

## The Importance of healthy Sleep

We all know what it feels like to need sleep, the appropriate times or situations to get sleep, and what sleep looks like when someone else is sleeping. But even watching another person sleep doesn't tell us much of what they are experiencing, in their brains or bodies. And given that we don't know we are sleeping when we're asleep, telling of your own sleep experiences isn't likely either.

### The characteristics of sleep

So, what exactly is sleep? Is it a state of inactivity, an altered consciousness or the body's rest cycle? Sleep scientists define sleep through **characteristic changes** to body and brain functions, that are typically different from when we are awake.

Before the era of modern research in the 1920s, scientists believed sleep shut down both the brain and body, only to restart again the next morning.

- Sleep is part of the daily pattern of rest and activity in humans; sleep is a period of reduced activity.
- In humans, sleep is associated with a typical posture, such as lying down with eyes closed.
- Sleep results in a decreased responsiveness to external stimuli.
- Sleep is relatively easy to reverse, distinguishing sleep from other states of reduced consciousness, like hibernation or coma.
- Sleep reduces physiological demands on the body, lowering our temperature, blood pressure, breathing rate, heart-rate, and blood glucose, and slowing kidney function and urine production.
- Sleep increases some physiological activity. Certain physiological activities associated with digestion, cell repair, and growth are often greatest during sleep, suggesting that cell repair and growth may be an important function of sleep.
- Sleep induces periods of more and less brain-wave activity. During rapid eye movement (REM) sleep, there is an increase in the firing rate of most neurons throughout the brain, when compared to non-REM sleep. In fact, the brain in REM sleep can even be more active than when we are awake.
- Dreaming is a well-known yet poorly understood characteristic of sleep. Some experts suggest dreams are a replay of the day's events occurring as a vital mechanism in forming memories, while others suggest dream content is merely the result of random brain activity. Dreams that are visually intense occur primarily during REM sleep, but can also occur during non-REM sleep, like night terrors.

### The impact of sleep-deprivation

- Sleep-deprivation is not merely the absence of sleep, but the detrimental factors that come with the absence of sleep, one being longer waketime or wakefulness.
- With longer wakefulness, attention, focus and vigilance drifts, and disrupts behaviour, emotions, mood, and the ability to receive and recall information.

- Without adequate sleep and rest, over-worked neurons can no longer function to coordinate information properly, and we lose our ability to access previously learned information.
- The more chronic the sleep-deprivation, the worse attention deficits become. Impaired attention can lead to a cycle of extended wakefulness and further deterioration in attention, even leading to accidents and injury.
- Lack of sleep impairs our judgement, meaning the ability to make sound decisions is lost because we can no longer accurately assess situations, plan according and choose appropriate behaviours.
- Sleep-loss commonly leaves muscles unrested, and the body's organ systems unsynchronised
- Sleep-deprivation is related to weight gain, sugar cravings, stress, lowered immunity and poor healing, poor growth, and lethargy.
- Sleep disruption commonly occurs alongside all the major neurological and psychiatric conditions, including anxiety disorders, Alzheimer disease, schizophrenia and addiction disorders.
- Sleep-deprivation triggers feelings of loneliness and social withdraw.

## Daytime napping

Western cultures typically sleep in one consolidated block during the night for approximately 8hrs. However, many cultures subscribe to daytime napping, usually in the afternoon, where businesses and organisation will close to observe a period of rest.

Naps usually last between 30-60 minutes and many report a renewed feeling of alertness into the evening. Experts note that naps can benefit those who sleep poorly at night, but cautions insomnia suffers, as napping may worsen their symptoms.

## The benefits of good quality sleep

Our bodies regulate sleep in much the same way that they regulate eating, drinking, and breathing, suggesting sleep plays a critical role in our health and well-being. Aside from preventing the detrimental effects of sleep-deprivation, there are so many benefits to getting great quality sleep:

- Sleep is like a daily car service for the body, inspecting, repairing and synchronising molecular structures and functions, energy balance, immunity, cardiovascular health, as well as intellectual function, alertness and mood.
- Sleep plays an important role in learning and memory, before and after a new task is learned.
- Sleeps supports clear thinking, quicker reflexes and greater focus.
- Sleep promotes increased productivity, higher levels of reasoning, problem-solving and attention to detail.
- Sleep reduces anxiety and emotional reactivity, especially with longer periods of non-REM deep sleep.
- Following a good night of sleep, we feel more alert, more energetic, happier, and better able to function.

**In essence, sleep makes us feel better! And it's simple and free to get started.**  
**Try the following tips to help get you on your way to great sleep and great health.**

## Good Night's Sleep

evidence-based tips for better quality sleep

Carve out a 7-8 hour opportunity for sleep



**Keep to the same sleep/wake routine.**

Head to bed and wake up at the same time each day. Even on weekends or after poor sleep.



**Dim the lights 1 hour before bed.**

Darkness encourages sleep and the release of melatonin, a hormone that helps with timing of sleep. Avoid using blue light emitting devices within the hour before bed (this light puts the breaks on melatonin).



**Cool your room.**

Approximately 65 degrees Fahrenheit or 18.5 degrees Celsius is optimal for cooling your brain and body for sleep.



**Avoid caffeine and stimulants.**

Caffeine reduces the depth of deep sleep. Not getting deep sleep results in waking unrested the following morning, promoting a desire for stimulants, and a cycle of dependency can begin.



**Avoid alcohol**

Alcohol belongs to a class of drugs called sedatives, and sedation is not sleep. Alcohol fragments sleep, meaning that you will wake many more times during the night. It also blocks your REM dream sleep, an important part of the sleep cycle.

## More tips for healthier sleep

- Try a non-caffeinated herbal tea, like chamomile, 1 hour before bed.
- Try spending some time outdoors each day. Natural daylight helps melatonin production.
- Blue light filters can be used on devices emitting blue light.
- Block-out curtains can help darken your room.
- Wear socks if your feet get cold, rather than increasing the temperature of the entire room.
- If you can't sleep, get out of bed and do something quiet and relaxing, before trying to go back to bed.
- Regularly performing resistance exercise can improve sleep quality (but not right before bed! More than 3 hours before bed is recommended).