



# Sleep

When considering overall health and small incremental changes that can have a big impact, sleep is one of the most powerful and yet one of the most simple to implement. Sleep has been shown to restore, repair and recuperate virtually every part of the body. It is probably one of the most important parts of well-being, physically, mentally and emotionally.

Yet, for all its benefits, it is the most underrated – it has almost become a medal of honour to be able to go without sleep. Yet a lack of sleep (less than six hours a night), has been linked to weakening our immune system, increasing the risk of cancer, cardiovascular and heart disease, developing Alzheimers, diabetes, depression, anxiety, and even weight gain.

## To put sleep into context

On the 14 October 2012, Felix Baumgartner made the Guinness book of records by climbing to the outer edges of the earth's stratosphere in a helium balloon and jumped in a pressurised suit plunging 128,000 ft at a speed of 833mph, the first human to break the sound barrier (since then, Alan Eustace, a Google executive, has since broken the record at 135,000 ft.).

Yet the Guinness book of records have removed the record for the longest period without sleep as it's just too dangerous!

## Sleep helps our brain and memory function

Imagine your brain as a super complex computer. During the day, we are constantly receiving data input and referring to information from our hard drive (our memory called the hippocampus), dumping it all on our cache memory for easy recollection.

Sleep takes all of those random pieces of information, all those thousands of bits of data and collates, consolidates and rationalises them; it even connects them with other relatable information; backing it all up safely on your hard drive during sleep.

That's why they say 'if you have a problem, sleep on it', as during sleep your brain is sorting, rationalising and looking for solutions. Many scientists have had eureka moments waking from a good nights sleep. Sleep deprivation substantially reduces this function and is suggested to contribute to cognitive decline, ageing and Alzheimers.

### Sleep helps our hearts

A natural study of 1.6b people over 70 countries, known as 'daylight saving time', where clocks spring forward in spring and we lose this valuable hour, showed there is a 24% rise in heart attacks. Autumn 'fall back' sees a 21% reduction in heart attacks. Same profile for traffic accidents and suicide.

### Sleep helps our immune system

We have natural killer cells, the SAS of the immune system, which identify and eliminate dangerous cells like cancer tumours. We need these special agents. A study restricting sleep to four hours resulted in a 70% drop in natural killer cell activity, potentially causing increased risks of some cancers.

### Sleep promotes hormones

Hormones support many functions in the body including the restoration of our cells, tissue and muscles. They can also balance our appetites by helping to regulate levels of the hormones which play a role in our feeling hungry and full. When we are sleep deprived, we may feel the need to eat more, which can obviously lead to weight gain.

### Getting the best sleep you can

The one-third of our lives that we spend sleeping is far from being 'unproductive'. It plays a direct role in how full, energetic and successful the other two-thirds of our lives can be.

It helps to **establish a routine**. Going to bed and, in particular, getting up at a regular time will help support good sleep – we have an automatic internal clock which supports our circadian rhythm, helping us naturally wake and sleep.

**Environment** is also important. Having a comfortable bedroom, with no noise or light and a cool temperature (around 18 degrees) will aid restful sleep.

**Avoid technology**. Keep TVs and computers in other rooms and avoid using your phone within an hour of going to bed. These screens emit light that can suppress melatonin, a hormone that helps regulate sleep patterns.

**Get active**. Exercise during the day can greatly assist sleep, although not too close to bedtime as this can have the opposite effect.

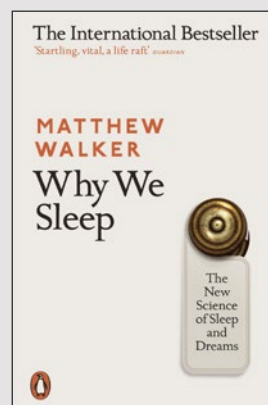
**Consider your diet**. Try to avoid caffeine in the afternoon and evening as well as spicy or sugary foods. In addition, avoid drinking alcohol before bedtime as although it might help you fall asleep initially, it is likely to disrupt your sleep pattern through the night.

### Key take homes – remember 10, 3, 2, 1, 0

- 10** hours prior to sleep – no caffeine (after midday)
- 3** hours prior to sleep – try not to eat or drink anything other than water
- 2** hours prior to sleep – try not to engage in work or too much mental stimulation, like work emails or watching Question Time!
- 1** hour before sleep – try not to expose yourself to screens
- 0** the amount of light in the room you sleep in and the number of times to hit the snooze button, as one of the most useful tips is to try to wake at the same time every day.

### Sleep well!

#### RECOMMENDED READING & WATCHING



**Why We Sleep**  
Matt Walker

Watch Matt on  
YouTube:  
Matt Walker -  
Sleep is your power



[sleepfoundation.org](https://sleepfoundation.org)