Sleep Smarter

Sleep Preparation

We all know that getting a good night's sleep is one of the keys to improved health and vitality. But achieving high quality sleep is something that needs to be planned for – a process that often needs to begin several hours before your head hits the pillow. A 'Sleep Preparation Plan' aims to prepare both your mind and your sleep environment for a good nights slumber.

It is thought that one hour of sleep before midnight is worth two hours after midnight.

Set your bedtime.

The first thing to do is to have a set time to aim for by which you should be in bed, relaxed, and drifting off to sleep in order to secure the optimal number of sleep cycles for you to wake up refreshed. For example, if waking up at 6:00 a.m. and you need to complete 5 sleep cycles (~7½ hours sleep), then you need to be in bed and drifting off by 10:30 p.m.

What about prior to even getting into bed?

Engaging in stressful activities in the period immediately prior to trying to get to sleep often ends up counter-productive. For example, leaving the preparation for an important work presentation the following day until just prior to getting into bed can increase stress levels, making it difficult to get to sleep. And often, the longer it takes to get to sleep, the more distressed we become as we begin to think about how little sleep we are getting and how tired we will be in the morning.

So how long prior to going to bed should be set aside for preparation?

Ideally you should set aside 60-90 minutes prior to sleep time and dedicate this period to winding down and relaxing. Any organisation and other potentially stressful activities need to be completed prior to this relaxation time. So if you need to be drifting off by 10:30 p.m. you will need to be in relaxation mode from 9:00 – 9:30 p.m. onward. During this time, try to engage only in activities you find relaxing, e.g. reading a book, watching TV, etc.

Are there any other areas that make up part of a good sleep preparation plan?

Just as important as your state of mind prior to sleep, is the state of your sleep environment. Having a bedroom that is too hot, too cold, noisy, or filled with bright light is going to make it difficult to fall asleep. Try to get a good sleep environment established prior to putting yourself down for the night.

Other sleep preparation tips include:

- Avoid the use of stimulants and sleep disruptors (caffeine, nicotine, alcohol) in the 3-6 hours prior to sleep.
- Avoid bright light being emitted from laptops, tablets and smartphones.
- Engaging in exercise 3-6 hours before going to bed will increase your quality of sleep.
- Get some sun exposure during the day where possible as bright light in the eyes during the day helps set up natural sleep-wake patterns.

Sleep Cycles

Understanding the impact of sleep cycles is the key to feeling refreshed and recharged every day after an improved night's sleep. If underestimating and ignoring the impact of sleep cycles, individuals may struggle to manage all aspects of their physical health and wellbeing.

Sleep difficulties and tiredness are an increasing problem in the modern world, with at least 50% of the adult population suffering from sleep deprivation at any one time.

How do we sleep?

It is commonly recommended that we aim for around 8 hours sleep per night. However, when we sleep, we do not sleep in a continuous block as this recommendation might have you think. Instead, we sleep in repeating cycles across the night, with the average length of each of these cycles being ~90 minutes (although this can vary with age and season).

So if you were to get 6 hours sleep, this would be ~4 cycles across the night. And 7½ hours would give you 5 cycles; 9 hours would give you 6 cycles, and so on. Most people need between 4-6 completed sleep cycles per night (6-9 hours) in order to feel rested. Any more or less than this will often see our energy and concentration fall sharply during the next day.

How do these cycles work?

Each cycle of sleep is broken into a series of stages that extend from the time we first start to drift off, right down into the deepest stages of our sleep and back again. This takes approximately 90 minutes for most adults to go through this cycle*. If you wake up naturally during the night, it is unlikely you'll be doing so from a deep sleep stage, and is more likely to be from the lighter stages of sleep. In order to awaken from deep sleep, it is likely that you would have been woken up by an external source such as an alarm clock, loud noise, or other person.

If you do get woken up from the deeper sleep stages, or are prevented from having enough of them, this is where you will often feel very tired and lethargic the following day.

* Children have sleep cycles that span 45-60 minutes on average, making them prone to waking more frequently during the night and often out of sync with their parent's cycles.
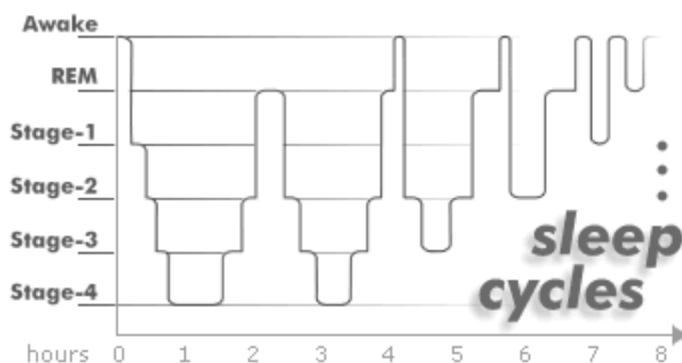

Figure 1. Graphical representation of sleep cycles over the course of a night. Large blocks of deep sleep (stage 3 and 4) occur early in the night. These give way to increasing amounts of dream sleep (REM) as the night progresses.

<u>What factors can influence these sleep stages?</u>

Some things that are commonly consumed by people such as caffeinated drinks, alcohol, and cigarettes can interfere with the deeper stages of sleep. Caffeinated drinks and cigarettes are stimulants that can keep you from either getting into or staying in deep sleep. And while many people think alcohol helps them sleep due to its sedative properties, it can still interfere with the natural cycles your body is trying to achieve and disrupt sleep quality.

<u>Sleep cycles are the key to a good night's sleep.</u>

When it comes to feeling fully refreshed after sleep, research shows that it is not the total length of sleep that we get each night, but the number of sleep cycles completed. For example, someone who sleeps for only 4 cycles per night (6 hours) will feel more rested than someone who has slept 8-10 hours but has been unable to complete one or more full cycles during the night.

<u>How to use your sleep cycle knowledge.</u>

First, try wake up at the end of a natural sleep cycle rather than being woken up by an alarm clock in the middle of a cycle. For example, if you naturally wake up at 6am, then this is the time to get up rather than trying to snooze for another 30 minutes. By doing so, you run the risk of dropping into the next sleep cycle, from which being woken by the alarm will leave you feeling groggy.

Second, once you know the time you naturally wake up, work out what time you need to go to bed in order to get at least 4-6 sleep completed cycles per night. So again if, for example, you wake up at 6am, to get 4-6x 90 minute cycles you will need to be asleep between 9pm-12am the previous night.