

## Melatonin Liquid (Melatonin®)

<b>Trade Name</b>	Melatonin Tablets Circadin® Melatonin capsules Swanson
<b>Class</b>	'Sleep' Hormone
<b>Mechanism of Action</b>	Melatonin is a naturally occurring hormone that is produced by the pineal gland. It is used to improve quality of sleep by controlling circadian rhythm. In addition melatonin is also involved in thermoregulation, vasodilation and vasoconstriction, haematopoiesis and immune function <sup>1</sup> .
<b>Indication</b>	Improvement of quality of sleep cycle.
<b>Contraindications</b>	Hypersensitivity to melatonin or the suspending agent used to make the liquid oraplus/orasweet.  Not recommended for use in patients with autoimmune disease due to lack of clinical data in this patient group.  Avoid in patients with hepatic impairment due to risk of decreased clearance.  Some reports suggest melatonin may affect seizure control use with caution in epileptic patients.
<b>Supplied As</b>	Melatonin Oral Liquid <b>1mg/mL</b> made by pharmacy on request
<b>Dilution</b>	Nil
<b>Dosage</b>	<b>0.5mg in the evening</b> is the starting dose used in neonates Dose can be increased to 2mg if required
<b>Interval</b>	Once daily
<b>Administration</b>	Give with a feed
<b>Compatible with</b>	Can be given with milk or water
<b>Incompatible with</b>	Do not mix in the same syringe as any other medicines.
<b>Monitoring</b>	Monitor for signs of unwanted sedation or alteration in seizure control.
<b>Stability</b>	Expiry is 30 days from day of manufacture.
<b>Storage</b>	Store oral liquid at room temperature.
<b>Adverse Reactions...</b>	Adverse effects of melatonin are considered to be fairly uncommon but have been reported to include: abdominal pain, dyspepsia, dry mouth, mouth ulceration, weight gain, hypertension, chest pain, malaise, dizziness, restlessness, nervousness, irritability, anxiety, migraine, proteinuria, glycosuria, pruritus, rash, dry skin; <i>rarely</i> thirst, flatulence, halitosis, salivation, vomiting, gastritis, hypertriglyceridaemia, palpitation, syncope, hot

<b>... Adverse Reactions</b>	flushes, aggression, impaired memory, restless legs syndrome, paraesthesia, mood changes, priapism, increased libido, prostatitis, polyuria, haematuria, leucopenia, thrombocytopenia, electrolyte disturbances, muscle spasm, arthritis, lacrimation, visual disturbances, nail disorder
<b>Interactions</b>	<p>Increased sedation in combination with other sedative medication.</p> <p>In some patients caffeine may increase the concentration of melatonin and increase sedation, in others the stimulatory effect of caffeine may oppose the sleep inducing effect of melatonin.</p> <p>Citalopram, cimetidine and ciprofloxacin may increase melatonin concentrations.</p> <p>Carbamazepine and rifampicin may reduce melatonin concentrations.</p>
<b>Metabolism</b>	Melatonin is predominantly metabolised by the enzyme CYP1A2 in the liver.
<b>Comments</b>	
<b>References</b>	<ol style="list-style-type: none"> <li>1. <a href="https://bpac.org.nz/BPJ/2015/August/melatonin.aspx">https://bpac.org.nz/BPJ/2015/August/melatonin.aspx</a></li> <li>2. <a href="http://www.nzfchildren.org.nz">www.nzfchildren.org.nz</a></li> <li>3. <a href="http://www.southwocscg.nhs.uk/EasySiteWeb/GatewayLink.aspx?allid=41253">www.southwocscg.nhs.uk/EasySiteWeb/GatewayLink.aspx?allid=41253</a></li> <li>4. <a href="https://www.bacdis.org.uk/policy/documents/melatonin_scp_-_1301.pdf">https://www.bacdis.org.uk/policy/documents/melatonin_scp_-_1301.pdf</a></li> <li>5. <a href="http://www.micromedexsolutions.com">www.micromedexsolutions.com</a></li> </ol>
<b>Updated By</b>	<p>A Lynn, B Robertshawe. August 2018</p> <p>A Lynn, B Robertshawe October 2021 (routine review)</p>