

White Oyster Mushroom

Pleurotus ostreatus



Partners:



Summary:

Oyster mushroom is an edible fungus and has been classified as vegetable in world foods. It belongs to genus *Pleurotus*. Mushroom fits in very well with sustainable farming systems with huge medicinal and nutritional importance. Oyster mushroom cultivation involves many steps i.e. selection of substrate and suitable mushroom strain, substrate preparation, its filling in polythene bags, growing the crop and harvesting. The yield of oyster mushroom can be obtained 1-2 kg per bag from 45 to 60 days of crop duration. Oyster mushroom is the rich source of protein, vitamins, minerals, fibre and other antioxidants like selenium protect body cells from damage that might lead to chronic diseases and help to strengthen the immune system. Oyster mushroom is low in calories, fat free, cholesterol free, gluten free and very low in sodium. Increasing the consumption of oyster mushroom appears to decrease the risk of obesity, diabetes, cancer, heart disease, and increase the immunity system of body.

Medicinal and nutritional benefits of oyster mushroom

https://www.researchgate.net/publication/332030720_Medicinal_and_nutritional_benefits_of_oyster_mushroom paper is published on research gate website.

<https://timesofindia.indiatimes.com/life-style/food-news/8-types-of-mushrooms-found-in-india-and-their-health-benefits/photostory/74866639.cms>

Oyster Mushroom Nutrition Facts:

This nutrition information is provided by the USDA for a 1-cup serving (86g) of raw, sliced oyster mushrooms.

- **Calories:** 28
- **Fat:** 0.3g
- **Sodium:** 15.5mg
- **Carbohydrates:** 5.2g
- **Fiber:** 2g
- **Sugars:** 0.95
- **Protein:** 2.9g

Carbs: low carbs

There are just 28 calories in a cup of raw, sliced oyster mushrooms. Most of the calories come from carbohydrates (5.2g). The mushrooms are low in sugar, providing just under 1 gram of naturally-occurring sugar. You'll benefit from 2 grams of fiber when you eat them. The rest of the carbohydrate in oyster mushrooms is starch.

The glycemic load of a 1-cup serving is estimated to be 3, making them a low-glycemic food.

Fats

Oyster mushrooms are nearly fat-free, providing just 0.3 grams per serving.

Protein

You'll get almost 3 grams of protein when you consume a cup of oyster mushrooms. Where One **chicken breast** contains about 54 grams of protein.

Vitamins and Minerals

Oyster mushrooms are an excellent source of several vitamins, including niacin (providing 21% of your recommended daily intake), riboflavin (18%), and pantothenic acid (11%). You'll also get smaller amounts of folate, vitamin B6, and thiamin.

Minerals in oyster mushrooms include phosphorus, potassium, copper (providing 10% of your daily needs for each), iron, magnesium, zinc, manganese, and selenium.

Health Benefits

Oyster mushrooms contain a number of substances thought to influence health. These substances include **dietary fiber**, **beta-glucan**, and several other polysaccharides—a class of carbohydrates found to affect immune functions.

Scientific studies on the health benefits of oyster mushrooms are emerging. Research has examined the potential benefits of this fungus.

Lower Cholesterol

A 2015 study found evidence that the dietary fiber component of oyster mushrooms (*Pleurotus ostreatus*) may be useful in reducing triglyceride accumulation in the liver.

Promotes Heart Health

Research has indicated that whole foods with fiber, such as mushrooms, provide several health effects with few calories making them a smart choice for a healthy eating pattern. Several studies have associated a higher intake of fiber with better heart health.

Authors of one study specifically said that fiber in vegetables and other foods "makes them attractive targets for disease prevention and reduction of risk of atherosclerosis and cardiovascular disease."

Supports Better Immune Function

Oyster mushrooms may enhance immune function, according to a small study published in 2016. For the study, participants ingested an oyster mushroom extract for eight weeks. At the study's end, researchers found evidence that the extract may have immune-enhancing effects.

Another study reported that oyster mushrooms contain compounds that act as immunomodulators to help to regulate the immune system

May Reduce Risk of Cancer

Some preliminary research indicates that oyster mushrooms may possess cancer-fighting properties.⁷ A 2012 study demonstrated that an oyster mushroom extract may suppress the growth and spread of breast cancer and colon cancer in human cells. Research is ongoing with scientists suggesting that more studies are needed to fully understand the relationship.

Improves Metabolic Health

Consuming a diet that includes plenty of fiber-rich vegetables is often recommended by health professionals as a method to reach and maintain a healthy weight. But mushrooms may offer an additional benefit to help you maintain better metabolic health.

One published study examined the effects of edible mushrooms on obesity. Researchers concluded that "regular consumption of mushrooms is effective in the treatment of metabolic syndrome, including obesity." They advised, however, that the practice needs to be combined with regular physical exercise, as well as dietary and lifestyle alterations.

Allergies

There is at least one case report of an allergic reaction to oyster mushrooms. According to the report, a mushroom worker experienced chills, fever, joint pain, and skin rashes after exposure to the mushrooms. Symptoms disappeared after a few days.¹⁰

There are other reports of allergic reactions to mushrooms. According to one published case study, prior sensitization to mold allergens might explain severe food reactions to cross-reacting mushroom proteins.¹¹

If you have a mold allergy, you may experience symptoms of oral allergy syndrome when you consume mushrooms. These symptoms may include itchiness or swelling of the mouth, face, lip, tongue, and throat. If you have an allergy to mold, speak to your healthcare provider before consuming mushrooms.

[Mold, Food, and Penicillin Allergies](#)

Adverse Effects

Some people who consume certain types of edible mushrooms, especially in large quantities, may experience stomach problems such as nausea, flatulence, diarrhea, or stomach rumbling, although it is unclear if oyster mushrooms can cause those problems.

Also, there is some evidence suggesting that mushrooms may interact with gabapentin, a medication traditionally prescribed to manage pain or epilepsy. But the limited research did not specifically include oyster mushrooms and researchers concluded that the interaction may not be clinically significant.

Emerging scientific research touts the benefits of taking oyster mushrooms in dietary supplement form. Keep in mind that supplements haven't been tested for safety and dietary supplements are largely unregulated by the Food and Drug Administration (FDA).

In some cases, the product may deliver doses that differ from the specified amount. In rare cases, the product may be contaminated with other substances such as metals.

There is little research, however, regarding the safety of supplements in pregnant women, nursing mothers, children, and those with medical conditions or who are taking medications has not been established.

As always, it is advisable to check with your doctor before adding oyster mushrooms and/or supplements to your healthcare regimen. Oyster mushroom supplements should not be used as a substitute for standard medical care to treat serious health conditions such as high cholesterol.

Lastly, it is safest to consume mushrooms that have been purchased from a legitimate food vendor (such as a grocery store or local market). Eating mushrooms that are collected in the wild can lead to mushroom poisoning. Certain types of wild mushrooms are poisonous and may cause abdominal pain, dizziness, diarrhea, headache, and loss of consciousness.

Varieties

There are approximately 40 species of oyster mushrooms, such as golden oyster, pink oyster, Phoenix oyster, blue oyster, and many more. Each has its own flavor profile, but in general, oyster mushrooms are known to have a mild, sweet, woodsy taste. They have a texture that is more firm than other mushroom varieties, making them an easy addition to hearty recipes.

Pearl oyster mushrooms are commonly found in North America in hardwood stumps and logs, although mushroom experts advise that you do not consume the ones you find yourself unless you are certain that they have been properly identified.

When It's Best

Oyster mushrooms are sold as a whole food in many grocery stores. Most varieties can be found year-round as mushroom growers cultivate them throughout the year. In the wild, oyster mushrooms are most commonly found in the fall or early spring.

When choosing oyster mushrooms, look for dry, firm clusters. Avoid mushrooms that are dark, wilted, or too moist.

Storage and Food Safety

The best way to store oyster mushrooms is to place them in a plastic bag or on a plate covered with plastic wrap in the refrigerator. Some people place the mushrooms in a paper bag in the refrigerator. Fresh mushrooms are likely to stay good for about 4 to 7 days.

You can also dry mushrooms to make them last longer. To do so, simply place sliced mushrooms on a baking tray and place in the oven at 150 degrees Fahrenheit for at least an hour.

Freeze any fresh mushrooms that you don't plan to use right away. Boil them first for 1 to 3 minutes. Then drain thoroughly, seal them in airtight bags, and place in the freezer.

How to Prepare

Clean oyster mushrooms before using them in recipes by brushing them with a damp paper towel to remove any dirt. Some people rinse mushrooms, but if you choose this method, be sure to dry them completely before use.

Oyster mushrooms are perfect in egg dishes, soups, savory casseroles, stir-fries, or stews. They make an excellent pizza topping and can also be battered and fried. Many people simply enjoy sautéed mushrooms as a side dish.

Recipes

You can use oyster mushrooms alongside or in place of other types of mushrooms in many dishes.