

# Shii-take

## King of Mushrooms



### About Shii-take

Shii-take is Japanese for “mushroom (“take”) growing on the Castanopsis tree (“shii”).” Shiitake mushrooms have been cultivated in Japan, China, and Korea for thousands of years. During the Chinese Ming Dynasty (AD 1368–1644), the physician Wu Juei wrote that he had discovered shiitake should be used not only as a food but also as a medicinal. He recommended shiitake as a remedy for upper respiratory diseases, poor blood circulation, liver trouble, general exhaustion, and to stimulate qi-life energy.

In terms of taste, aroma, texture, and culinary versatility, Shiitake really is the king of mushrooms. And since shiitake can easily be incorporated into every modern cooking style, it has become the global healthy mushroom—the second most widely cultivated mushroom in the world. In Japan, certified organic shiitake mushrooms are quite rare and Wara Nosan, Muso’s organic shiitake mushroom grower, is the first to receive Japan’s JAS organic certification for their shiitake.

### Eco-friendly Cultivation

Wara Nosan maintains its shiitake growing facility in Gujo city (in the prefecture of Gifu). Their farm is located in the beautiful area between the mountain foothills and arable flat land where people have lived and farmed in harmony with nature for many generations. This natural environment enriches the life of the locals, and foods grown in this area are particularly noteworthy. In fact, in the year 2000 it was reported that Wara town was the number one village of average longevity in all of Japan, truly an ideal environment for the cultivation of organic shiitake.

Most commercially cultivated shiitake are grown in sawdust blocks, with the use of artificial fertilizers and pesticides with closely monitored temperature and moisture in a laboratory-like cultivating room. It’s almost impossible to trace the origin of the sawdust or how the trees (that produced the sawdust) have been grown. In contrast, Wara Nosan makes their own pure high quality sawdust blocks—using carefully selected local trees, where chemicals have not been used for at least three years. Their growing medium is created using only the sawdust from these trees mixed with pure mountain water. Wara Nosan inoculates these sawdust blocks with the shiitake spores that are then allowed to mature for four months. In order to make the cultivation environment as natural as possible, their shiitake greenhouses are built between mountains with the doors open for excellent ventilation. They do not use artificially controlled temperature or moisture control. During the very cold and snowing winter, the cultivation houses are warmed by heat generated from the growing mushrooms and small wood fires. During the hot summer months, sprinkling cold mountain spring water on the roofs cools the greenhouses.



The shiitake mushroom spores, which have been cultivated by Wara Nosan using their proprietary process, are planted in the organic sawdust blocks, and they take about four months to mature in the relatively dark environment within the growing rooms. When the crown of the shiitake appears, it matures fairly quickly and are then harvested by hand within seven days during the summer and within ten to fourteen days during the winter months.





*Traditional Simmered Shiitake*

## **Nutrition**

Shiitake contains the highest concentration of fiber of all mushrooms—about 40% of dried shiitake is dietary fiber. Most of the fiber is non-soluble which stimulates bowel activity and is known to relieve constipation.

Shiitake mushrooms contain relatively high levels of lentinan—a phytonutrient that provide excellent immune system support. There are other fairly remarkable health claims made for shiitake, but further research is required before we can actually use these claims. Shiitake mushrooms also contain a compound called D-Erhitadenine (DEA), which helps lower cholesterol levels and supports overall cardiovascular health. Shiitake are an excellent source of 4 B vitamins: B2, B3, B5, and B6. And finally, shiitakes are also a good source of iron (great for vegetarians) and antioxidants (which help reduce free radicals in the blood).



*By drying, guanylic acid increases tenfold*

## **Umami in Shiitake**

Japanese cooking relies on an essential component: dashi, made from kombu and dried shiitake mushrooms cooked into a kind of soup. The traditional dashi is known to be one of the best sources of the umami flavor, the fifth flavor, and an essential taste in Japanese cuisine.

Dried shiitake contains large amounts of guanylic acid, one of the three basic ingredients in developing the Umami taste. The others being glutamic acid (from Kombu) and inosinic acid (contained in Bonito flakes). The umami flavor is developed when making “dashi” soup by soaking or brewing these ingredients in water, and the Umami taste is further enhanced by mixing the shiitake dashi with kombu dashi, or shiitake dashi with bonito dashi.

Some suggestions for making an umami and savory shiitake dashi soup stock: Use cold water and brew dried shiitake at least 2-3 hours. For 1 liter water, use about 20g - 30g of dried shiitake. Soak the dried shiitake in cold water in the refrigerator over night. The longer it soaks, the more the umami taste can be developed. Place fresh or dried shiitake in the sun for 1-2 hours before using to increase the vitamin D level of the mushrooms.