Insomnia

<table>
<thead>
<tr>
<th>Practice points</th>
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<tr>
<td>• Valerian may improve time taken to fall asleep and sleep quality. It should be taken approximately 1 hour prior to bedtime. Continuous nightly use of valerian may be needed for significant effect for some people</td>
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<td>• Hops may improve sleep quality and is commonly used in combination with valerian</td>
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<td>• Lemon balm may improve sleep but trial evidence is limited</td>
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**Description**

- Insomnia is a prevalent sleep disorder affecting up to 40% of the population. Diagnosed chronic insomnia affects around 10%.
- The prevalence of general sleep disturbance experienced by people over a year is approximately 85%.
- There are four types of insomnia: (1) difficulty falling asleep; (2) difficulty maintaining sleep; (3) early morning awakening; or (4) unrefreshing sleep.
- Insomnia typically presents as an isolated episode, but may denote an underlying medical condition or situation.

**Complementary medicines**

**Primary recommendations**

**VALERIAN (Valeriana officinalis)**

**Mechanism of action**

- May stimulate release of GABA, inhibit GABA reuptake and modulate GABA activity at GABA(A) receptors.

**Research**

Most research shows that taking valerian orally modestly reduces the time to sleep onset (sleep latency), and improves subjective sleep quality although not all evidence is positive.

- A 2010 meta-analysis (18 RCTs; n=1317) found that valerian improved subjective sleep quality, although this was not confirmed by quantitative measurements.
- A 2011 systematic review found 3 positive (more effective than placebo and equivalent to oxazepam) and 3 negative results (equal to placebo).
- A 2015 systematic review and meta-analysis (14 RCTs; n=1602) found no statistically significant difference between valerian and placebo for 13 measures of clinical efficacy.
- Some research suggests valerian in combination with hops may improve sleep latency and duration.
- Valerian does not relieve insomnia as fast as benzodiazepines, however it may improve sleep quality in those withdrawing from these drugs.
- Morning drowsiness is rare at standard doses due to improvement of sleep parameters and no inhibition of REM sleep phases.
- No increase in alcohol toxicity if combined.
- No adverse effects shown in driving studies.

**Adverse effects**

- May occasionally cause headache, GI symptoms, morning somnolence, and vivid dreams.

**Interactions**

- Theoretical potentiation effects with pharmaceutical sedatives.
Diet and lifestyle recommendations

- Decrease body-mass index
- Increase exercise and physical activity
- Lower caffeine (coffee/tea), alcohol, and nicotine consumption
- Maintain a regular sleep schedule
- Avoid large meals before bedtime
- Yoga and tai chi may improve sleep duration or quality
- Good evidence supports cognitive behavioural therapy and relaxation therapy

REFERENCES


Dosage
- Typically found in tablet/capsule form
- Standardised extracts that report valerenic acid content may be more reliable
- Dosage range: > 600 mg/d dried root 1h before bedtime. Infusion of ≥9 g/day dried root

HOPS (Humulus lupulus)

Mechanism of action
- May modulate activity of GABA via modulation of brain GABA(A) receptors as well as effects on adenosine, serotonin and melatonin
- A 2010 systematic review of randomised controlled trials found hops and valerian combination improved at least one sleep parameter, often sleep latency and sleep quality in patients with primary insomnia. There were, however, methodological problems and further studies are needed.
- A 2008 randomised controlled trial found a hops/valerian combination improved sleep quality and duration after single-dose administration
- Concomitant use of hops with CYP450 enzyme substrates (1A1, 1A2, 1B1, 2C8, 2C9, 2C19, 3A4) may increase drug effects and blood levels of affected medications
- Typically found in tablet/capsule form
- Dosage range: equivalent to 500 – 3 g dried herb/d
- Also used as a bath additive and in pillows

LEMON BALM (Melissa officinalis)

- Preliminary research suggests that a standardised lemon balm extract may reduce insomnia in patients with mild to moderate anxiety disorders. There were improvements in sleep latency, sleep quality and sleep duration
- Dosage range: equivalent to 500 – 3 g dried herb/d
- Also used as a bath additive and in pillows

Contact education@blackmoresinstitute.org Healthcare Professional Advisory Service 1800 151 493 Website blackmoresinstitute.org