



The Sleep Council

The Good-Night Guide

Sleep is the mysterious shift in consciousness that our bodies require every day. It's vital for our health and wellbeing, and not only do we function less well when we don't get enough quality sleep, but it can lead to long-term health problems. That's why we need to do all that we can to ensure that we enjoy quality sleep and deal with any sleep problems.

The Sleep Cycle

During sleep our heart rate drops, our body temperature falls and we experience complex changes in brain activity. An EEG (electroencephalogram) gives us an insight into the brain's electrical activity when we sleep:

- When we first fall asleep we enter non-rapid eye movement (NREM) sleep.
- NREM is divided into three stages:
 - NREM1
 - NREM2 and
 - NREM3, each stage becoming progressively 'deeper'.
- Stages 1 and 2 are light stages of sleep from which we can be easily roused.
- Stage 3 is a deeper stage of sleep from which we're more difficult to rouse, and some may feel disorientated if woken from this stage of sleep.
- Generally, after going through the NREM stages, we enter stage 4 which is known as rapid eye movement (REM) sleep, which the EEG shows as being similar to wakefulness or drowsiness. It is during the REM stage of sleep that we dream.
- Each cycle lasts around 1½ hours and we need to experience all four stages in order to wake up rested.
- A good night's sleep consists of five or six cycles, whereas disturbed sleep consists of far fewer.

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Sleep is largely controlled by sleep pressure, and the circadian rhythm, or our body clock, which is a 24 hour cycle that regulates all our biological and physiological processes. It anticipates environmental changes around us so that our bodies can adapt to them.

In ideal situations, the circadian rhythm will naturally rise in the early morning, promoting wakefulness and alertness, and will reach a peak in the evening. After a waking period of around 15 hours the pressure to sleep becomes greater and greater, in other words, we get tired. With the onset of darkness, the circadian rhythm drops to the lowest level and helps to maintain sleep.

To ensure you experience good sleep it's essential to follow good lifestyle habits and to eliminate the factors that are causing you disturbed sleep. For example making sure that your bedroom is the right environment, looking at the lighting in your home, and avoiding foods and drinks that can hinder sleep. Below are seven areas to address in order to ensure a good night's sleep.

1. Your bedroom

If you're having difficulty sleeping one of the first things to look at is your bedroom. You need the right environment to get a good night's sleep and that means a bedroom that's pleasant, inviting and welcoming.

- Keep your room completely dark, if necessary use blackout curtains or an eye mask.
- Make sure your room isn't too hot or too cold, keep it slightly cool around 16-18°C (60-65°F).
- Keep clutter out of your room – put the laundry basket in the spare room, bathroom or the landing.
- Avoid having a television or computer in the bedroom.
- Turn off your mobile phone and anything with an LED display (including clocks).
- Don't treat your bedroom as an extension of your living room or a study. Use it for sleeping and sex only.
- Adorn your bedroom with beautiful things such as photographs of loved ones, artwork that you like, plants and flowers. It will help you feel more connected to the room and look forward to going to bed.
- Try to avoid bright colours such as reds which are less restful and quite stimulating, and less conducive to a good night's sleep. Use muted and pastel colours, which are a lot more calming.

- Some smells can affect your mood, making you more relaxed and calm. Sprinkle a pot pourri with essential oils of lavender or geranium, though never use during pregnancy or in children's rooms.
- Take a long hard look at your room and see what it says about you and understand that you have a duty to care for yourself, your sleep area and your general health and wellbeing – you're worth it!

Your bed

The foundation of good sleep is a comfortable bed. The right mattress can make the difference between a restorative night's sleep and poor quality sleep resulting in tiredness and fatigue. Lack of support from a mattress reinforces poor sleeping posture and can prevent you from getting a good night's sleep.

If you sleep better in a hotel or other bed away from home; or are waking up with aches and pains which wear off as the day progresses, it may be time to change your bed.

With the vast variety of beds on the market, choosing the right one can be difficult. It's a good idea to do your homework so you understand more about all the different components you can find in a mattress (The Sleep Council's Bed Buyers Guide provides more details about the all options available)

When you're shopping for a new mattress or bed, consider these factors:-

- Always put value and quality over price. Of course, there are some perfectly acceptable, lower priced beds available but the better the construction, the better the support and comfort.
- The right support and comfort is critical – a mattress that's too hard or too soft will be uncomfortable or become so as time goes by. It needs to be firm enough to support your spine in correct alignment – but must also conform to your body's contours.
- Try before you buy: You should lie on each one you're seriously considering for at least 10-15 minutes and try different positions (you move 40-60 times a night) to decide if it's a good fit. If two people will be sleeping on the mattress, both should test it at the same time to make sure they have enough space and are both comfortable on the same style of mattress.

Try not to wait until your bed has 'worn out' completely. Research has shown that sleeping on an uncomfortable bed could rob you of up to an hour's sleep a night. Deterioration is gradual and mostly invisible and your own body's needs also change over time. As a rough guide, you should be thinking about replacing your bed after about seven years.

2. Your Lifestyle

Our twenty first century lifestyles are fast-paced and full of stimulation. Often from the moment when we wake up and check our smart phones, life is fast paced and non-stop. We put on the radio or television to be given the news as it happens and when it happens, we check our emails constantly throughout the day; we sit at our computers and/or watch television late into the evening. It barely stops and it can be difficult to switch off and wind down so it's small wonder that many of us have trouble sleeping. In order to help you wind down:

- Reduce the intensity of light in your home in the evenings by using dimmer switches or lamps with low wattage bulbs
- Have a bedtime routine and maintain a regular sleep pattern
- Use a hot water bottle if you get cold feet
- Empty your bladder before going to bed
- Avoid alcohol
- Avoid use of technology in the hours before bedtime including computers, mobile phones and televisions
- Avoid napping during the day

3. Stress and Worry

Scientists have found a direct link between anxiety and rhythm of sleep. When a person has anxious thoughts, their heart rate goes up and in turn the mind starts to 'race'. This causes the brain to become alert and stimulated and start producing beta waves. This happens to someone who worries about something when they're trying to get to sleep – instead of being calm and subdued; their brains are too aroused to sleep. And to make matters worse, once their brain is stimulated in this way, other worries are activated, making sleep even harder to achieve. As a pattern sets in, sleep becomes a thing of anxiety.

To overcome this various techniques can be used to stop these thoughts and calm the heart rate, cognitive behavioural therapy being one of them. This is a psychological treatment that helps people 'unlearn' the thought processes that block a good night's sleep.

One way to manage and slow your heart rate is to place your hand on your heart and quiet yourself so that you can hear it beating. Then breathe in deeply and slowly for three or four –seconds, then breathe out for three or four seconds. Repeat this until you feel your heart rate slowing down. This will then slow the busy brain activity.

A technique to stop the worrying thoughts that cause your heart to race in the first place is to speak positive thoughts instead. Speaking overrides thinking and will stop the negative thoughts in their tracks. To explain how to do this, start thinking the alphabet in your head. When you reach 'J' start counting out loud.

What happened to the alphabet? You stopped thinking it in your head because your speaking overrode your thoughts. Do this when you start worrying about something when you're trying to sleep. Instead of thinking 'the mortgage is due and I don't have the money to pay it', say aloud 'I don't know where it will come from but I'll need to get creative to find the money for the mortgage and I will find it.'

4. Diet

What promotes good sleep?

There are three substances that are key to understanding how nutrition can affect the brain chemistry that promotes good sleep:

- Tryptophan,
- Serotonin, and
- Melatonin.

What is tryptophan? All protein foods are composed of amino acids and tryptophan is one of them. It is the rarest of the amino acids, and is found in foods like turkey, steak, chicken and pumpkinseeds, and to a lesser extent in peanuts, sunflower seeds, beans and milk. Tryptophan is important because when it reaches the brain, it converts to an important chemical called serotonin.

What is serotonin? You may have heard of serotonin because of its connection to drugs such as Prozac, which are known as selective serotonin reuptake inhibitors (SSRIs). Serotonin is actually a chemical that carries messages between brain cells (neurones) and other cells. Decreased serotonin levels can lead to anxiety, depression, and increased cravings for carbohydrate foods. At night-time, serotonin undergoes two metabolic changes to become melatonin, the chemical that induces sleep.

What is melatonin? Melatonin is a hormone that helps to regulate the body's circadian rhythm and promotes restful sleep. It is produced from serotonin in the evening to help us sleep.

The best way of ensuring optimal melatonin production is to sleep in as dark an environment as possible. Even low amounts of ambient light will suppress the production of melatonin which will affect not only sleep but have other health consequences as well.

- Always combine a protein food with a low to medium glycaemic index carbohydrate food to optimise tryptophan levels.
- Avoid stimulants such as caffeine and cigarettes
- Avoid sedatives such as sleeping pills and alcohol to help you sleep. The effects are usually short-term, they can have counter effects, and sustained use can lead to dependency.
- Avoid buying melatonin supplements from the Internet (they are only available on prescription in the UK). Taking them may disrupt your own natural melatonin production and potentially suppress your ability to produce this important hormone, ultimately making sleep problems worse.
- Do not stop taking sleep medications suddenly. The best approach is to speak to your doctor and develop a strategy to slowly wean yourself off them.
- Changes in diet can help you sleep but it takes a little longer than the quick fix pill. Fill in a sleep diary and note what you've done on days when you've slept well or badly.

5. Exercise

- Exercise can help you enjoy better quality sleep and lower body temperature which also induces better sleep
- Don't overdo it. Wearing yourself out physically is not particularly likely to induce sleepiness. In fact it can be counter-productive and lead to wakefulness and alertness when trying to sleep.
- Though it's widely believed that working out too close to bedtime can disturb sleep, there isn't evidence that backs this argument, so it's better to exercise in the evening than not at all.

- The important thing is to exercise because it makes you feel fitter and better, and if you are experiencing sleeping difficulties, the more you exercise, the more likely you are to improve your sleeping patterns.

6. Relaxation and other therapies

Relaxation and Breathing

Stressful lifestyles, working late, and watching intense television shows or the news, are some of the factors that can contribute to the mind racing and being unable to wind down. It's important to know the importance of being relaxed before bed, and to have the knowledge of effective relaxation techniques to apply in order to experience deep, restful sleep.

Relax your Body

This can be done in bed and works by relaxing separate groups of muscles. It is also effective to visualise each set of muscles being relaxed as you go through the exercise:

1. Tense a muscle by contracting and flexing for 7-10 seconds. Don't strain the muscle.
2. Visualise the muscle being tensed and feel the build up of tension
3. Release each muscle abruptly, then relax, allowing the body to go limp before going on to the next muscle.
4. Keep other muscles relaxed whilst working on a particular muscle.

For more information visit the Sleep Council website: www.sleepcouncil.org.uk

Breathe

The effects of deep breathing are largely psychological but it can bring about a physiological response in the body. It can normalise the heart and respiration rate and calm you.

An exercise:

As well as relaxing you before bed, you can use this breathing exercise whenever anything upsetting happens, and before you react. It can be done anywhere because you don't have to lie on your back:

1. Sit up with your back straight and place the tip of your tongue just behind your upper front teeth, and keep it there throughout the entire exercise.
2. Practice exhaling with your tongue in this position. It will be easier if you purse your lips.

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3. Now close your mouth and inhale through your nose for 4 seconds (counting one one thousand, two one thousand etc)
4. Hold your breath for 7 seconds then exhale through your mouth, taking 8 seconds to exhale completely
5. Repeat 3-4 times and try to be accurate with the counting
6. Do this every evening before bed

Cognitive Behavioural Therapy (CBT)

CBT is commonly prescribed for depression but clinical trials have shown it is the most effective long-term solution for insomniacs. CBT helps you identify the negative attitudes and beliefs that hinder your sleep, and replaces them with positive thoughts, effectively 'unlearning' the negative beliefs.

A typical exercise is to set aside 30 minutes in which you do your day's worrying. During the worry period you keep a diary of the worrying thoughts because the act of writing them down is believed to reduce them. You're now banned from worrying at any other time of the day other than these 30 minutes. And before going to bed you write down the worries you might have in bed then set them aside. When in bed you close your eyes and imagine these worries floating away in a balloon, leaving your mind free and unencumbered by these worries.

Stimulus Control – 20 minute rule

You go to bed when you're fatigued, and if you're not asleep after 20 minutes, you get up and do something else such as listen to relaxing music or the breathing and muscle relaxing exercises.

When you feel sleepy again, then you return to bed. The idea of this is to build a strong association between bed and sleep, and eventually you'll be able to fall asleep soon after getting into bed and not dread bedtime.

Sleep Restriction

This method involves only spending the amount of time in bed that equates to the average number of hours that you sleep. For example, if you only get five hours of sleep per night, even though you spend seven hours in bed, you limit yourself to five hours in bed at night.

This method may make you more tired at first, but it can also help you fall asleep faster and wake up fewer times. However it's not suitable if you're only getting a couple of hours sleep, and should be supervised by a qualified CBT Sleep Practitioner.

If you incorporate all the recommendations in the booklet your sleep should improve a lot – but if not, then try Sleepio, a six week online CBT course devised by sleep expert Dr Colin Espie. It's designed to help you develop a healthier relationship with sleep and in trials it's said to have helped 75% of chronic insomniac sufferers (www.boots.com)

7. Hormonal balance

Many people think they are not sleeping well because of stress or other reasons, but it may be because of your hormones. Changes in hormone levels as we age can cause sleep disturbances, and sleep disturbances can alter hormone levels, turning into a vicious cycle.

Sleeplessness can affect around 10 different hormones, and shifts in these hormones can cause changes in appetite, mental wellbeing, cardiac health and even fertility.

Melatonin has already been mentioned earlier regarding its importance in getting a good night's sleep, but there are other hormones that can also affect how we sleep.

- Hormonal fluctuations in the years before menopause can cause disturbed sleep, low progesterone levels can cause sleeplessness, and an overactive thyroid can cause sleep problems so if you're menopausal or perimenopausal get your hormone levels checked by your GP (and don't settle for a prescription for sleeping pills)
- A stressful lifestyle can keep cortisol levels high and cause sleeplessness
- Adolescents and young adults need to follow good sleep guidelines with regard to bedroom and lifestyle to help prevent disturbed sleep