Used for thousands of years in traditional Chinese medicine, shiitake (*Lentinula edodes* (Berk.) Pegler) is an edible mushroom rich in proteins and polysaccharides, which include lentinan, a beta-glucan with numerous medicinal properties.

Polysaccharides in shiitake act as powerful immunomodulators. In addition to being rich in vitamins and minerals, shiitake is an excellent restorative and helps combat fatigue.

Shiitake also has antibiotic, antiviral, antithrombotic and lipid-lowering activity (reduces cholesterol levels).

Our organic shiitake extract is standardised to contain 30% polysaccharides and 15% beta-glucans, guaranteeing maximum effectiveness.

**Composition**

**INGREDIENTS:**
2 capsules contain: 500 mg of dry extract of shiitake* (*from organic farming) (*Lentinula edodes* (Berk.) Pegler) standardised to contain 30% polysaccharides (i.e. 150 mg) and 15% beta-glucans (i.e. 75 mg).

Other ingredients:

Maltodextrin* (*from organic farming), vegetable-based capsule: hydroxypropyl methylcellulose.

**ALLERGENS:**
This product does not contain allergens (in accordance with Regulation (EU) No 1169/2011) nor genetically modified organisms.

**FABRICATION AND GUARANTEE:**
This food supplement is manufactured by a GMP-compliant laboratory (GMPs are the Good Manufacturing Practice guidelines for the European pharmaceutical industry). Their active principle content is guaranteed through regular tests, which can be viewed online.
DIRECTIONS:
2 capsules per day with half a glass of water at mealtimes.

WARNINGS:
Not recommended for pregnant or lactating women. Do not exceed the recommended daily dose.

ADVICES:
Does not replace a varied and balanced diet and a healthy lifestyle. If you are undergoing medical treatment, seek your therapist's advice. For adult use only. Keep out of reach of young children.

STORAGE INSTRUCTIONS:
Store in a cool dry place away from light.

Detailed information

Description and origin

Shiitake (Lentinula edodes (Berk.) Pegler) is a fungus native to East Asia (1) and has been cultivated for thousands of years in Japan and China, where it has been used for both food and medicinal purposes. This basidiomycetic fungus grows on trees, degrading cellulose, hemicellulose and lignin in the trunks. Shiitake is also one of the most cultivated fungi in the world, second only to the mushroom (Agaricus bisporus (Lange) Sing.) (2).

Known for centuries, use of the shiitake fungus for medicinal purposes became widespread in China during the Ming Dynasty (1368-1644). Shiitake was considered a tonic capable of alleviating pain, discomfort and fatigue relating to ageing (3).

Composition

The shiitake fungus is rich in polysaccharides such as the beta-glucans lentinan and LC11. It also contains lipids, proteins, essential amino acids, vitamins (primarily from group B and D) and minerals (sodium, potassium, magnesium, calcium, aluminium, silica, iron, phosphorus and sulphur) (4).

Benefits

Shiitake is a fungus with immunomodulatory, anti-bacterial and antiviral properties (4). Its polysaccharides and beta-glucans offer a range of therapeutic applications for treating hyperlipidemia and immunodepression (5). Studies among the polysaccharides present in shiitake, beta-glucans have an immunostimulant function that has been studied for decades (6). Early studies into beta-glucans identified that they were capable of stimulating the mononuclear phagocytic system (cells of the immune system), boosting the general defence mechanisms and promoting resistance to tumours by activating various immune responses (6-7). Lentinan stimulates production of antibodies, and it has been observed in experiments conducted on cell cultures that it stimulates the cells of the immune system to attack cells infected by viruses (3).

According to some studies, the polysaccharides present in shiitake could also be potential prebiotics (stimulating the growth and activity of probiotics), and a recent laboratory study demonstrated the effectiveness of polysaccharides in shiitake for boosting immunity and improving intestinal health (5). Finally, the lipid-lowering activity in shiitake is also due to beta-glucans, since they reduce the absorption of cholesterol and inhibit the enzyme HMG CoA-reductase, an enzyme involved in the metabolism of cholesterol, inhibition of which reduces the serum levels of cholesterol (8).

Bibliography


