



MELATONIN – THE VAMPIRE HORMONE

Melatonin is made by the body from the Tryptophan molecule which is an amino acid that you get from protein foods in the diet. It is natural. In the past, it was thought that melatonin was only made by the pineal gland (which sits in the centre of the brain) in response to darkness. But it is now known that it is also made in other parts of the body.

As a person ages, melatonin production falls. Supplementing it for certain people may be beneficial and it is safe.

It induces sleep, shortens the time it takes to fall asleep, and aids a faster onset of deep sleep (slow wave sleep) and REM sleep. Furthermore, melatonin relaxes the muscles and nerves by stimulating the parasympathic (relaxing) system. This facilitates sleep, improves sleep quality and enhances recovery. You wake up having had a good night sleep.

Shift workers, those that are sleep deprived and those with jet lag are melatonin deprived and so have many symptoms that include fatigue and poor ability to function. This is where taking melatonin can be useful.

Melatonin benefits

- Antioxidant / free radical scavenger
- Protects DNA, proteins and lipids (fats) from injury
- Anti-inflammatory – similar to anti-inflammatory drugs
- Protects against radiation
- Decreases damage from beta amyloid which is increased in Alzheimers disease
- Reduces cancer growth and spread
- Increases natural killers cells which fight viruses and cancer
- Activates immune messengers called cytokines favourably
- Extends life by lengthening telomeres (the ends of chromosomes) that would normally shorten with age
- Reduces abdominal fat and controls insulin – this helps to prevent obesity and diabetes
- Helps in wound healing and prevents scar formation
- Protects against brain injury – including traumatic brain injury and spinal cord injury and brain injuries that involve initial lack of oxygen where it causes follow on damage to cells
- Helps irritable bowel, acid reflux and protects the stomach from non-steroidal anti-inflammatory drugs.
- Helps migraine, depression, anxiety
- Protects the heart against injury
- Helps stressed and anxious people sleep

Dose of Melatonin

The doses used in research have been up to 700mg. The doses used for cancer patients have been up to 50mg /day

The suggested dose is 0.5- 1mg, taken 30-60 minutes before bed. Increase by 0.5- 1 mg every 2-3 days until the person can get off to sleep, and wakes refreshed.

Most patients find that they need between 1-6mg to get a good sleep. This is available on prescription and is generally very safe.

If the person wakes drowsy, take earlier before bed, or reduce the dose.

A minority of people have no effect or experience vivid dreams. For vivid dreams – reduce the dose and persevere for up to 3 weeks with it, and it should resolve.

Precautions:

- Whereas Melatonin is safe to use concurrently with all antidepressants, some patients who are very depressed may become more depressed. In these patients, go slowly with dose increases.
- Alcohol and non-steroidal anti inflammatory drugs lower melatonin levels