



SLEEP: MELATONIN

About melatonin

The pattern of waking during the day and sleeping at night is a natural part of human life. A key part of how this process works is our exposure to light and darkness.

Melatonin is a hormone produced deep in the brain by the pineal gland. During the day, the pineal gland is not active and levels of melatonin in the blood are very low. As the sun goes down and it starts to get dark, the pineal gland begins to produce melatonin which is released into the blood stream. Melatonin makes us feel drowsy and want to fall asleep.

Levels of melatonin remain high overnight and begin to fall again towards sunrise. At that time, the body is rested and getting ready to emerge from the state of sleeping.

Melatonin can also be produced artificially, and may be prescribed by specialist doctors (paediatricians/psychiatrists) for use mainly by children who have difficulty in falling asleep but have not responded to 'Sleep Hygiene' methods. Because behaviour influences sleep, it is important that parents/caregivers carry on using these methods alongside giving melatonin.

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Starting melatonin

In the UK melatonin is licensed for adults over the age of 55 and is also used for children. At present there is no evidence to show that it causes harm and, for many children, it can be helpful. However, ideally it should not be relied upon as a long-term cure for sleep problems, and, like all medicines, it must be used carefully.

The main type of melatonin prescribed by UK paediatricians is Circadin. This comes in tablet form and is modified (slow) release. Tablets should be swallowed whole but can be crushed and added to jam or yoghurt, although this may reduce their effectiveness.

Circadin also comes as a liquid medicine but is rarely prescribed.

Each dose should be taken **30–60 minutes before the set bedtime**. This is important because taking it at the wrong or different times could disrupt the body clock.

Parents/caregivers should not adjust the dose themselves. If children wake at night the same or a smaller dose may be given, but this must only be done following medical guidance.



Side effects and safety

The side effects of melatonin are fairly uncommon. Rarely it may cause heart problems (chest pain, fluttering feeling or rapid heart rate). If this is the case, seek immediate medical advice. Other side effects include dizziness, daytime drowsiness, headaches or itchy rash.

It is safe for children to be given paracetamol when taking melatonin. Medicines for ADHD are also safe. If the child is taking medications for other conditions (including epilepsy and asthma) this should be discussed with the doctor before starting treatment.



Boosting melatonin naturally

Artificial lighting has been shown to affect the production of melatonin and upset the body's 24-hour sleep/wake cycle (circadian rhythm). Getting plenty of daylight (especially in the mornings) and keeping lights dim in the evenings will help the body to naturally produce melatonin.

Medical advice is that screen time for children should be limited, because 'blue light' given out from televisions, smart phones, computer monitors and other devices influences the delicate balance of melatonin production in the brain. For this reason, electronic gadgets must be switched off at least one hour before bedtime.

Read our section [Eat Right to Sleep Right](#) to find out about foods which naturally contain melatonin and other chemicals to help sleep.

More Information

When starting treatment please refer to:

www.medicinesforchildren.org.uk/melatonin-for-sleep-disorders

For individual advice about melatonin speak to the paediatrician or a pharmacist.

We recommend that parents/caregivers read our range of information about sleep and follow sleep hygiene guidelines for the duration of taking melatonin and beyond.

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To find out other useful advice and information please visit:
providechildrenandfamilyservices.co.uk