

Sleep Protocol: The Evidence Behind the Doses

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Each herb in the sleep protocol is listed with the dose I suggest and what the published research actually tested. Where the studied product differs from the one in the protocol, that is stated. Start with the foundation (magnesium glycinate, L-theanine, I Sleep Soundly), then add one herb at a time and judge it for two weeks.

Herb	Dose in this protocol	What the research used and found	How sure
Valerian root	1 to 2 capsules (200 to 400 mg extract, 2% valerenic acid), 60 min before bed	Trials used 400 to 900 mg of extract, most often 600 mg, for 2 to 4 weeks. Some showed modest improvement in sleep quality and time to fall asleep; the NIH review calls the overall evidence inconclusive. Few side effects. [1]	Probable, modest
Hops	3 capsules (about 930 mg flower), 30 to 60 min before bed	Recognized in Europe as a traditional sleep aid. Controlled trials tested hops with valerian: one tablet of 500 mg valerian plus 120 mg hops extract nightly for 3 weeks added about 22 minutes of sleep per night (40 adults). Hops alone has not been tested well. [2, 3]	Promising (with valerian); traditional (alone)
Lemon balm	One label serving, late afternoon and before bed	A standardized extract (Cyracos), 300 mg twice daily for 15 days, reduced insomnia scores by 42% and anxiety by 18% in 20 adults. Open-label, no placebo group, and a different preparation from a liquid extract. [4]	Promising
Jujube seed (Zizyphus formula)	2 tablets in the evening, 2 at bedtime	Jujube seed 250 mg twice daily for 21 days improved sleep-quality scores (PSQI 10.5 to 6.2 vs 10.2 to 9.3 on placebo) in 96 postmenopausal women. Reviews of jujube-based formulas find benefit but rate the evidence low quality. This product is the traditional five-herb formula, not the single seed. [5, 6]	Promising
Reishi	2 capsules (1 g) in the evening	A reishi polysaccharide extract, 1,800 mg three times daily for 8 weeks, improved fatigue and well-being more than placebo in 132 adults. Sleep was not the outcome studied, and the dose and preparation differ from this product. [7]	Plausible for sleep; promising for fatigue
Kava	1 to 2 capsules (60 to 120 mg kavalactones) in the evening, a few weeks at a time	Studied for anxiety, not insomnia. 120 to 240 mg kavalactones daily for 6 weeks reduced anxiety (58 adults). A larger 16-week trial of 240 mg daily (171 adults) found no benefit over placebo and more abnormal liver tests. [8, 9]	Mixed

Safety

Kava and the liver. Rare but serious liver injury has been reported with kava, and the FDA issued a consumer advisory in 2002. Reported cases appeared 2 to 24 weeks after starting. Use it for adults only, a few weeks at a time, never with alcohol, and not at all with a liver condition or medication that affects the liver. Stop and call if you notice dark urine, yellowing skin or eyes, or unusual fatigue or nausea. [10]

All of these are sedating. Valerian may add to the effect of benzodiazepines, other sedatives, and alcohol. Do not combine these herbs with sleep medication, and do not drive after taking them. If you are pregnant, nursing, or on prescription medication, check with me first.

Sources

- [1] NIH Office of Dietary Supplements. Valerian: Fact Sheet for Health Professionals. ods.od.nih.gov/factsheets/Valerian-HealthProfessional
- [2] European Medicines Agency, HMPC. Lupuli flos (hop strobile) herbal monograph summary. ema.europa.eu/en/medicines/herbal/lupuli-flos
- [3] Valerian-hops extract combination (Ze 91019) in occasional insomnia: randomized controlled feasibility trial. PMC12134488.
- [4] Cases J, et al. Pilot trial of Melissa officinalis L. leaf extract in mild-to-moderate anxiety disorders and sleep disturbances. Med J Nutrition Metab. 2011. PMC3230760.
- [5] Mahmoudi R, et al. Effect of jujube seed capsule on sleep quality of postmenopausal women: double-blind randomized trial. BioMedicine. 2020. PMC7735973.
- [6] Zhao et al. Zao Ren An Shen for insomnia: systematic review with meta-analysis. Front Pharmacol. 2024. doi:10.3389/fphar.2024.1376637.

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- [8] Sarris J, et al. Kava in the treatment of generalized anxiety disorder. J Clin Psychopharmacol. 2013.
- [9] Sarris J, et al. Kava for generalised anxiety disorder: a 16-week double-blind randomised placebo-controlled study. Aust N Z J Psychiatry. 2020.
- [10] LiverTox (NIH). Kava Kava. ncbi.nlm.nih.gov/books/NBK548637

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease. This handout is educational and does not replace individual medical advice.