Common Medicinal Mushrooms

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MAITAKE (Grifola frondosa) also known as Hen of the Woods is a relatively common Maine fall mush-



room better known and highly sought for the table and also for the medicinal tool chest. Look for large (1-2 foot) clusters of overlapping gray to brown spoon-shaped fronds on the ground at the base of mature oak trees. It also occasionally grows on Beech, Ash, Maple and other hardwoods, but over 90% of the time it is found on oak in our area. Maitake contains a number of long chain polysaccharides known as glucans. Maitake has strong anti-tumor activity and is being used as a treatment or adjunct treatment for cancers in other countries. It has also been shown to lower and modulate blood sugar levels and is considered promising for diabetes treatment. Maitake has shown significant ability to lower blood pressure in studies with rodents. Maitake is taken as an edible mushroom, made into

immune broth or tinctures and taken in powdered form. Concentrated fractions are also being marketed and are in Phase II clinical trials as a cancer medication.

CHAGA (Inonotus obliquus) also known as Birch Clinker, or Kabanoanatake is a medicinal mushroom



which grows primarily on Birch trees in northern forests. Unlike all other medicinal mushrooms, the part collected is not a mushroom fruiting body, but a mass of vegetative mycelium known as a sclerotium. Chaga is collected growing along the trunk of living mature Birches upon which it is a parasite. Chaga has been used for centuries in Eastern Europe and Northern Asia as a treatment for cancers and gastric ailments and as an anti-inflammatory and pain manager. Much of the more recent research on Chaga is being conducted in South Korea. It confirms the immunomodulatory and anti-tumor effects of the Chaga polysaccharides, anti-tumor, antimicrobial, anti-inflammatory and pain relieving properties of Chaga triter-

pines and very potent antioxidant capacity. Chaga concentrates Betulin and Betulinic Acid from the host tree and these have been shown to be effective in treatment of melanoma and other cancers in animal studies. Chaga is too woody to be considered edible, and is made into a tea or decoction by simmering in water. It can also be made into a tincture and the boiled chaga used as a poultice.

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REISHI (Ganoderma lucidum and G. tsugae) also known as Varnished Conk,

Hemlock Polypore, Ling Zhi has been used in Chinese medicine for several thousand years and has been held in almost archetypal regard for its healing powers. In Maine we are much more likely to find its close relative G. tsugae growing on Hemlock though G. lucidum is occasionally found on Maple or Oak wood. These two species have been shown to be part of a complex of closely related species often sold and used interchangeably around the world. The distinctive shiny "varnished" appearance of the top of the cap is quite distinctive. The mushrooms are collected fresh when still actively growing. No other medicinal mushroom caries the degree of honor and mystique that is embodied by Reishi. It has been used to treat numerous acute and chronic ailments and is reputed to increase stamina and longevity. It has a number of immunemodulating polysaccharides which activate several components of the immune system. In addition several Reishi triterpines have direct antitumor action. Other triterpines and polysaccharide components work together and appear responsible for antimicrobial activity, anti-inflammatory, antioxidant, anti-viral, lipid-lowering, cholesterol lowering and a number of other health-promoting activities. This certainly is a partial list. Reishi can be brewed into a bitter tea, dried and taken as a powder,

or made into a tincture. It is often found mixed with other mushrooms or herbs as part of a more complex preparation.



TURKEY TAIL (Trametes versicolor) also known as Kawaratake in Japan and Yun Zhi in China. Turkey Tail is one of the more common small wood rotting fungi in our woods and indeed, is common in woodlands throughout the world. It grows on dead wood and dying trees of a number of different species, preferring hardwoods such as maple, birch, beech and oak but capable of colonizing most trees. Its small size, variable cap color and similar look a-likes make it a challenge to learn, but once learned can be found in abundance. The annual fruiting bodies should be collected in their prime. Though too tough and leathery for edibility turkey Tail makes a good broth or soup base simmered in water. Turkey Tail has been a traditional treatment for cancers and other diseases

in China and Japan. The proprietary polysaccharide preparations PSK and PSP have been available and used in cancer treatment in Japan, China and other Asian countries for many years and have the strongest clinical track record of all the medicinal mushrooms in treatment of of cancers. These fractions are beginning to be available in this country as dietary supplements and are under review for approval as anticancer

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Greg A. Marley, Mushrooms for Health, 2013. All rights reserved. <u>www.mushrooms4health.com</u> drugs. Turkey Tail is a potent immune stimulant. The fruiting body can be dried and taken as a powder, made into a tincture or as a tea or broth.



OYSTER MUSHROOM (Pleurotus ostreatus and P. populinus) also known as Hiratake or Tomogitake in Japan. This mushroom belongs in the more well-known group of mushrooms with gills rather than pores under the cap. Oyster mushrooms are among the more common gilled wood rotters in our forests and grow on a wide variety of predominately hardwood tree species. In the late spring and early summer we collect Oysters primarily on Poplar trees and these are P. populinus. In the late fall we find P. ostreatus most common on either old Sugar Maples or elms. Throughout the warm months it is possible to come upon Oysters growing on beech, maple, birch and other species, especially in a year with abundant moisture. Oyster Mushrooms are a good safe edible mushroom and one where we can enjoy them at the table and benefit from their medicinal value at the same time. Oysters have been shown to contain immune- stimulating polysaccharides including a Beta-glucan named Pleuran which have shown considerable anti-tumor activity in animal studies. A Lovastatin-like compound has been isolated which may be responsible for

the demonstrated ability of Oyster mushrooms to lower plasma and liver cholesterol levels in animal studies. It has also shown to reduce or prevent the formation of arterial plaques in the same study. No human trials have been completed. Other than eaten as food, Oyster mushrooms can be dried and taken as a powder or tinctured as a way to concentrate the compounds.



LION'S MANE, COMB TOOTH, (Hericium coraloides, H. ramosum, H. erinaceus). This mushroom is known by many common names and appears in 3 slightly different forms (and species) in the Northeast. The Lion,s Mane is an unmistakable mushroom found growing on standing or downed hardwood, usually Beech, Birch or Maple. This is a great edible mushroom that is an excellent immune stimulant due to the glucans it contains. Additional excitement in the medicinal mushroom world is focused on the erinacines it contains and their ability to stimulate the production of Nerve Growth Factor. It is being studied for addressing cognitive decline and as a possible treatment for dementia. Stay tuned...