

# **Stress and Sleep**

## Why do we need sleep?

Most infections are caused by viruses and the most common of these are colds, influenza (the flu) and flu-like illness. Why do we need sleep?

Sleep is essential for good health, it refreshes the mind and repairs the body. The exact role of sleep is not clear, but research has shown that it is important to your overall health and wellness as it facilitates a wide range of biological processes:

- The brain stores new information and gets rid of toxic waste. This allows your brain to develop and work well when you wake up
- Nerve cells communicate and reorganize, which supports healthy brain function.
- The body repairs cells, restores energy, and releases hormones and proteins.

Our body's internal clock regulates when and how we sleep depending on the amount of light around us. When the sun sets, your brain releases hormones called melatonin to make you sleepy. In the morning, daylight stops these hormones and releases brain chemicals to keep you awake.

Without sleep, your body can't function correctly and therefore adults typically need 7-9 hours of sleep per night.

# **Sleep problems**

Many of us don't get enough sleep around a quarter of New Zealanders report feeling tired or fatigued every day due to a lack of sleep. Some signs that you may have a sleep problem include that:

- 1. You regularly take more than 30 minutes each night to fall asleep
- 2. You regularly wake up several times each night and then have trouble falling back to sleep, or you wake up too early in the morning
- 3. You often feel sleepy during the day, take frequent naps, or fall asleep at the wrong times during the day

There are different causes for different sleep problems, including:

- · Health conditions, such as heart or lung disease
- Stress
- Medicines
- Aging As people age, they often get less sleep or spend less time in the deep sleep

Some other common causes of sleep loss are; parenthood, shift work, jetlag and habits such as late-night usage of devices or drinking caffeine and alcohol.

#### Ways to improve sleep

There are lots of things you can do at home to improve your sleep, below are some good habits that can help you have a good night's sleep:

- Set your body clock go to bed and get up at the same time each day, including weekends. Many phones, have a 'bed time' function that can help you schedule wake up and bedtime reminders.
- Avoid stimulants within 2 to 3 hours of bedtime don't: smoke, drink alcohol or caffeinated drinks, eat a heavy meal or do energetic exercise.
- Make your bedroom suitable for sleep keep it cool, dark and quiet and use it only for sleep and sex.
- **Exercise outside** Going out into the sun during the day to get a healthy dose of natural light helps your body produce melatonin, which helps regulate the sleep-wake cycle in your body
- Get up if you can't sleep if you can't sleep after 20 minutes or so, get up and do something boring e.g. a puzzle until you feel tired, then try again.
- Avoid naps don't sleep during the day but go to bed earlier in the evening.

### **Stress**

Stress is your body's natural reaction to a threat or an excess demand. Some stress is good for you and helps motivate you to get something done. We experience stress when there is an imbalance between the demands being made on us and our resources to cope with those demands.

Normally, when faced with a situation of stress, your nervous system causes your body to release stress hormones, particularly cortisol and adrenaline. These hormones contribute to the common symptoms of stress:

- headaches,
- upset stomach,
- rapid heartbeat,
- feeling anxious, tired or finding it hard to concentrate,
- not sleeping and
- craving fatty foods

#### Ways to reduce stress

Developing strategies to recognise and deal with stress can prevent or reduce its negative effects. There are many

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approaches to managing, relieving or coping with stress. These include lifestyle changes, relaxation, stress management and counselling

#### Some practical things to try include:

- Write down emotional concerns or worries on a piece of paper at least one hour before bed and then throw it away
- Talk your worries over with a friend, partner, or someone else you trust.
- Review all the sources of stress in your life what can be reduced, stopped or changed to take some pressure off?
- Plan breaks in your day change your habits to make this part of your routine, you can only do so much each day.
- Exercise and Diet Eat a balanced diet and avoid foods that may increase tension and stress e.g. coffee, tea, and foods high in sugar. Exercise helps to release built up tension and anxiety

# **Stress and Sleep**

Stress and sleep are closely linked. Stress can adversely affect sleep quality and duration, while insufficient sleep can increase stress levels. If you don't sleep enough at night, your body boosts its levels of stress hormones. The brain chemicals connected with deep sleep are the same ones that tell the body to stop the production of stress hormones. As a result, when you don't sleep well, your body keeps pumping out those hormones The next day, you feel more stressed, the following night you find it harder to fall asleep, and so on.

Both stress and a lack of sleep can lead to lasting physical and mental health problems, including

heart disease,

- high blood pressure,
  - obesity and diabetes, stroke
- depression or anxiety,

every body

By lowering your stress levels in the evening before bed, many people can improve the duration and quality of their sleep. Whether you practice meditation, count sheep, listen to music, or count backwards from 100, clearing your mind can calm your body and make the transition into sleep easier.

#### Medicines and Natural Sleep Aids for sleep and stress

In severe cases of stress and/or sleep deprivation, prescription medicines may be prescribed, this should only be considered as a short-term treatment and should be monitored by your doctor.

Natural sleep aids and herbal products may help with sleep and stress, some of the most commonly used ones are described below. These supplements alongside implementing lifestyle changes and good sleep habits, can be very effective in ensuring a good night's sleep and a more stress-free lifestyle.

every Doc patientsheets

**Lavender and passion flower:** Lavender plants, oils, teas and supplements are believed to enhance sleep and passion flower may help improve sleep quality in some individuals. Both are known to be natural stress relievers.

**Magnesium:** Magnesium is a mineral involved in hundreds of processes in the human body, and is important for brain function and heart health. Magnesium's relaxing effect may be partly due to its ability to regulate the production of melatonin, a hormone that guides your body's sleep-wake cycle so may help improve sleep quality.

Valerian Root: Valerian is an herb native to Asia and Europe, commonly used for symptoms of anxiety. Valerian root is a popular supplement that may improve sleep quality in some people. More studies are needed on the safety of long-term use.

**Melatonin:** Melatonin is a hormone your body produces naturally, which signals your brain that it's time to sleep, levels naturally rise in the evening and fall in the morning. Melatonin is useful if you have jet lag or are doing shift work.

Ashwagandha: The ashwagandha plant is native to India and North Africa. Ashwagandha may help you to de-stress your mind and body so that you relax and unwind before bed and therefore allowing you to sleep better. It may also support better health and wellbeing and increase your energy levels.

## Where to seek help

You should see your doctor if your sleep problems or stress levels feel they are beyond your control. Need to talk? 1737 is free to call or text from any landline or mobile phone, 24 hours a day 7 days a week.

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