

The image features a person sleeping peacefully in a bed, their face partially visible in the upper right. The background is a gradient of blue and green, with a dark purple vertical band on the left side. This band contains large, stylized, light purple swirls. The overall mood is calm and restful.

A Good Night's

Sleep

Acknowledgments

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Sleep is a natural way of restoring your body's energy. It is a complex and important activity/function of the body.

This booklet briefly explains what sleep is, the causes of sleep problems and tips to help you get a good night's sleep. Some sleep problems mentioned in this booklet might require advice from counsellors, doctors or sleep specialists.

Most people have had problems sleeping at some time or another. If you don't get enough sleep, or the right sort of sleep, your body and mind won't work as well as they should.

The normal sleep requirement varies from person to person and there is no health benefit in forcing yourself to have more sleep than you need.

We all need light sleep, deep sleep and dreaming sleep to feel refreshed when we wake up.

Types of sleep and sleeping patterns

Everyone's sleeping patterns are different. Some people sleep more than eight hours a day – others need as little as five. Generally, the need for sleep decreases as we get older. Both the number of hours you sleep and the structure of the sleep you get are important.

There are two main types of sleep:

Rapid Eye Movement (REM) sleep

During REM sleep, your eyes flicker rapidly behind closed lids, your body temperature is slightly raised, the heart beats faster and breathing is irregular. REM sleep is often described as dreaming sleep. You are likely to have four or five periods of REM sleep during a night. Most of it occurs during the last third of your sleeping time.

Non-Rapid Eye Movement (non-REM) sleep

There are four stages of non-REM sleep ranging from light sleep to deep sleep. Stages 1 and 2 are the light sleep stages. Your muscles begin to relax, heartbeat is regular, body temperature slightly drops and sleep walking is possible at this stage. You can still be woken easily, for example, if you hear a door slam or someone calls your name or shakes you.

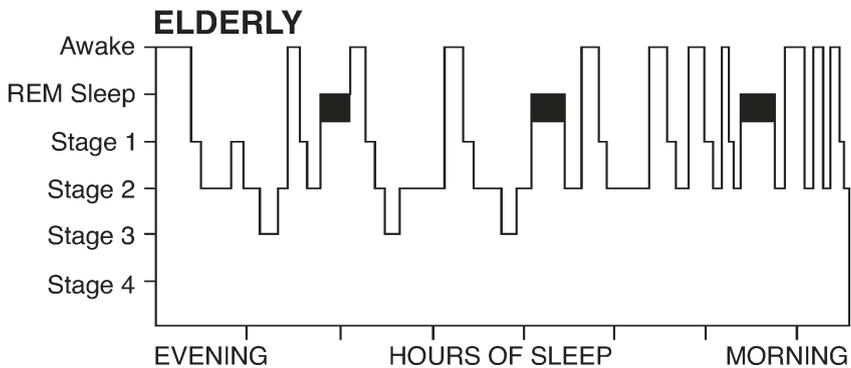
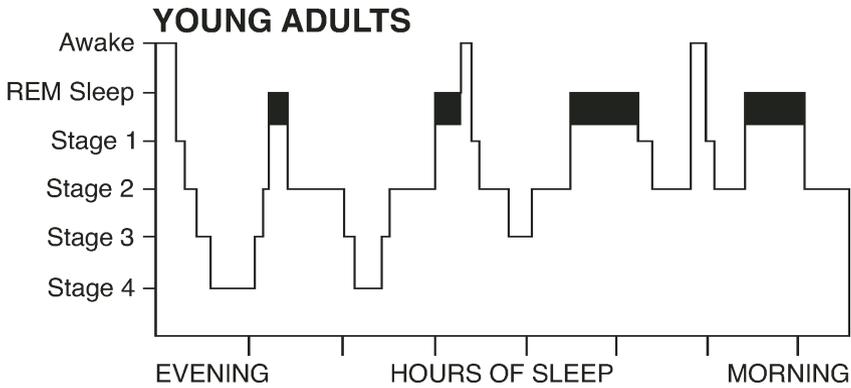
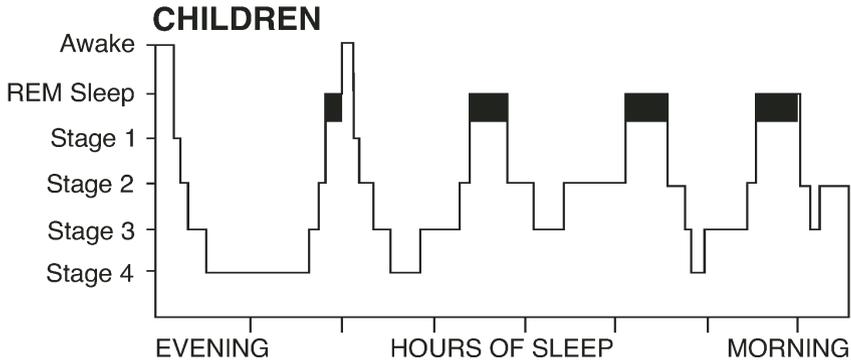
Stages 3 and 4 of non-REM sleep are the deep sleep stages. During these stages your blood pressure drops, your body is inactive and it is difficult to be woken up. Most of the deep non-REM sleep is in the first part of the night (see diagram on page four).

Dreams occurring at this time are usually snapshots, incomplete and may not make sense to you.

In a normal sleep cycle, non-REM and REM sleep alternate throughout the night. Sleep begins with about 80 minutes of non-REM sleep followed by about 10 minutes of REM sleep. This cycle is repeated three to six times per night. As the night progresses there is less deep sleep and more REM sleep per cycle.



SLEEP CYCLES FOR CHILDREN, YOUNG ADULTS AND THE ELDERLY



Falling asleep

The brain has two processes that work against each other to determine whether someone stays awake or goes to sleep. The *homeostatic mechanism* is the drive to sleep and the *circadian rhythm* is designed to bring about and maintain alertness. This means that alertness increases and decreases throughout the day (over a 24-hour cycle) due to a pattern set by the body's internal clock. For example, a person who wakes at about 6 am will find alertness peaks in the morning at about 8 am and then decreases until early afternoon. It will begin increasing again from about 3 pm until about 8 pm when it begins to decrease to a minimum between 2 am and 4 am.

Disturbed sleep

Insomnia occurs when you have difficulty falling and/or staying asleep. There are three patterns of insomnia:

- *Sleep-onset insomnia* is when it takes longer than thirty minutes to fall asleep.
- *Sleep-maintenance insomnia* is the sleeping pattern of waking often during the night. This may be due to sleep apnoea (a breathing disorder described later), habit, shiftwork, stress or drug use.
- *Early-morning awakening insomnia* is often related to depression and can be due to alcohol use, habit, shiftwork, jet lag and going to bed too early.

Insomnia can be a short-term or chronic problem. Insomnia is not a disease, it is a symptom of other problems.

There is a lot you can do to improve your sleep but first you need to find out what is causing the problem.

Causes of disturbed sleep

Many of us have experienced some sort of sleep problems at some time in our lives. Some of the things that may affect a good night's sleep are:

PERSONAL FACTORS

Medical conditions:

Asthma, coronary heart disease, depression, chronic fatigue syndrome, chronic pain and tinnitus may affect sleep.

Sleep disorders:

Restless leg syndrome, narcolepsy, snoring and sleep apnoea can affect sleep.

Snoring is a common condition caused by vibration of the throat with the muscle relaxation that accompanies sleep. Factors that increase the likelihood of snoring include:

- being overweight
- having large tonsils
- having a small receding chin
- suffering from nasal obstruction and/or congestion
- taking sleeping tablets
- sleeping on your back
- consuming alcohol before bed
- smoking and chronic exposure to other inhaled irritants
- suffering from chronic exposure to allergens.

Often snoring has no serious consequences, but it can be a symptom of a condition called sleep apnoea.

Sleep Apnoea occurs when someone stops breathing for a few seconds while asleep. This may result in broken sleep. Sleep apnoea has been linked with poor work performance, relationship problems and other health concerns.

A simple test, like the one below, can help decide if you may have sleep apnoea.

1. Are you a loud habitual snorer?
2. Do you feel tired and groggy on awakening?
3. Do you experience sleepiness and fatigue during the day?
4. Are you overweight?
5. Have you been observed to choke, or hold your breath during sleep?

6. Do you often wake up in the morning with a headache?

If you answer yes to at least three of these questions it is worthwhile visiting your doctor for further tests. You may be referred to a sleep disorders centre for full assessment and treatment.

Parasomnias:

Some specific conditions can interfere and disrupt the sleep process. Examples include sleep talking and walking, night terrors, nightmares, bedwetting (sleep enuresis) and grinding of teeth (bruxism).

Grief:

Grief can be experienced from losses such as breaking up with a partner, the death of a close friend or family member and can cause intense emotional and psychological distress.

Grieving may lead to a range of sleep disturbances.

Talking to someone about the loss may help make the feelings more bearable. Someone experiencing prolonged or very strong grief reactions may require specialised assistance.

Stress:

Stress is the body's response to anything that is threatening. Experts suggest that 60-80% of sleep problems may be due to stress and worry.

Anxieties and worries about family, money, friends or work, relationship problems, nervousness or over excitement about an event can often cause stress.

Stress is a normal part of being alive and we respond and react to it in many different ways.

While a certain level of stress drives people to achieve goals, too much stress can cause problems. Getting the right balance of stress is important to living a satisfying and healthy life.



LIFESTYLE FACTORS

Circadian rhythm sleep disorders:

Going to sleep late at night, going to sleep too early at night, having an irregular sleep-wake cycle, jet lag and shift work may interfere with sleep.

Physical activity:

Physical activity reduces the time taken to fall asleep and increases the length and amount of deep sleep leading to a more refreshing sleep.

Physical activity during the afternoon will improve sleep, but it can make getting to sleep difficult if too close to bedtime.

Nutrition:

Eating late at night or going to bed hungry tends to keep you awake.

Maintaining a well-balanced healthy diet is one way of improving your sleep.

Alcohol and other drugs:

Drugs such as the caffeine in tea, coffee, cola drinks, cocoa and chocolate, nicotine in cigarettes, alcohol, and the side-effects of medications, may interfere with sleep.

Alcohol may help people to fall asleep but may not lead to deep refreshing sleep. Drug use may cause decreased quality of sleep, insomnia, daytime sleepiness and more frequent waking.

Shift work:

It can be difficult to sleep well when working shifts because people are working when they would normally be sleeping.

The internal body clock of shift workers is often affected and may result in a lack of sleep. This can cause sleepiness and difficulty in keeping awake, affecting the ability to function and causing safety issues at work, irritability, depression and family problems. Long-term shift workers can suffer from chronic sleep disturbances.

Some strategies that may help shift workers improve their sleep include:

- having a sleep environment which is dark, quiet and not too warm
- eating a carbohydrate-rich meal before sleeping
- carrying out physical activity during the night shift. This may help the *circadian rhythm* of night shift workers adapt more quickly to sleeping during the day

- eating food containing protein during work time may help keep the shift worker more alert.

Jet lag:

Travelling across time zones can make it difficult to fall asleep at the appropriate time in a new location. The symptoms that result are called jet lag. These symptoms include:

- daytime sleepiness
- insomnia
- poor concentration
- disorientation
- slower reaction time
- gastrointestinal problems
- irritability
- depression
- alterations to the menstrual cycle
- a tendency to catch colds.

It can take about one day per hour of time difference to recover from the sleep-related symptoms of jet lag.

Strategies to overcome jet lag include:

- drinking water and avoiding alcohol during the flight
- going to sleep at the normal time for the country you are in, rather than sleeping during the day
- doing less activity for the first two days after changing time zones.

Environmental factors:

Noise, excess light, a lumpy pillow or mattress or a stuffy atmosphere can contribute to sleep problems.

Minor tranquillisers

Some people take prescribed medicines, including minor tranquillisers, to help them sleep.

Minor tranquillisers (also called benzodiazepines) are drugs mainly used to calm people, relieve anxiety and induce sleep. Benzodiazepines slow down physical, mental and emotional responses. They are also used for specific medical conditions such as cerebral palsy and epilepsy.

There are many different brand names but the most common benzodiazepines prescribed in Australia are:

- Hypnotics (sleeping pills) – drugs that calm people down or induce sleep. Drugs in this group include: Euhypnos, Normison, Nocturne, Nomapam, Temaze, Tematabs, Alodorm and Mogadon.
- Anxiolytics – drugs that relieve anxiety. Drugs in this group include: Valium, Ducene, Antenex, Alepam, Murelax, Serepax, Xanax and Ativan.

Minor tranquillisers are effective in reducing anxiety or inducing sleep if used for short periods (2 to 3 weeks) following a doctor's instructions. Prolonged use of minor tranquillisers can result in unpleasant side-effects and may lead to dependence. In the long-term they do little to alter the problems that may be causing the sleeplessness.



The most common side effects of minor tranquillisers are:

- lack of coordination
- drowsiness
- difficulties with memory and concentration
- anger
- feeling panicky
- bladder incontinence
- sleeplessness
- shakiness and mood swings
- increased risk of falls.

It can be dangerous to take minor tranquillisers with alcohol or some other medications like antidepressants, antihistamines and strong painkillers. Dependence on minor tranquillisers can develop within weeks of regular use.

Tolerance can also occur, this means more of the drug is needed to get the same effect. Stopping the drug suddenly can produce unpleasant and dangerous withdrawal symptoms.

If you are taking minor tranquillisers and have decided to stop, it is very important to stop gradually. You must seek medical advice from your doctor who may work out a safe reduction program.

Antidepressants

The problems associated with the use of benzodiazepines have led to an increase in the number of antidepressants being prescribed to assist with sleep problems. There are two groups of antidepressants used for the treatment of insomnia:

- Tricyclic antidepressants (TCAs), which include: Endep, Tryptanol, Tryptine, Deptran and Sinequan.
- Selective serotonin re-uptake inhibitors (SSRIs), which include: Prozac, Serzone and Zoloft.

Different antidepressants can have different side effects. TCAs generally cause drowsiness and can be fatal if an overdose is taken. While SSRIs may initially cause insomnia, in the long term they can decrease insomnia that is related to depression. The newer SSRIs are non-toxic when taken alone but are dangerous if taken with other antidepressants.

If you are taking antidepressants and intend to stop, it is very important that you seek medical advice from your doctor who is able to work out a safe reduction program for you.

Tips for a good night's sleep

Using drugs to cope with insomnia may deal with the symptoms but not the cause. There are alternative strategies which many people have found helpful.

Sleep experts and individuals who have had to cope with insomnia suggest trying some of the following strategies.

Naps

Naps can be effective in restoring alertness and enhancing performance, reducing mistakes and accidents. Napping, if done at appropriate times, provides better quality sleep than adding extra sleep onto the night time sleep. Naps can also be used as a preventive measure, for example before a long drive or a party. Be aware that daytime napping can disturb normal sleep patterns.

Relaxation

Relaxation exercises, such as slow deep abdominal breathing, can be an effective way to unwind. Tapes of relaxation exercises are available.

Complementary therapies such as acupressure, acupuncture, aromatherapy and herbal preparations (such as chamomile and valerian) may assist in reducing stress and inducing sleep.

Other relaxation techniques:

- A warm bath
- Satisfying sex
- Massaging specific areas of tension such as the neck, shoulders, hands and feet
- A warm milk drink instead of stimulants like tea, coffee, cocoa or cigarettes before bed
- Ensuring your room is warm and your bed, mattress and pillows are comfortable.

Managing worries

If you have worrying problems on your mind, it can be helpful to jot these down before going to bed and deliberately close off worrying time until the next day.

Seeing a counsellor may help identify other strategies to combat worries.

Have a regular routine and go to bed only when sleepy

Follow a similar routine each night before you go to bed. For example: bring in the cat, lock all the doors, brush your teeth and listen to calming music. Do these activities at the same time every night. It will help you set up a familiar routine and feel relaxed before going to bed.

If you find yourself unable to sleep, get up, read a book or relax in another room. Go back to bed only when you feel sleepy. If you are in bed for more than 30 minutes without falling asleep, get out of bed again. Repeat this as often as necessary.

Use your bed only for sleep and sexual activity. Try not to read, watch television or eat in bed.

Set your alarm and get up at the same time each day, regardless of how much sleep you had during the night. A constant wake-up time helps your body to acquire a consistent sleep rhythm.

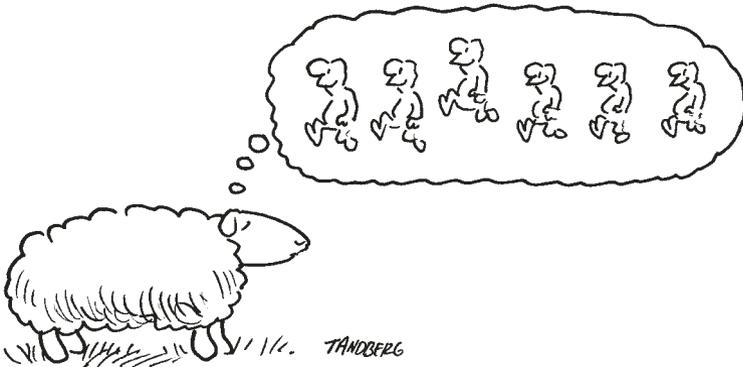
If you have trouble falling asleep, cut out any naps you are having during the day and see if this improves your sleep.

Avoid large meals late at night, but eat enough so you are not hungry.

Sleep diary

Keeping a sleep diary helps to identify the cause of sleep problems and possible solutions. Once these are identified, a sleep management plan can be mapped out.

Use a sleep diary to keep a record of progress.



Keeping a sleep diary

Improving the length or quality of your sleep will take time and patience, but the results will be worth the effort. Don't expect instant results, especially if your insomnia has been a problem for months or years.

The first step in managing your sleep is to find out what might be stopping you from getting a good night's sleep. You will need to chart your sleeping patterns every night for two weeks.

Keeping records this long may seem difficult, but it will help you work out the factors causing your particular insomnia.

You could keep your diary next to your bed or the kettle, so you are reminded to fill it in straight away or as you drink your first cup of tea or coffee in the morning.

How to fill in your diary

On page 19 is an example of how to set out your sleep diary. You should record the following *'pre-sleep'* details:

- how many naps you had during the day and the approximate time and length of the naps
- pre-bed activities, including the time you ate your last full meal. If you follow a regular routine you may want to just record an 'r' in the box. If it was different, for example, you stayed up late watching television or had a relaxing bath, you should jot that down
- in-bed activities, note what you did just before turning out the light, for example, reading or watching television
- record any caffeine or alcohol you drank or the number of cigarettes you smoked for the day within five hours of going to bed. Also include any medication you took, including sleeping pills
- any tension or worrying experienced when in bed
- the time you turned the light out to go to sleep
- any physical activity done during the day and at what time.

Bed/sleep patterns should be filled in the next morning. Record:

- the time it took you to fall asleep
- the number of times you woke and the approximate time in minutes awake
- the number of hours slept
- select the type of sleep
- select a 'rest score'.

Make a brief comment if sleep was disturbed. That is, if it took a while to fall asleep, if you woke during the night or early in the morning and the causes (for example, was it due to worry, or noise or being too hot?)

Getting help

Your doctor can help you with any problems or questions you may have about sleep and insomnia.

A child health nurse at a Child Health Centre can also assist with information on children (aged 0 - 5 years) and sleep.

For an appointment at a sleep clinic you need a referral from your doctor.

Sleep Clinics

Respiratory Sleep Disorders Clinic

Sir Charles Gairdner Hospital
Verdun Street
Nedlands WA 6009
Telephone (08) 9346 2422

St John of God Sleep Centre

Suite 102/Level 1
Subiaco Clinic
25 McCourt Street
Subiaco
Telephone: (08) 9382 6855

Perth Sleep Clinic

Suite 40/146 Mounts Bay Road
PERTH WA 6005
Telephone (08) 9481 2244

Princess Margaret Hospital for Children

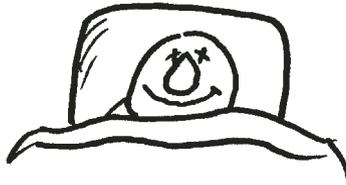
Roberts Road
Subiaco WA 6008
Telephone (08) 9340 8222

Sleep Disorders Association of Australia, WA Branch

Telephone (08) 9332 1037

This is a support association for people suffering from a variety of sleep disorders, including insomnia, sleep apocnea, restless leg syndrome and narcolepsy.

The Alcohol and Drug Information Service (ADIS) offers a 24-hour confidential information, counselling and referral service for anyone seeking assistance with any alcohol or other drug concerns. Call ADIS on (08) 9442 5000. Or for country callers 1800 198 024. (Toll free)



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