

Maitake, Shiitake, Cordyceps, Reishi, Coriolus, Phellinus linteus and others. By Chris Woollams

Research on the subject of medicinal mushrooms is consistent and very clear: Depending upon the variety, they....

- * increase survival times in research trials with breast, lung and prostate cancer patients,
- * have been shown to shrink cancer tumours by up to 70 per cent (some extracts even caused cancers to disappear)
- * stimulate the immune system, for example increasing macrophage activity or stimulating B- and T-lymphocyte production
- * reduced blood supply to prostate cancer tumours, and,
- * reduced side-effects of radiotherapy and chemotherapy (like nausea and hair loss).



It all depends which mushroom extract you choose, how concentrated it is, and whether you use complementary doses of vitamin C and other such natural compounds.

Personally, I believe every cancer patient should take an extract of a medicinal mushroom. Like astragalus and vitamin D, these compounds act in a complementary way to help you increase your personal odds of beating cancer.

Nature's medicine

Mushrooms have long been used in medicine, the earliest records go back over 4,000 years in China. Like the Chinese, other nations from Japan to Korea and Taiwan have built the use of 'medicinal mushrooms' into their treatment of many serious diseases and even cancer.

This trend is not confined to South East Asia. If anything it is an important part of medicine in the West that we have forgotten. In the market of Le Muy in France every Sunday sits a man selling his Girolles and twenty other varieties, and he will tell you whether they can be used for colds, flu, arthritis or diabetes. Traditionally, they helped 'clean the blood'. His Father and Grandfather taught him everything as they searched through the woods.

Medicinal mushrooms come in all shapes and sizes - Maitake mushrooms, Cordyceps, Shiitake, Reishi, Coriolus Versicolor and so on. You can even buy them in Sainsbury's! The internet has hundreds of web sites offering extracts of organically grown medicinal mushrooms.

They have a number of general benefits, and each has a number of specific ones too.

Medicinal Mushrooms contain high levels of glycoproteins and polysaccharides (Beta Glucan Polysaccharide being a particularly active 'health' contributor). Research, including 4 Nobel Prizes, shows that glycoproteins can help cellular communications. So they help your hormones do their job better, they help receptor sites receive the messages they are supposed to receive, and they help your immune system 'see' the rogue cells and differentiate them from the healthy cells. ([Click here to read about 'Glycoproteins - the coming cancer treatment'](#))

Not surprisingly, they also help increase levels of the different white cells in your immune system. Indeed, we covered a story in Cancer Watch back in 2003 where Japanese Mushroom growers were shown to have cancer rates far less than the already low rates of the Japanese. It just shows that scrumping has its benefits.

Alternative cancer cures?

Asian Doctors have used medicinal mushrooms for hundreds of years as blood purifiers and to aid in cases of respiratory illness, to enhance the performance of internal organs and for all manner of diseases. In particular they are used to 'normalise', or balance, the blood.

CANCERactive is a cancer charity and so this article will focus on cancer. Here are the most common mushrooms and some of their abilities with cancer:

Maitake (*Grifola frondosa*) contains grifolan, a beta glucan polysaccharide. This activates macrophages which search and engulf foreign invaders in the body. Another ingredient, termed d-fraction, stimulates the immune system at the cellular rather than blood stream level. d-fraction can be used on its own, but seems capable of enhancing the effect of cancer drugs whilst reducing side-effects such as nausea and hair loss. Clinical trial research (Kasylor) has shown reduction of side-effects by up to 95 per cent and improved effectiveness of chemotherapy drugs. Maitake has been found in the Kobe College of Pharmacy to destroy tumours and to be helpful against leukaemia, stomach and bone cancers.



Maitake mushrooms are common in Chinese and Japanese cooking, and both countries use them to treat blood pressure and liver disease. Now researchers at the New York Medical Center, led by Dr Sensuke Konno, the head of Urology, have shown that an extract of Maitake mushrooms can shrink tumours of **bladder and prostate cancers** by as much as 75 per cent. In certain cases the tumours disappeared. Researchers believed this was because the active extract stopped a cancer-driving enzyme. They also used the extract in conjunction with interferons, which can boost the immune system. (British Journal of Urology - Dec 2009)



Shiitake has been used in medicine for years as a blood 'balancer' and particularly for lowering cholesterol levels. The National Cancer Center in Tokyo isolated lentinan, one of the active ingredients, and showed that the extract could reduce tumours in mice by 80 to 100 per cent.

Cordyceps sinensis is an anti-bacterial, anti-fungal mushroom that can also paralyse insects and provide potent antibiotics! Its first recorded use was in the 15th century. It is used in Taiwan and China in the treatment of diabetes, as an anti-depressant, and in the treatment of cancer.



Coriolus has been shown to activate T-lymphocyte production, macrophage activity and other immune system functions.

Japan, Korea and Thailand have expert centres studying medicinal mushrooms but the

West is catching up.

Reishi (*Ganoderma lucidium*) contains polysaccharides that are effective in suppressing cancer cells. Research by Dr Fukumi Morishiga at the Linus Pauling Institute of Science and Medicine took a hot water extract of Reishi (which concentrates the active ingredients much more than you will find in retail products) and showed that when used in conjunction with vitamin C (which humans, unlike animals, cannot make), macrophage activity was greatly stimulated. In his paper he showed that all manner of cancers from brain tumours to breast cancer regressed over time. Some disappeared.



Phellinus linteus. In 1993 Korean scientists successfully extracted an anti-tumour medicine from *Phellinus linteus*, following the 1968 research study by Dr Ikegawa 'Anti-tumour activity of some basidiomycetes, especially *Phellinus linteus*'. This prompted many further studies, but also the term 'Magic Mushroom' as 'superstitious folklore in South East Asia has been improperly translated into the English language. Correctly it is 'a mushroom with special properties'. *Phellinus* has been used in Chinese Medicine for thousands of years for everything from rheumatism to arthritis and gout.

The faculty of science at Mahasarakham University, Thailand now has a museum dedicated to the mushroom, with case history after case history on successful cancer treatments from colon to lung. Biochemistry Professor Tae Woong Kim of the Korean National University says that the mushroom extracts kill cancer cells with no known side-effects or toxicity.

Several other studies (e.g. Leo JLD Van Griensven and Huub Savelkoul) have shown that beta glucans from these mushrooms can alter cytokine and T- and B-cell activity, prompting the view that the mushrooms would

not just be applicable to fighting solid tumour cancers, but also in fighting blood cancers where the white cells themselves were in trouble (like **leukaemia**).

Now researchers at the Boston University School of Medicine have studied this mushroom (*Phellinus Linteus*). In one test they found that neither the mushroom extract nor doxorubicin (a **prostate cancer** drug) were effective in small doses but the doxorubicin became effective at higher levels. When the mushroom extract was added, the results were much better still, with many more cancer cells killed (*British Journal of Cancer August 2006*). Previous studies in 2005 (Drug Discovery Today) showed that Reishi, *Ganoderma lucidium*, restricted blood vessels to prostate cancer tumours and stopped cancer cell proliferation.

But what about everyday **button mushrooms** - are they any help?



Research from Perth University in Western Australia showed that women who ate 10 gms of button mushrooms a day, developed one third of the **breast cancers** of non-eaters!

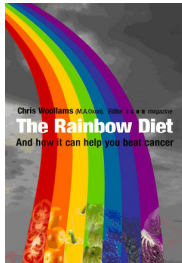
The reason given was their content of linoleic acid, which acts like an aromatase inhibitor and restricts the production, and action, of oestrogen. The same study noted that if these women also drank green tea, their breast cancer rates fell to just 1 in 10 of the norm!

A study by UCLA in 2009 showed that breast cancer patients who ate medicinal mushrooms two times per day, prevented their cancers returning. Again this was concluded to be due to the mushrooms' anti-oestrogen activity.

So eat your mushrooms - a little olive oil, chopped garlic and parsley. Very tasty and extremely healthy!!

And if you have cancer, I think you really should think very seriously about taking the relevant mushroom extract for you and your cancer.

Readers may also want to look at the article on Glycoproteins, polysaccharides and read a list of other foods that provide these essential molecules - [click here to go to 'Glycoproteins - the coming cancer cure'](#).



“ At last, the definitive, research-based book on how to build a diet to help beat cancer. [Click here](#) to read about it. ”

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