



ILLUSTRATION: SOPHIE BLACKHALL-CAIN

There is nothing more restorative than a deep, restful night's sleep – and nothing worse than being sleep-deprived. Naturopath **Tania Flack** reports.

Sleep well

A hhhh, sinking into a comfortable bed at the end of a long day, feeling totally relaxed as you drift off to sleep, and then waking refreshed and energetic the next morning. For people suffering from sleep problems this type of blissful night's rest is something they can only dream of, and like other aspects of good health, you really don't know what you are missing until it's gone.

Studies show that between 13 and 33 percent of Australian adults have difficulty either getting to sleep or staying asleep. While most of us consider the odd sleepless night more of an inconvenience than anything else, the health ramifications of chronic sleep problems can be profound. The effects of persistent poor sleep also have significant economic impact: Deloitte Access Economic report commissioned in 2010 estimated that the total health care cost of sleep disorders in Australia was estimated at a staggering \$818 million. Here is how you can protect yourself against insomnia and promote healthy sleep.

Sleep types

There are two main types of sleep and we tend to cycle between them throughout the course of the night.

Approximately 25 percent of the night is spent in the 'rapid eye movement' or REM stage of sleep. This is where the body is very

relaxed but the eyes dart back and forward under closed eyelids, while the brain is busy processing and sorting the events of your day. Dreams often occur in this stage of sleep, which is important for emotional processing and wellbeing. Studies also show that the brain preserves emotionally important events to long-term memory during REM sleep.

The remaining 75 percent of the night is spent cycling through several stages of 'non-rapid eye movement' (NREM) sleep. It is during NREM that the body does the majority of its housekeeping and repair work - blood pressure drops, breathing deepens, tissues repair, hormones and the immune system are regulated, and energy is restored. The 'delta' phase of NREM sleep is particularly important, and it is considered the deepest sleep. It is during this phase that growth hormone is released, which is essential for growth and development; this is why children and teenagers need more sleep than adults.

It is only when you understand all of the vital physiological processes and emotional housekeeping that occur during sleep that you can truly understand the health impacts of chronic sleep problems. There is ongoing debate among researchers and sleep scientists about whether insomnia is a disease in and of itself, or just a symptom of other conditions. This, of course, dictates how insomnia is treated; often practitioners don't tackle insomnia head-on and work to treat other co-existing

Researchers have suggested that timely and effective management of insomnia may actually help to prevent the onset of depression.

Autogenic training can take someone into a delta - or deep - sleep brain wave state in five minutes or less.

conditions first, in the hope that insomnia will abate. However, focused treatment of insomnia may actually help to avoid the onset of secondary conditions.

Concentration and performance: Anyone who's had insomnia will tell you that they don't feel bright the next day. Poor sleep can significantly impair concentration and performance, affecting judgment, coordination and memory. Unfortunately, we may lose sleep the night before an important event, such as an exam or work presentation, which then has a negative effect on our performance.

Chinese studies show that workers who only managed five hours of sleep or less per night had significantly poorer work performance than their colleagues who achieved seven hours or more.

Mood: Depression and insomnia are intrinsically linked, which is no surprise when you consider the importance of quality sleep on emotional processing.

Around 50 percent of patients with depression experience chronic insomnia. It was once thought that insomnia was merely a symptom of depression; however, studies have since found that people experiencing insomnia have a two-fold risk of developing depression, so it may actually be a possible predictor of the development of depression.

Cardiovascular disease: Research shows that persistent insomnia significantly increases the risk of cardiovascular disease, including myocardial infarction, stroke, and coronary heart disease. People who sleep less than five hours a night are at significantly increased risk of high blood pressure. This is thought to be due to an increase in inflammatory cytokine and systemic inflammation.

Obesity: Sleep problems are a double-edged sword when it comes to obesity and weight issues. Being overweight is by far the biggest risk factor for obstructive sleep apnoea, the most common cause of sleep disruption; and conversely, poor sleep is strongly linked to

metabolic disruption and weight gain. Ghrelin, the 'hunger hormone' which regulates appetite and energy metabolism, is greatly affected by poor sleep. Normally, when the stomach is empty, ghrelin is released and we feel hungry, and when the stomach is full, ghrelin secretion stops. Research shows that poor sleep decreases night-time ghrelin release by up to 30 percent, which indicates disruption to the endocrine energy balance and metabolism.

Natural remedies

The amount of sleep needed will vary from person to person - between six to eight hours of unbroken sleep per night is considered ideal. Several studies on the health impacts of sleep problems indicate that anything less than five hours per night is associated with poor work performance, elevation in blood pressure, and increased risk of cardiovascular disease.

There may be times in our lives when sleep is broken. New parents often struggle with sleep deprivation in the first year of their child's life. It is important to recognise the signs of fatigue and make up for lost time when possible. Teenagers often go through periods of extended sleep, and while frustrated parents may attribute this to being lazy, it generally has more to do with the additional requirements of a rapidly developing brain.

Even women who have never had sleep problems may be waylaid by insomnia at the onset of menopause. This can be effectively managed with natural medicines and early intervention is essential for restoration of long-term sleep patterns. The elderly are another group who experience sleep problems. As we age we tend to sleep less, due to the subtle effects of ageing on the brain. Improving quality and duration of sleep helps to slow that progress.

Many natural therapies can be used to effectively restore restful sleep. Your health practitioner will be able to assess what is driving your sleep problems and may use a combination of therapies to achieve the best results.

Nutrition: Several nutrients are essential for healthy brain function and stable sleep patterns. You can easily develop low grade nutritional deficiencies which contribute to poor nervous system health and compromised adrenal and neurotransmitter function, all of which can affect quality of sleep. Magnesium is considered the primary 'anti-stress' nutrient and is essential for muscle relaxation. Deficiency is relatively common and can contribute to poor sleep, muscle twitching and night-time cramps. Taking magnesium supplements before bed will ensure a restful night's sleep. The amino acids tryptophan and methionine act as precursors to serotonin and melatonin, powerful neurotransmitters that influence mood and sleep. Other nutrients, such as the B-group vitamins, particularly B6, support the function of these neurotransmitters and nourish nervous system health. B-group vitamins should be taken in the morning, not at night.

Herbal medicine: This has been used for centuries to promote sleep; in fact, a majority of modern pharmaceutical drugs used to treat insomnia were originally formulated from plants. Nervine herbs, including zizyphus, passionflower, scullcap, vervain and oats have soothing effect in the nervous system, promoting relaxation. Adaptogenic herbs such as withania, rehmannia, rhodiola and licorice are often added to sleep formulas to regulate adrenal function and reduce night-time cortisol. St John's wort is commonly used to treat sleep problems; it supports healthy serotonin levels and can be particularly effective to reduce broken sleep.

A numbers game

Sleep disorders are associated with:

- 9.1% of work-related injuries
- 8.3% of depression
- 7.6% of non work-related motor vehicle accidents
- 2.9% of diabetes
- 0.9% of kidney diseases
- 0.6% of cardiovascular disease

Autogenic therapy: AT, as it is commonly referred to, is a powerful relaxation technique that was developed by a German psychiatrist, Johannes Heinrich Schultz, in the 1930s. It can be successfully used to achieve deep relaxation and treat sleep disorders. Helen Gibbons, psychologist and director of the Autogenic Training Institute says, "Autogenic Training is the perfect technique to help people fall asleep and to sleep soundly. Studies using magneto-encephalography imaging of the brain shows that self-practice of AT can take someone into a delta/sleep brain wave state in five minutes or less."

Exercise: This has many health benefits; not least of which is its ability to promote healthy sleep patterns. In a review of the literature, it was found that regular exercise reduced the risk of developing sleep problems. Interestingly, some studies found that regular cardiovascular exercise can be as effective as standard pharmacological drug treatment for insomnia, and with none of the side effects. For best results, exercise should be undertaken in the mornings to help establish stable circadian rhythms.

Cognitive behavioural therapy: Also known as CBT, this is another evidence-based tool used by psychologists to treat chronic sleep problems. It has been shown to be effective for a range of sleep problems, including broken sleep in the elderly.

Homeopathy: Homeopathy works on the concept of 'like cures like', so remedies for sleep, such as Coffea, which would ordinarily cause insomnia in a physical dose, can paradoxically be very effective for sleep problems in a homeopathic dose. It is especially indicated if sleeping problems are due to racing thoughts, an overactive mind, nervous energy and difficulty relaxing.

Gelsemium is helpful when you are feeling exhausted and finding it difficult to think due to fatigue, but you just can't drift off. Ignatia is useful if you have had recent disappointment or grief and are unable to unwind, despite being tired. Nux vomica can also be used for sleep, especially if you wake between three and four in the morning and struggle to get back to sleep.

Yoga: The combination of movement therapy, physical exercise, and mindfulness practices makes for a powerful tool against sleep problems. Yoga can be modified to suit the individual and has no side effects or interactions with other medications. A recent review investigated the effects of yoga on insomnia in cancer patients and survivors, and found that yoga helped to reduce insomnia and improve sleep quality.

Massage: If you've ever had a massage you'll know how deeply relaxing they can be. Massage activates the parasympathetic nervous system, which helps to relax muscles and soothe physical tension. Clinical studies show that massage reduces pain, improves sleep quality, and increases serotonin levels in people suffering from back pain. Adding a few drops of relaxing essential oils to your massage blend will also help you relax and unwind - choose from lavender, valerian, Roman chamomile, neroli or clary sage.

Tania Flack is a respected naturopath specialising in women's health and hormonal disorders. www.taniaflack.com

Dos and don'ts

DO	DON'T
Take time to unwind before bed	Use alcohol to unwind before bed
Soak in a warm bath with lavender oil to relax	Drink caffeine
Practise deep breathing, meditation or Autogenic Therapy techniques to unwind	Spend time on your computer before bed
Get out of bed at the same time each day	Exercise late at night
Turn off mobile phones and other electronic devices in your bedroom	Drink fluids two hours before bed
Exercise in the mornings	Eat sugary snacks before bed
Ensure your room is dark and you have adequate airflow	Nap during the day
See your practitioner for professional support	Ignore sleep problems