

Patient information

Chronic pain self-management

Sleep

Chronic pain can affect your sleep in several ways. You may find it difficult to get to sleep, or stay asleep, or both. For some, it may be pain itself that prevents a restful night, for others, it may be worrying thoughts.

After a few nights of poor sleep, it can become a vicious circle – you worry that you won't be able to sleep, you then can't relax, and you don't sleep.

How much sleep you need may vary according to your age, sex, lifestyle, work, social demands and physical and emotional health.

Sleep patterns change throughout our lives. For example, we usually sleep less and have more wakeful periods as we get older.

Sleep and nutrition

Certain nutrients may play an underlying role in sleep duration. For longer and better sleep, it's important to have lycopene, a natural compound found in red and orange coloured foods. Carbohydrates, vitamin C, selenium (found in nuts, meat and shellfish) and lutein / zeaxanthin (found in green leafy vegetables) are also rich in stress reducing calcium. A snack that contains both complex carbohydrates and protein will help optimise our tryptophan levels.

The Sleep charity has considered diet in relation to sleep and how nutrition can affect the brain chemistry that promotes good sleep. This includes tryptophan, serotonin and melatonin.

- Tryptophan – an amino acid found in protein foods eg turkey, steak, chicken and pumpkin seeds and to lesser extent in peanuts, sunflower seeds, beans and milk are converted to serotonin in the brain.

- Serotonin – a chemical that carries messages between brain cells and other cells. Decreased levels serotonin levels can lead to anxiety, depression and increased cravings for carbohydrate foods. At night time serotonin undergoes 2 metabolic changes to become melatonin which induces sleep.
- Melatonin – a hormone which helps to regulate the body’s circadian rhythm and promote restful sleep. It is produced from serotonin in the evening to help us sleep.

Our internal biological rhythm, the Circadian rhythm, regulates many biological functions including sleep. It promotes wakefulness and sleepiness at different times each day.

To keep in sync, we need exposure to sunlight and both physical and social activities during the day. Inactivity and social withdrawal are common consequences of chronic pain which may disrupt your Circadian rhythm.

Reasons for poor sleep

- Too much rest with insufficient activity and exercise
- Increased pain due to overdoing an activity
- Daytime naps
- Medication use and withdrawal
- Caffeine
- Cigarettes
- Alcohol
- Worries and anxieties
- Shift work
- Clock-watching

Effects of lack of sleep

- Less able to enjoy things
- Pain is harder to live with
- Less resistance to infection
- More irritability with others
- Depression and feelings of hopelessness
- Slower mentally and physically



Basic guidelines for a good night’s sleep:

- Establish a regular routine before going to bed. Try to prepare for bed, following a familiar pattern each evening, for example, secure the house, have a bath, make a drink, go to bed. Try to go to bed at around the same time each night.

- Make your bed and bedroom as much associated with sleep as possible. Don't use your bedroom during the day (except for relaxation). If you are still awake after 20 minutes, get up, leave the room and do something to occupy your mind – read, listen to music etc. and then return to bed.
- Don't 'clock watch'. Avoid watching TV or working in bed – writing letters, using laptops etc. The time will seem to pass very slowly. Turn the clock face away from the bed.
- Establish a regular routine for mornings. Try to get up at the same time each day, even when you don't feel like it.
- Keep a record of your progress on your sleep chart. This will show you that things are improving, even if you don't think they are. Don't worry about an occasional 'blip' – we all have bad nights sometimes.

It is easy to become obsessed by how long, or little, we sleep. More important is how rested we feel after our sleep. A sleep diary filled in for a week or so can give an idea of what the problem is. It is important to realise that it may require considerable time and effort to overcome long term sleep problems.

Sleep diary/chart (example)

| Day/date | Lights out time | Final wake up time | Number of times awake | How rested? Score 0 – 10 where 0 = not rested 10 = fully rested | Comments |
|----------------------------------|-----------------|--------------------|-----------------------|---|--|
| Sunday 3 rd September | 10.30pm | 6.45am | 4 | 3 | <i>Too hot. Couldn't get comfortable</i> |
| Monday 4 th September | 10.30pm | 7.30am | 2 | 4 | <i>Couldn't settle, still awake at 2am</i> |

Useful resource: www.thesleepcharity.org.uk

Sleep Diary

| Day/Date | Lights out time | Final wake up time | Number of times awake | How rested? Score 0–10 where 0 = not rested 10 = fully rested | Comments |
|-----------------|------------------------|---------------------------|------------------------------|---|-----------------|
| Monday | | | | | |
| Tuesday | | | | | |
| Wednesday | | | | | |
| Thursday | | | | | |
| Friday | | | | | |
| Saturday | | | | | |
| Sunday | | | | | |