

How well did you sleep last night, did you get your full 8 hours of slumbering bliss, or were you ruffled, stressed and restless?

Sleep is at the cornerstone of good health and considered vital in helping your immune system perform at its optimum level, yet two-thirds of adults in the developed world fail to obtain the recommended 8 hours sleep. In fact, sleep is so essential to every component of our wellbeing that the World Health Organisation (WHO) had now declared a sleep loss epidemic throughout industrialised nations. Scientist have started lobbying doctors to start “prescribing sleep” – but do not mistake this for a plea for prescribing sleeping pills.

Feeling fresh and vibrant as you jump out of the bed in the morning is something we may all yearn for but may seem so far away as we struggle to roll out on the right side of bed each day. But what really happens to the body and brain as we sleep and why is it so important?

Society’s apathy towards sleep is in part caused by the historic failure of science to explain sleep and why we need it.

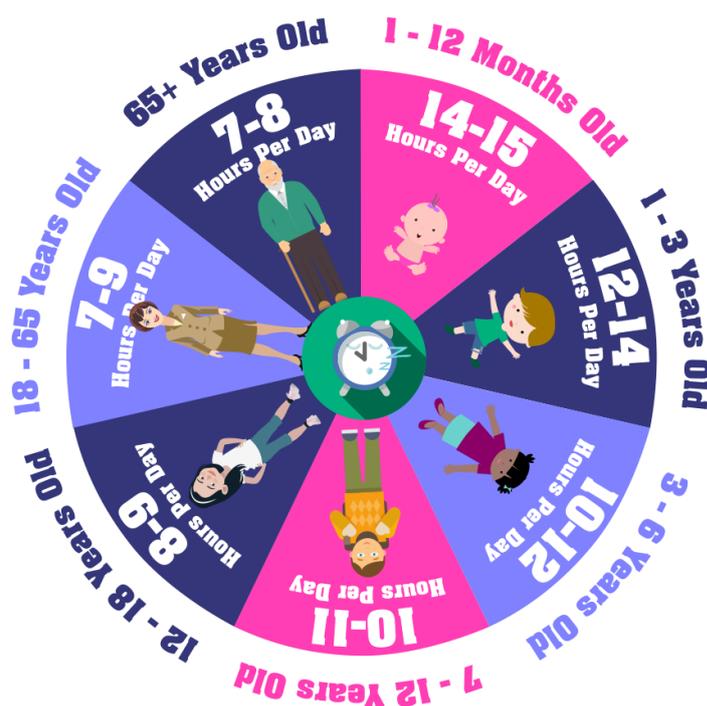
Here’s what we know:

Humans, along with all other species, require some form of sleep. Sleep is an active period in which a lot of important processing, restoration, and strengthening occurs. Our body requires long periods of sleep in order to restore and rejuvenate, to grow muscle, repair tissue, and synthesize hormones. Precisely how this takes place and why our bodies are calibrated for such a long period of sleep is still not fully understood. However, research has repeatedly shown how important sleep is for

both your physical and mental health. From anxiety and depression to type 2 diabetes and cancer, Alzheimer's and cardiovascular disease - prolonged paucity of sleep is associated with numerous of the most serious health conditions. Perhaps you have noticed that you feel hungrier when you are tired? This is no coincidence. When you are sleep deprived you release a hormone that makes you feel hungry whilst suppressing the companion hormone that tells you you've have eaten enough. Sleep deprivation can therefore have a negative impact on any attempts of dieting. Sleep alone isn't a magic cure to all ailments. But as research into sleep increases, what is becoming clear is that good sleep is the foundation upon which our health can be built. The shorter you sleep, the shorter your life span.

How Much Sleep Do We Really Need?

As we have seen, healthy sleep is critical for everyone, and even more so when we consider the amount of information we need to retain, plus learn skills to thrive in life. Most adults require 7-9 hours of sleep per night, whilst one-year-olds need roughly 11 to 14 hours. Children of school age need between 9 and 11, whilst teenagers between require 8 to 10 hours. During these critical periods of growth and learning, younger people need a heavy dose of slumber for optimal development and alertness. As they are acquiring language, social, and motor skills at an incredible pace throughout their development, they require more sleep than adults.



Unfortunately, we are unable to 'pay back' any sleep debt once it has been accumulated, but it doesn't hurt to log as many extra hours of sleep as you can, particularly if you're sleep deprived.

Being consistent with your sleep habits and creating healthy routines as well as a calming sleep environment can help play a significant role in reaching your daily sleep needs. Although all humans have a circadian rhythm, our 24-hour body clock which conducts life's biological rhythmic symphony – the differences from person to person is striking. For some people (about 40%), their peak of wakefulness arrives early in the day, and sleepiness early at night. For others – such as the “evening types” – going to bed late and subsequently wake up late the following morning is preferable. The remaining fall somewhere in between. Society's work schedule is of course strongly biased towards the early start times that punish owls and favour larks! Let's hope society will gradually adapt to this in order to increase work performance and health maintenance.

So, what can YOU do to improve your health and sleep cycle?

- **Set yourself a sleep schedule and stick to it**
- **Avoid caffeine, bright screens (especially up close such as iPad, phones and Kindles) and alcohol in the lead up to bedtime.**
- **Engage in a relaxing activity for 20 minutes to an hour before bed, such as reading, a warm bath or meditation.**
- **Pay attention to temperature and the sleep area, too. A cool bed environment is best for finding sleep.**
- **Soft, clean, cosy bedding also has a role to play in sleep quality.**
- **A comfortable mattress and supportive pillows also play a part in helping keep you relaxed, refreshed and healthy.**
- **Any lighting, even the red LED signal on your dormant TV is registered by your brain – turn it off!**

- **Use ear plugs to block out noises – my wife insists this has saved our marriage**

BACK PAIN AND SLEEP

What if back pain disturbs your sleep? Does your sleeping position help, or does it contribute to your pain and poor sleep? Our Clinic Director, Kristine Hagen offers some advice.

Your good night's rest may be disturbed by your lower back, but your poor sleeping posture may be exacerbating the situation.

Everyone sleeps differently, but the best way to avoid pain and the creation of pain is to maintain the natural curve of your spine when lying in bed. By doing so, you are ensuring your head, shoulders, and hips are in alignment and your back is properly supported. The best way to achieve this is by sleeping on your back or on your side. However, as many people find it uncomfortable to sleep on their back or they find it causes them to snore, try out the following postures and tips to help you find relief and a perfect night's sleep.

1. Sleeping on the back with knee support

Lying on the back is usually considered to be the best sleeping position for a healthy back.

This position evenly distributes weight the full length of the body's largest surface. It also minimizes pressure points and ensures good alignment of the head, neck, and spine. It makes breathing an easier task – don't forget – we breathe the volume of an Olympic swimming pool every 24 hours, so a lot of this breathing work is done whilst you are asleep.

Placing a bolster cushion under the knees can provide additional support and help maintain the natural curve of the spine.

To adopt this sleeping position:

- Lie flat on your back facing the ceiling and avoid twisting your head sideways.
- Position a pillow to support your head and neck.
- Place the bolster cushion under your knees.
- For extra support, fill in any other gaps between your body and mattress (such as beneath the lower back), with additional pillows.



2. Sleeping on the side with a pillow between the knees

Although lying on the side is a common and comfortable sleeping position, it can pull the spine out of position and place strain the lower back.

To adopt this sleeping position:

- Get into bed and carefully roll on to one side.
- Position a pillow to support your head and neck.
- Pull your knees up slightly then place a pillow between them.
- For extra support, fill in any gaps between your body and mattress with more pillows, especially at the waist.
- The simple correction of placing a firm pillow between your knees, helps raise your upper leg, which restores the natural alignment of your hips, pelvis, and spine.



3. Sleeping in the foetal position

Lying on the side with the knees tucked into the chest reduces bending of the spine and helps open-up the joints. This is particularly helpful for those who have wear and tear (osteoarthritis) in the bottom of their spines.

To adopt this sleeping position:

- Get into bed and carefully roll on to one side.
- Position a pillow to support your head and neck.
- Draw the knees up towards your chest until your back is relatively straight.



4. Sleeping on the front with pillow under the stomach

Lying on the front of the body is usually considered the worst sleeping posture. However, those who habitually turn to sleep on their front may also want to try hugging a large pillow against their chest and stomach to aid sleep and keep their back aligned.

Sleeping on the front may also benefit some people with a herniated disc (those who struggle to bend forward). This position can also help people with acute facet joint irritation.

To adopt this sleeping position:

- Get into bed and roll on to your front.
- Place a slim pillow underneath your abdomen and hips to raise the mid-section.
- Use a flat pillow for your head or consider sleeping without one.



5. Sleeping on the front with the head face down

Often or not, when you sleep on the front, your head is usually turned to one side.

This places further stress on the neck, shoulders, and back.

To avoid this, place a firm pillow or tightly rolled-up towel to prop up your forehead, allowing room for you to breathe. This should be done in addition to placing a pillow under your stomach.

To adopt this sleeping position:

Get into bed and roll onto your front.

Place a slim pillow underneath your stomach and hips to raise the middle of your body.

Place a pillow or rolled-up towel under your forehead to create adequate breathing space between your mouth and the mattress.

Sleep well tonight!