

## Want To Try Melatonin?

If you are considering trying melatonin to improve sleep or manage sleep-related issues, it is advisable to follow these steps:

- 1. Consult your GP:** Before starting any supplement, including melatonin, it's crucial to consult your GP. They can assess your specific situation, medical history and any potential interactions with other medications.
- 2. Discuss dosage and timing:** Your GP will help determine the appropriate dosage and timing based on your individual needs. They will consider factors such as age, sleep patterns and the reason for using melatonin.
- 3. Start with a low dosage:** Begin with the lowest effective dosage and observe how your body responds. This approach minimises the risk of side effects.
- 4. Use as directed:** Follow your GP's instructions and the manufacturer's recommendations.



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# Melatonin

What you  
need to know



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Melatonin, nicknamed the “hormone of darkness”, is produced by the brain’s pineal gland. It plays a role in managing our sleep-wake cycle and circadian rhythm as its level rises as it gets dark.

The sleep-wake cycle refers to our 24-hour daily sleep pattern, which generally consists of about 16 hours of daytime wakefulness and eight hours of night-time sleep. Circadian rhythms are involved in most human biological processes and are regulated by the body’s internal master clock, which is located in the brain.

Melatonin production tends to decline as we get older. There are several factors which may contribute to this including calcification of the pineal gland, decreased sensitivity to light cues and changes in lifestyle, routines and environmental exposures. The decline in melatonin production as we age is thought to be one of the reasons why older adults often experience changes in sleep patterns.

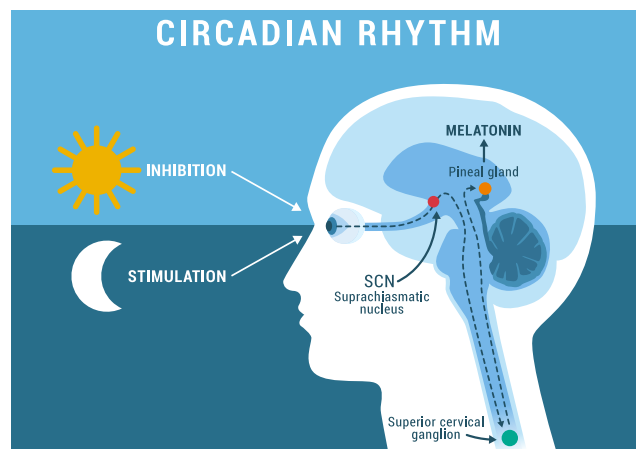
Melatonin can be made synthetically and it is marketed in some countries as a dietary supplement.

### HOW DOES MELATONIN HELP WITH SLEEP?

Taking melatonin at the appropriate time before sleep can alleviate the symptoms of jet lag by helping reset the body’s internal clock and reducing the time it takes to adapt to a new time zone.

Sleep problems and dementia often go hand-in-hand. Some studies suggest that melatonin might have a role in the management of certain aspects of dementia, such as sleep disturbances and behavioural symptoms. However, more research is needed to fully understand its potential benefits.

Melatonin has been widely used to treat insomnia and other sleep difficulties, but the data underpinning this is not yet convincing. The effect appears to be more obvious in people aged over 55 and some data suggests it is a better hypnotic during daylight hours.



### ARE THERE ANY SIDE EFFECTS?

While melatonin is generally considered safe for short-term use, common side effects include daytime drowsiness, headaches, nausea, dizziness and mood changes (in rare cases). It’s important to note that side effects can vary from person to person and not everyone will experience them.

The effect of melatonin on children in puberty and in pregnancy is relatively unknown. People suffering from diabetes who have a particular genetic makeup, can also be negatively affected by melatonin.

### HOW IS MELATONIN SUPPLIED? IN WHAT DOSES?

In Australia, melatonin is mostly classified as a Schedule 4 substance which means it requires a prescription from a healthcare professional. In general, it is not available “over the counter” without a prescription. However, there is one exception. From June 2021, a form of melatonin in modified-release tablets (long-acting or slow-release) is available from pharmacies without a prescription for people aged over 55 years. These tablets contain 2mg or less of melatonin in packs containing not more than 30 tablets and are now a Schedule 3 substance.

The age restriction on supply in pharmacies reflects research showing a decline in the natural secretion of

melatonin at night as we age. The modified-release form of medications is designed to delay the delivery of the drug inside the body after being taken.

Anyone younger than 55 still requires a script from their doctor – as would those requesting a dose stronger than 2mg, or for any melatonin supplement other than in a modified-release tablet.

### IS IT SAFE TO BUY MELATONIN ONLINE?

While it may be possible to find melatonin supplements for sale online, it is crucial to exercise caution and only purchase from reputable sources. In Australia, melatonin is a prescription-only medication, so purchasing it online without a valid prescription could be illegal and potentially unsafe. It is always important to consult a healthcare professional before using melatonin supplements.

### WHAT RESEARCH IS THE WOOLCOCK DOING?

Sleep disturbance has been linked to an increased risk of cognitive decline and dementia. A recent study at the Woolcock investigated whether melatonin can act as a preventive treatment in delaying the onset of dementia, the second leading cause of death among Australian men – and the first for women. Researchers believe a correct dose of melatonin may have therapeutic benefits, including synchronising the body clock and promoting good sleep.

Our researchers are currently carrying out an important melatonin trial, the Melatonin for Delayed Sleep Phase Disorder (DSPD) Study. This study will assess whether a melatonin-like drug, tasimelteon, can help people suffering from DSPD, a circadian rhythm disorder defined as a sleep schedule occurring substantially later than the conventional or desired time. Our experts hope the study will provide accurate diagnosis methods, optimal treatment timing and a pragmatic treatment approach.

To find out more, go to [www.woolcock.org.au/clinic](http://www.woolcock.org.au/clinic).