

Irma Lomashvili
DEN 2315 Pharmacology
November 16 - Fall, 2019

Valerian

Valerian is a flowering plant, the root of which is dried and used as an herbal remedy.

The generic name is Valerian, the Latin name is *Valeriana officinalis*, the brand name is Valerian Root, and other common names are, all-heal, garden heliotrope, ammantila, baldrian etc. The roots and rhizomes (underground stems) of valerian are used to make capsules, tablets, and liquid extracts, as well as teas. Valerian is most commonly used for sleep disorders such as insomnia, or the inability to sleep. Although there is limited scientific research on its other uses, it is known to relieve anxiety and psychological stress. In addition, the oil and extracts from Valerian are manufactured to be used as a flavoring in foods and beverages.

Valerian is native to Europe and parts of Asia but also grows in North America. Valerian has been used medicinally since the times of early Greece and Rome; Hippocrates wrote about its uses in 400 B.C.E. in the “Hippocratic Corpus” (magma.ge). Historically, valerian was used to treat nervousness, trembling, headaches, and heart palpitations. According to sources from Georgia — an old eastern European country where the use of Valerian is very common — eastern countries used Valerian as an ingredient for relaxing baths or perfume. Interestingly enough, it is also known to improve sleep by making dreams more clear, bright, positive, and comforting.

There are research studies as well as unapproved theories that explore the functions of Valerian and its effects on the human body. A study suggested that *Valeriana officinalis* root extract suppresses physical stress by electric shock and psychological stress by nociceptive

stimulation-evoked responses by decreasing the ratio of monoamine neurotransmitters to their metabolites (Jung 203-220). Another theory, which does not have sufficient evidence to be proven, suggested that taking valerian root every night for 4 weeks can improve sleep quality and anxiety in people taking efavirenz, a medication used to treat HIV infection that often causes psychiatric side effects like psychosis and thoughts of suicide (Motahareh 457-464).

Additionally, Valerian root and lemon balm extracts contain a phytomedicine compound that improves ADHD symptoms in children but is only possibly safe when taken by children for 4-8 weeks (Maxine 391-395). In general, no information is available about the long-term safety of valerian or its safety in children younger than age 3, pregnant women, or nursing mothers.

Because there is no accurate research on Valerian's long term side effects, it is important to take precautions when combining it with other drugs. Although Valerian usually does not have side effects, it may be unhealthy if combined with alcohol or sedatives like CNS depressants and Benzodiazepines (Ex. Alprazolam), which cause too much sleepiness and drowsiness. (WebMD).

While there is a prescription medication like Zolpiden available for patients with insomnia, they may prefer to use an herb like Valerian because it has fewer side effects on their everyday life. Dental health professionals should know about the safety and effects of supplemental herbs before suggesting it to a patient. They should inform patients that an herb like Valerian cannot treat, prevent, diagnose, or cure their disease and suggest not combining it with other medications for a sleep aid as it could be a risk. In a treatment plan, they should advise taking this herb if it offers enough relief to the patient and is taken in moderation without being combined with sedatives.



References

- Ahmad Motahareh., Hosein K.”Effect of Valerian in Preventing Neuropsychiatric Adverse Effects of Efavirenz in HIV-Positive Patients: A Pilot Randomized, Placebo-Controlled Clinical Trial”. *Annals of Pharmacology*. Jun 2017; 51(6), 457-464. Web 17 Nov. 2019
- Meadows, Austin. “Best Valerian Root Supplements.” *top10supps.com*. Oct.25, 2019. Web.17 Nov.2019. https://top10supps.com/best-valerian-root-supplements/#5_Gaia_Herbs_Valerian_Root
- Meunargia, Nuca. “Valerian Roots.” *Magma.ge*. 2018. Web.17 Nov. 2019. <http://magma.ge/categories/dreaming/516-valerian>
- Multum, Cerner. “Valerian.” *Drugs.com*. Oct.9,2019. Web.17 Nov. 2019. <https://www.drugs.com/mtm/valerian.html>
- NIH National center for complementary and Integrative Health. “Valerian.” *nih.com*. Dec.1, 2016. Web.17 Nov. 2019. <https://nccih.nih.gov/health/valerian>
- Ross Maxine, S. “Valerian Root and Lemon Balm Extracts A Phytomedicine Compound Improves Symptoms of Hyperactivity, Attention Deficits, and Impulsivity in Children”. *Holistic Nursing Practice*. Nov/Dec 2015;29(6) 391-395. Web 17 Nov. 2019.
- “Valerian.” Vitamins and Supplements. *WebMD.com*. 2018. Web.17 Nov.2019. <https://www.webmd.com/vitamins/ai/ingredientmono-870/valerian>
- Young Jung, Woosuk, K. ”Valeriana Officinalis Root Extract”. *BMC Complementary and Alternative Medicine*, 2014; 14(1). 203-220. Web 17 Nov. 2019.