STEPS TO TAKE CONTROL OF YOUR SLEEP PROBLEMS

Table 3.1

- (1) **Go to bed only when you are sleepy**
Why? There is no reason to go to bed if you are not tired. Going to bed when you are not sleepy only prolongs the time you will spend in bed trying to get to sleep.
 - (2) **During your bufferzone, establish a set of regular presleep routines to signal that bedtime approaches. Do these activities in the same order every night. Allow yourself at least 60-90 minutes before bedtime to unwind.**
Why? Establish a pattern to make every day seem more the same. Make going to bed a habit. Eventually, you will associate your presleep routine with feeling sleepy.
 - (3) **When you get into bed, turn out the lights with the intention of going right to sleep. If you cannot fall asleep within a reasonable time (about 20 minutes), get up, go into another room, and return to your bufferzone activities; engage in some quiet, non-stimulating, activity until you begin to feel ready to sleep.**
Why? To break the vicious cycle of trying to get to sleep with no success. The frustration and anxiety over not getting to sleep leads you to be ever more aroused, making sleep even less likely. Breaking the cycle will reduce this frustration and make sleep come easier.
 - (4) **If you still do not fall asleep within a brief time, repeat the previous step. Repeat this process as often as it is necessary throughout the night. Use this same procedure if you awaken in the middle of the night and do not return to sleep within about 20 minutes.**
Why? Same as above.
 - (5) **Do not use your bed or bedroom for anything other than sleep (and sex).**
Why? To build up the association between your bedroom and sleeping.
 - (6) **Get up at the same time in the morning regardless of how much you slept.**
Why? To establish a strong and regular sleep and waking schedule
 - (7) **Avoid daytime napping, especially after 3:00 p.m.**
Why? Reserve your sleeping for nighttime only. Sleeping in the afternoon is like starting your nighttime sleep period early; doing so will result in your nighttime sleep being shorter and more fragmented.
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