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Published by dharmalingam on Jun. 06, 2012

Food

Mushrooms!

The delicious, nutritious and medicinal fungi of the forest

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Mushrooms have been around since life originated on Earth. In fact, much of life on this planet depends on fungi, for they are the great recyclers of the forest, converting fallen plant matter into precious soil. Mushrooms' modern uses are exciting: from those that transform agricultural waste products into inexpensive but strong composite building materials that can be reused as garden mulch, to pesticidal fungi that trick insects into eating them, to mushrooms that can break down the neurotoxins used in nerve gas.

Culturally, fungi have an important history of uses. Pharaohs ate mushrooms as a delicacy. Greeks believed them to be a source of strength. The Chinese regard them as health food. There are over 14,000 types of mushrooms in the world, out of which about 3,000 are edible; and of those 700 have known medicinal properties. Around the world, we feast on fungi for their flavor, texture and nutritional and health benefits.

Mushrooms are fungi that belong to the phylum Basidiomycota. What we call a mushroom is actually the reproductive structure, or the fruiting body, of the fungus. A typical mushroom has an umbrella-shaped cap with a stalk and gills on the underside. Caps vary widely in color and shape.

In nature, mushrooms grow wild on moist, rich soil or on the barks of trees. Mushrooms are mostly aerial except in the case of the exotic truffle, "the diamond of the kitchen," which produces an underground fruiting body. Do not go into nearby woods to collect mushrooms unless you know how to identify edible

mushrooms, because a fair number of wild mushrooms are poisonous, some even deadly. The best approach is to go out mushroom hunting with a knowledgeable guide.

Edible mushrooms are readily available at grocery stores, farmers' markets and from mushroom farms. The most popular cultivated edible mushrooms are *Agaricus bisporus*, including white, crimini and portobello. Portobello are giant--about six inches in diameter--mature crimini mushrooms. Other cultivated species include shiitake, porcini, maitake, hen-of-the-woods, oyster and enoki.

The shiitake, native to China, is known for its healing properties. Aromatic oyster mushrooms grow on fallen, dead hardwood in forests and have a scallop-shaped cap with a delicate, anise-like flavor (these can spread out to 18 inches in diameter, with thick flesh). Cultivated oyster mushroom caps come in a variety of colors: gray, blue, yellow, pink and white. Porcinis, with their earthy, nutty flavor--considered the king of edible mushrooms by the Italians--live in a symbiotic relationship with trees, very common in pine forests and chestnut woods all over the world.

The cheapest mushrooms are white and brown crimini. Truffles are the most expensive; a pound may cost a couple of thousand dollars, and a single truffle may weigh one to three pounds! One can cultivate mushrooms indoors at home, providing the right conditions. Spores and kits to grow mushrooms are commercially available.

Edible mushrooms are extensively used in cooking. You can easily incorporate them in soups, sauces, vegetable medleys, pastas, rice dishes, etc. Clean mushrooms with a soft brush prior to cooking. Never soak them in water; if you must, wipe them with a damp paper towel. Optionally, remove the stalks, which may be used for preparing stocks along with other vegetables. Fresh mushrooms do not last long in a refrigerator. Dried mushrooms can be reconstituted by soaking in hot water for ten minutes. Cook in a heavy skillet on low heat. Herbs and spices may be used to enhance flavor. Food, in addition to being nutritious, should be colorful, flavorful and aromatic.

An Ayurvedic Perspective on Fungi

By Vamadeva Shastri, OMD, Santa Fe, New Mexico

Some countries have historically been avid consumers of mushrooms, while others have avoided them. For example, mushrooms have been popular in continental Europe but were not used by Native Americans. India has generally avoided mushrooms, while nearby China has used them extensively.

Yogic and ayurvedic texts contain little information on fungi. They have tended to classify them as tamasic and not recommended their extensive usage as a food. Ayurveda has recommended mushrooms as a medicine for certain conditions, however, but has not given them as much attention as other types of herbs. This situation is changing: mushrooms are gaining a new place in India's cuisine and in ayurvedic medicine.

The most commonly used Agaric species, or field mushroom (including portobello), is regarded in ayurveda as a nutritive tonic and aphrodisiac (vajikarana), good for reducing pitta and vata doshas but for increasing kapha dosha. It is cooling, moistening, invigorating and gives strength and vitality. It can help improve immunity and longevity, promoting body weight.

Other types of fungi have similar properties, but there are many variations in species that must be considered. Dried mushrooms are better for kapha dosha, cooked into soups and rice dishes. Mushrooms with firmer tissue and less water, such as morel, chanterelle and shiitake, are also better for those of kapha dosha and usually provide better nutrition than the field mushroom for all doshic types. The Chinese reishi mushroom is regarded as excellent for promoting longevity. The Himalayan cordyceps is famous for its healing ability.

Ayurveda has often designated mushrooms as tamasic; they do spoil easily and can be hard to digest, particularly when the agni (digestive fire) is low. Too much of them can increase ama (toxins) in the body and blood, and they should be avoided when there is fever or infection. One should not take an excess of mushrooms, nor recook them or eat them cold. I have found mushrooms to be disturbing to some vata types who have sensitive and nervous digestive systems.

That being said, a little caution is not a rejection altogether. Even though ayurveda regards garlic as tamasic, it also considers it a good medicine for the heart and lungs. The potential tamasic qualities of mushrooms should not make us forget their benefits. Their tamasic qualities are much less than that of meat and fish and can be compensated for, particularly by taking mushrooms more as a side dish or condiment with more sattvic food items. If one learns how to cook them properly, mushrooms can be an important addition to a healthy vegetarian diet, and can add good flavoring properties.

There are several wild mushrooms that have powerful tonic and energy-producing actions. These include the king boletus, morel, oyster and chanterelle. Many of these mushrooms grow abundantly in American forests, particularly in the Pacific Northwest and the wetter Eastern forests. Many health food stores are now carrying these as well.

Some scholars have proposed that the original Vedic soma was the Amanita mushroom, or fly agaric. There is no real basis for this, as the Vedic soma was a type of plant, not just one species, and the species defined are largely high mountain plants of the orchid, reed and sunflower families. Still, one cannot rule out that such a mushroom was one of the many types of soma plants!