

The Unique Medicinal Properties of the Lavender Plant

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Abstract

Information is provided about the unique chemical composition of lavender, a medicinal plant belonging to the Lamiaceae family, its importance in the body, its properties in improving the nervous system, its unique properties in preventing insomnia, its antimicrobial properties, its relationship to the digestive system, and its harmful effects.

Keywords: **Lavender, Lamiaceae, polyphenols, flavonoids, antioxidant.**

Introduction

Lavender is an aromatic plant of the Lamiaceae family, which, in addition to its pleasant aroma, has antioxidant, anti-inflammatory, antispasmodic and sedative properties. In folk medicine, lavender flowers are used for functional disorders of the nervous system, headaches, increased anxiety, sleep disorders, digestion and a number of other indications.[1]

Composition of the plant; The beneficial properties of lavender are due to its rich chemical composition. The essential oil of the plant contains more than forty chemical components, including linalyl acetate (30-40%), linalool (30%), tannins (12%), cineole (10%), nerol, borneol, caryophyllene, coumarins, bitter, resins, herniarin, polyphenols, flavonoids. The plant is also rich in vitamin A, iron and calcium.

In folk medicine, lavender is used in the form of infusions, decoctions, teas, as well as in the form of ointments, essential oils and inhalations. In herbal medicine, complexes with plant flowers, oils, extracts are used to reduce irritability and anxiety, improve sleep, maintain a healthy nervous system, reduce pain and inflammation.

Several studies investigating the beneficial properties of lavender have confirmed the neuroprotective and antioxidant activity of the plant. Scientists have found that lavender extract can protect cells of the nervous system from the negative effects of external factors, free radicals and toxins.

A number of experiments have also revealed the ability of lavender to improve coagulative function and mood. Thus, in fifty patients with neurasthenia or post-traumatic stress disorder, oral use of lavender at a dose of 80 mg per day for six weeks showed a significant improvement in general mental health and quality of life.[2]

Traditional healers have used lavender oil as a sedative since ancient times. Currently, scientific studies have confirmed the calming properties of the plant. In particular, in 221 patients with

nervous disorders, the anxiolytic effect of lavender was superior to placebo. In addition, lavender reduced symptoms such as anxiety, sleep disorders and somatic complaints, and had a positive effect on the general well-being and quality of life of all study participants.[3]

Another experiment conducted in a long-term neurological hospital showed an increase in mood indicators and a decrease in psychological stress after aromatherapy with lavender in combination with tea tree and rosemary. In a study of postpartum women at high risk of depressive disorders, the herb was found to have an effect on anxiety and depression, and the postpartum depression scale showed that overall anxiety improved after four weeks of lavender use.[2]

Lavender is a great natural sleep aid. In a study examining the effects of the plant's scent on sleep quality, it was found that lavender improved sleep quality in 11 subjects, on average, when given to 15 healthy college students, 64 patients with 9 occupational illnesses, and 34 middle-aged women with insomnia.

Oral doses of lavender oil (80 mg/day) have been shown to have a positive effect on both sleep quality and duration, as well as improved overall mental and physical well-being, without any adverse effects, in patients with mixed anxiety disorder. In addition, a study of 31 hospitalized patients showed that exposure to the scent of lavender not only prolonged nighttime sleep but also increased daytime activity.[2]

In vitro studies have shown that lavender essential oil can inhibit the growth and spread of fungal flora and may be more effective than synthetic antifungal agents for some infections.¹² Laboratory studies have also confirmed the bactericidal and bacteriostatic effects of lavender oil against a wide range of opportunistic pathogens. The highest activity of lavender essential oil was found against gram-negative bacteria: *Stenotrophomonas maltophilia* and *Acinetobacter baumannii*[2]

Lavender tea is used to normalize sleep and calm the nervous system, but not everyone knows that it can help improve digestion. Lavender tea can be recommended for nausea, increased gas formation, when the intestines are relaxed, as well as for intestinal disorders. So, in one of the experiments, patients in the postoperative period were given aromatherapy with lavender essential oil to reduce postoperative nausea and vomiting. Almost 82.6% of the subjects.

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