

Hops

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Humulus lupulus

Principal Proposed Uses

- None

Other Proposed Uses

• [Allergic Rhinitis](#); [Anxiety](#); [Breast Enhancement](#); [Cavities](#); [Digestive Problems](#); [Insomnia](#); [Menopausal Symptoms](#); [Periodontal Disease](#)

Hops (the fruiting bodies of the hop plant) is most famous as the source of beer's bitter flavor, but it has a long history of use in herbal medicine as well. In Greece and Rome, hops was used as a remedy for poor digestion and intestinal disturbances. The Chinese used the herb for these purposes and to treat leprosy and tuberculosis.

As cultivation of hops for beer spread through Europe, it gradually became obvious that workers in hop fields tended to fall asleep on the job, more so than could be explained by the tedious work. This observation led to enthusiasm for using hops as a sedative. However, subsequent investigation suggests that much of the sedative effect seen in hop fields is due to an oil that evaporates quickly in storage.

Despite the absence of this oil, dried hop preparations do appear to be somewhat calming. While the exact reason is not clear, it seems that a sedating substance known as methylbutenol develops in the dried herb over a period of time.¹ It may also be manufactured in the body from other constituents of dried hops.

What Are Hops Used for Today?

Germany's Commission E authorizes the use of hops for "discomfort due to restlessness or anxiety and sleep disturbances." However, scientists have had difficulty proving that hops causes sedation.² Because its sedative effect is mild at most, the herb is often combined with other natural treatments for [anxiety](#) and [insomnia](#), such as [valerian](#). One small, double-blind study found evidence that a proprietary combination of hops and valerian extract is more effective as a sleep aid than placebo; the results of this trial also hint that hops plus valerian is more effective than valerian alone, but this possible finding did not reach statistical significance.²

In addition, hops has fairly strong estrogen-like properties, making it a phytoestrogen.⁵⁻⁸ The basis for this activity is a constituent called 8-prenyl naringenin. Like soy (another phytoestrogen), hops has been proposed as a treatment for [menopausal symptoms](#). It is also marketed as a [breast enhancement](#) product. However, there is no direct evidence as yet that it works for either of these purposes.

For reasons that are not at all clear, a water extract of hops (called "hop water") has shown promise for reducing allergic reactions.^{10,11,12} In a small, double-blind, placebo-controlled study, use of hop water at a dose of 100 mg daily significantly reduced symptoms of allergy to the Japanese cedar.¹¹ (The Japanese cedar is a strong allergen, similar in its sensitizing power to ragweed.)

A special extract of the hop plant called "hop bract polyphenols" has shown promise for preventing [cavities](#) and treating or preventing [periodontal disease](#).¹³

Like other bitter plants, hops is also used to improve appetite.

Dosage

The standard dosage of hops is 0.5 g taken 1 to 3 times daily.

Safety Issues

Hops is believed to be nontoxic. However, as with all herbs, some people are allergic to it. Interestingly, some species of dogs, greyhounds in particular, appear to be sensitive to hops with reports of deaths occurring.³ The mechanism of this toxicity is not yet known. Those taken with the popular hobby of brewing beer at home are advised to keep pets away from the relatively large quantity of hops used in this process.

As noted above, hops has estrogen-like effects. Like estrogen itself, hops might stimulate the growth of breast cancer cells.^{7,8} On this basis, women who have had breast cancer, or who are at high risk for it, should probably avoid hops until more is known. (Beer does not appear to contain enough of the active phytoestrogen in hops, 8-prenyl naringenin, to matter). Children should also probably abstain from hops to avoid producing unwanted estrogen-like effects. Safety in pregnant or nursing women, or people with severe liver or kidney disease has not been established.

One animal study suggests that hops might increase the effect of sedative drugs,⁴ so do not take hops with other medications for insomnia or anxiety except under a physician's supervision.

Interactions You Should Know About

If you are taking sedative drugs, do not take hops except under a physician's supervision.

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