



vitalpilzratgeber.de



Everything you always wanted to know about medicinal mushrooms

Extraordinary **gifts**  
from **nature's** pharmacy

New expanded edition



## Dipl. Ing. (FH) Jürgen Guthmann

*Publisher and Mentor of the Medicinal Mushroom Advisor*

Studied chemistry at the Georg Simon Ohm University of Applied Sciences in Nuremberg, Germany.

Laboratory Engineer in the Laboratory for Food Chemistry at Weihenstephan University of Applied Sciences in Triesdorf.

Many years of interest in nutrition and health questions. Particular interest in medicinal plants and mushrooms with their huge spectrum of effects and possibilities to use them.

## Dipl. Ing. (FH) Jürgen Guthmann

### How did I become interested in mushrooms?

Mushrooms have fascinated me for more than 30 years. They are the great recyclers in the cycle of nature and play an important role as symbiosis partners, parasites or pathogens. They have valuable aromas and form a number of interesting chemical compounds and poisons. Humans have also used mushrooms themselves or their metabolic products as cures since primeval times. Searching for mushrooms is an archetypical inheritance that is more or less known to all of us; anyone who has looked and found something knows what I mean.

What interests me is the entire spectrum, from the technological use of mushroom enzymes to their potential for medical uses and as healthy foodstuffs. Although the medicinal uses of mushrooms may have been forgotten in Europe, the situation is completely different in Asian countries. For thousands of years they have played an outstanding role there as cures and means to maintain health and vitality.

In the course of years I have gathered more and more information about mushrooms. By now I have a huge collection of specialized scientific publications and correspond with scientists and amateurs all around the world on the subject.

The first possibility to make my work accessible to a larger public was provided by the Quelle & Meyer publishers with their 'Taschenlexikon der Pilze Deutschlands' (Pocket Lexicon of Mushrooms in Germany). In the book I could share my knowledge and also use my ability to present complicated subjects clearly and develop the interconnections.

### My Engagement for the Medicinal Mushroom Advisor

As publisher I am once again interested in presenting the fascinating possibilities of healing and medicinal mushrooms to a wide audience. For more extensive inquiries in the area of the therapeutic or medicinal effects of medicinal mushrooms I would like to refer you to the alternative medicine practitioner Ms. Doris Richtsteig, who has a deep knowledge of mycotherapy.

### Helpful Tips

In the following text the most important medicinal mushrooms are presented and their main areas of use described briefly. Please also note the indication list starting on page 24. For successful therapy I always recommend consultation with an experienced and trained mycotherapist. And if you decide to get to know medicinal mushrooms and their effects I would strongly advise you to buy from suppliers who offer products with the government approved BIO seal.

Warmly,

Your Jürgen Guthmann

This advisor provides important information on the topic of medicinal mushrooms. In the field of naturopathy they may also be known as vital, healing or healthy mushrooms.

You will gain basic knowledge about medicinal mushrooms and their effects, as well as the possibilities to use them in mushroom therapy or mycotherapy.

## Medicinal mushrooms – one of the oldest natural remedies

Medicinal mushrooms belong to humankind's oldest natural remedies. In China and Japan medicinal mushrooms were used more than four thousand years ago with surprising success to prevent, mitigate and heal a long list of illnesses.

Medicinal mushrooms are known to strengthen the immune system, heal heart and circulatory diseases, regulate blood pressure and glucose levels, strengthen and detoxify the liver, treat allergies, help to lose weight and above all to improve vitality.

The shiitake, the reishi and many others are still regarded today as extremely valuable diet elements. Both are considered 'fountains of youth'. And in fact: Nowhere in the world is the percentage of physically and mentally fit hundred-year olds as high as it is in Asia. That is why in the last forty years scientists in Western countries have begun to show interest in Traditional Chinese Medicine (TCM) and in particular in the remarkable medicinal mushrooms.

## Medicinal mushrooms and their ingredients

The natural ingredients in medicinal mushrooms are valuable from the point of view of nutritional physiology. They influence many vital bodily functions and can slow down aging and affect or support recovery from numerous complaints - all without negative side effects.

Studies have already found over a hundred medicinally valuable components. According to cautious estimates this is only a very small part of the real total. What is in any event is unique is the combination of vitamins, minerals, trace elements, fibres, essential amino acids and secondary ingredients with high bioactivity. The main reason for this is because mushrooms have their own special biological kingdom parallel to those of plants and animals. This is why many of the substances found in mushrooms do not exist anywhere else in nature.

## Dr. med. univ. Matthias Freutsmiedl



### Dr. med. univ. Matthias Freutsmiedl

Medical Doctor

Internist and Specialist for General Medicine, Emergency Medicine,  
Clinical Environmental Medicine and Homeopathy  
Practice for Holistic Medicine & Prevention, 04229 Leipzig, Germany

[www.ganzmed.eu](http://www.ganzmed.eu)

'In my career as an internist and general practitioner I quickly became aware of one thing: In order to deal responsibly with illness conventional medicine is irreplaceable as a therapeutic basis. But sometimes conventional medicine alone is not enough to deal with the changing requirements of ill patients because as a rule it only deals with the objective physical level of the person. Holistic procedures require openness and a long view of the individual process as well as knowledge of the interplay among body, spirit and soul.

In the Western European countries the knowledge of medicinal mushrooms has been somewhat forgotten in the course of time, even though they are one of the oldest and most essential human cures. In my practice in Leipzig I now take a holistic approach and work a lot and gladly with medicinal mushrooms – out of conviction.

Medicinal mushrooms have their leading applications for immune modulation and to strengthen specific organs. Then whenever possible I use primarily biological and/or homeopathic means to activate the self-healing abilities of the body without causing undesired side effects.

I treat many people for exhaustion and with a secondary kidney weakness shown in a neuro-stress test. In particular Cordyceps has been demonstrated to be successful as a supporting therapy. As a rule I prescribe taking them for at least four months – numerous positive reports from my patients confirm the success of this treatment method.'

# Alternative Medicine Practitioner Doris Richtsteig



## Alternative Medicine Practitioner Doris Richtsteig

Classical and Modern Natural Healing Practices,  
Energetic Treatments, Specialty Mycotherapy

Natural Healing Practice, 87439 Kempten

[www.natur-heilimpulse.de](http://www.natur-heilimpulse.de)

'After three years of full-time study at the Centre for Natural Healing Methods and Homeopathy in Kempten, Germany, in 1992 I passed the test and was admitted to practice alternative medicine without approbation. In parallel I completed an internship in a pharmacy.

Then I had more than four years in my own practice to deepen and confirm my knowledge. I took additional courses in subjects that were important to me, including mycotherapy. Twenty-two years ago I completed a six-week course in Traditional Chinese Medicine under a Chinese master.

As part of this course we diagnosed each other and worked out suitable combinations of mushrooms, herbs and roots. We had to prepare these recipes as decoctions and of course we also had to drink them. The mushroom-herb-root mixture was prepared in 2.5 litres of water and cooked down to 0.2 litres. Even the preparation was an olfactory challenge but at the latest the subsequent taste explosion made it clear to me that I would not be able to use this form of therapy just then.

In spite of the convincing effects of my 'cocktail' with mushrooms, I chose the path of homeopathy and bio-resonance therapy. After nine years of bio-resonance therapy, pushy equipment manufacturers became too much for me and the technology hype in alternative medicine practices became more and more suspicious. I then returned to the roots of my profession as a practitioner of alternative medicine.

I was searching for alternative therapy methods and remembered my good experiences with mushrooms and herbs. Now that medicinal mushrooms were also available in capsules there was nothing to keep me from using them in my practice.

My primary clientele had always been patients with immunological problems such as allergies, hay fever and neurodermatitis. I began to include reishi and *Agaricus blazei murill* (ABM) in my therapy. The successes were so convincing that I would not want to do without mycotherapy in my practice.'

# Mycotherapy and Cancer Therapy

‘Investigations have verified the presence of more than a hundred medicinally valuable components.’

## Mycotherapy – medicinal mushrooms and how they work

In order to understand the wide-ranging spectrum of effects from reishi and other medicinal mushrooms, it is necessary to know that they do not fight illness like conventional medicines but strengthen the organism through regulation. Medicinal mushrooms are adaptogens that effectively regulate the homeostasis in the body. This involves the balance of all processes operating continuously in the body including balances of minerals, enzymes, hormones, water, electrolytes and immune cells. These products and modes of action of medicinal mushrooms are the foundation of mycotherapy. Their action is compensatory, meaning that they can sink the blood pressure of those for whom it is high and raise it for those for whom it is low.

The compensatory principle of medicinal mushrooms also applies to digestion, the psyche, allergies and cancer. This is necessary to understand the almost unbelievable range of applications for these particular mushrooms, above all their preventative effects.

## Medicinal mushrooms in cancer therapy

Particularly interesting and encouraging results have been presented in recent years for the treatment of cancer with medicinal mushrooms. In Asia and the USA some medicinal mushroom extracts or their isolated active ingredients are now officially part of the standard therapy for cancer treatment.

There are special polysaccharides from mushrooms that demonstrably inhibit the formation and growth of tumours. They do not attack cancer cells directly but regulate the production of macrophages, cytotoxic T helper cells and of course killer cells. In addition use of medicinal mushrooms can lead to the release of the body's own messenger compounds such as interleukins and interferon. This helps the body to recognize and eliminate abnormal cells. Medicinal mushrooms are also able to model the immune system. This means that underactive functions are elevated, overactive functions reduced and, if possible, disturbances brought back into balance.



# Overview of Medicinal Mushrooms

## The 16 most important medicinal mushrooms



**Agaricus bisporus**  
*White button mushroom*  
Page 8



**Maitake**  
*Grifola frondosa / Hen-of-the-woods*  
Page 16



**Agaricus blazei murill**  
*ABM*  
Page 9



**Meshima**  
*Phellinus linteus*  
Page 17



**Auricularia polytricha**  
*Wood ear*  
Page 10



**Pleurotus ostreatus**  
*Oyster mushroom*  
Page 18



**Chaga**  
*Inonotus obliquus*  
Page 11



**Polyporus umbellatus**  
*Umbrella polypore*  
Page 19



**Coprinus comatus**  
*Shaggy ink cap*  
Page 12



**Reishi**  
*Lingzhi / Ganoderma lucidum*  
Page 20



**Cordyceps sinensis**  
*Chinese caterpillar fungus*  
Page 13



**Shiitake**  
*Lentinula edodes*  
Page 21



**Coriolus versicolor**  
*Turkey tail*  
Page 14



**Tinder fungus**  
*Fomes fomentarius*  
Page 22



**Hericium erinaceus**  
*Pom pom mushroom or lions mane*  
Page 15



**Tremella fuciformis**  
*Snow fungus, silver ear fungus, white jelly mushroom*  
Page 23

# The 16 most important medicinal mushrooms

## Agaricus bisporus White button mushroom

The white button mushroom belongs to the botanic group of the Agaricaceae. In Europe this treasure was first raised in France. A melon farmer at the beginning of the 17th century noticed that in his melon refuse, where the washing water from wild white button mushrooms from his kitchen also landed, the mushrooms grew particularly well.

The first precise instructions for raising them were published in 1651 in the gardening book 'The French Gardener'. From then until now there has been an enormous development in raising these mushrooms up until the decoding of its genome in 2009. The culinary aspect has always taken centre stage and the important contribution of this mushroom to health was completely overlooked.



### Significance in naturopathy

In the macrobiotic and vegan scene white button mushrooms belong to the most important superfoods.

Nutritional physiology shows that the mushroom contains a variety of vitamins, minerals and trace elements as well as all eight essential amino acids. For the stomach and intestinal tract it is a real blessing, it takes care of improving the physiological intestinal flora while reducing pathogenic germs such as the Clostrides or Helicobacter pylori. The white button mushroom also neutralizes methane, indole and skatole directly in the intestine so that it can prevent halitosis or bad breath.

The kidneys also see a positive influence. For kidney insufficiency it is able to substantially delay the collapse of the functional tissue, postponing the necessity of dialysis. It performs similarly for liver diseases, above all providing protection against liver adiposis.

In tumour therapy the Agaricus bisporus has shown itself to be an absolute enrichment for the supporting treatment of hormone-dependent tumours. Through the inhibition of the enzyme aromatase, which is necessary for the formation of oestrogen, and of 5-alpha reductase, which converts testosterone into dihydrotestosterone, the white button mushroom is able to positively influence benign and malignant breast and prostate illnesses. It also raises the activity of natural killer cells, modulating the immune system. It is also able to initiate apoptosis, the death of cancer cells.

As an additional highlight it shines in encouraging the healing of wounds and successfully preventing the formation of scars.

### Main areas of usage

**Cancer, in particular breast, prostate and stomach**

**Intestinal illnesses with dysbiosis, detoxication**

**Kidney insufficiency, hyperuricemia and hypercreatinemia**

# Agaricus blazei murill

ABM

The medicinal mushroom 'Agaricus blazei murrill' (ABM) is also known as himematsuake. It originates in the rainforests in Brazil, where the locals call it 'mushroom of God'. They use it not only as a 'special' food but also in cases of serious illness.

Forty years ago, Japanese scientists noticed and examined this mushroom because the life expectancy in regions where it was consumed was higher and cases of cancer were almost unheard of.

In the meantime this mushroom has experienced a true boom in its naturopathic uses. It is cultivated in large quantities and is recognized as an approved anti-cancer substance in Japan, Brazil and the USA.

## Significance in naturopathy

Pharmacologically valuable substances and the highest proportion of valuable polysaccharides (especially  $\beta$ -glucane) in all medicinal mushrooms are found in ABM. Remarkable anti-tumour effects are also attributed to ABM.

ABM often successfully stops the growth of cancer cells and can even bring about remission. These effects were verified in studies of leukaemia as well as cancer of the intestine, lung, abdomen, breast, pancreas, prostate and liver. ABM has also been especially helpful in countering brain tumours, skin cancer and gastric cancer as well as hepatitis B and C, cirrhosis and other diseases of the liver, spleen and stomach. This is also valid for cases where an operation, radiotherapy or chemotherapy cannot be performed.

At the same time, ABM mushrooms or their extracts can drastically reduce the dangerous side effects caused by conventional therapies such as radiation and chemotherapy. They help to rapidly eliminate the toxins formed in the process and encourage haematosis in the bone marrow.

The regulation of the immune system also positively impacts the treatment of chronic inflammations, allergies, asthma, bronchitis and migraines, as well as that of chronic fatigue and especially of autoimmune diseases such as polyarthritis, diabetes Type I and thyroid hyperfunction. Extracts of ABM are used in the supporting treatment of the human immune deficiency AIDS in HIV patients.

## Main areas of usage

**Cancer and tumour therapy**  
(accompanying conventional medicine)

**Alleviates side effects of radiation and chemotherapy**

**Autoimmune diseases**

**Skin diseases**

# The 16 most important medicinal mushrooms

## Auricularia polytricha

Wood ear

Auricularia, also known as 'wood ear', is a medicinal mushroom which is found almost all around the world. Its fruiting body is frost-resistant and can be found all year round.

Auricularia is known from Chinese cuisine, where it is added to soups or used to refine sauces. Wood ear has a very mild taste of its own and is able to absorb aromas from spices.

Usually Auricularia is obtained in dried form. If wood ear is allowed to soak before cooking, its volume increases greatly and it provides a pleasant feeling in the mouth.



### Significance in naturopathy

Auricularia is often used in the treatment of arteriosclerosis in Traditional Chinese Medicine to regulate blood circulation and reduce cholesterol levels. Studies have also confirmed its anti-inflammatory effects.

Scientists continue to investigate its anti-clotting properties, which positively affect blood pressure. Positive results have been reported, especially in the prevention of stroke, heart attack and circulatory disorders, even if it is not known exactly how the substances in the mushroom work.

Further studies point to the regulating effect of Auricularia on the immune system, where the development of immune cells in the spleen can be improved. Like most medicinal mushrooms examined to date, Auricularia has shown evidence of positive effects on the strengthening of the immune system in tumorous diseases and is therefore used in the accompanying treatment.

### Main areas of use

**Arteriosclerosis  
(encourages circulation)**

**Inhibits inflammation**

**Thrombosis, heart attack and  
stroke prophylaxis**

**Blood pressure regulation**

# Chaga

## Innonotus obliquus

This mushroom grows on a variety of tree species but there is evidence showing that those growing on birches and harvested in autumn or spring are most effective in healing.

The legendary chaga has been used in Siberia for centuries to treat even serious illnesses of the stomach and intestinal tract and all mucous membranes. First known to add strength, it also cleanses the blood and has been used for tuberculosis and heart problems. For centuries it has been a component of Russian medicine.

### Significance in naturopathy

Chaga is an excellent means to treat all diseases of the digestive system including ulcers and inflammations from the oral cavity to the large intestine.

In the complete mucous membrane area polyps can be reduced as much as possible by this valuable mushroom. The rehabilitating effect on the digestive system can be taken advantage of during the treatment of skin diseases. Besides this, the use of this mushroom strengthens the general defences against infection and encourages metabolic stimulation. It satisfies hunger, dispels fatigue and improves performance.

The first scientific evidence of this mushroom's antiviral effects was provided by Kahlos et al. in 1996. In this study, extracts from the black exterior coat of the mushroom were able to repress the influenza virus by almost 10 percent. In 2011 Shibnev V. A. et al. were able to show the inhibitive effect of the mushroom's aqueous extract on the hepatitis C virus in cell cultures. Studies have shown the ability of chaga to protect against the herpes simplex virus. The anti-inflammatory and pain-relieving qualities of the mushroom were shown by Park Y. M. et al. in 2005.

An important use of the mushroom is in the treatment of cancers, focusing particularly on those of the gastrointestinal tract and the lymph system (Hodgkin's lymphoma). It improves the general health of patients, for example after surgical removal of a tumour, and alleviates the side effects of chemotherapy.

Now there is a whole range of scientific studies on cancerous cells which reveal the cancer-palliative properties of this mushroom and its extracts.

The chaga mushroom is an easily digested enrichment of our health.



### Main areas of usage

**General resistance to infection**

**Skin and mucous membrane illnesses**

**Stomach and intestinal illnesses**

**Improves performance**

**Cancer and tumour treatment  
(accompanying conventional medicine)**

**Alleviates side effects of chemotherapy**

## Coprinus comatus

Shaggy ink cap

The *Coprinus comatus* occurs in Europe and Asia. When harvested young, that is while the cap is still closed, it is an excellent mushroom for eating. Thanks to its asparagus-like taste it is sometimes also called the asparagus mushroom. Unfortunately *Coprinus* cannot be stored; for this reason it is rarely used for cooking.



At this point it is worth mentioning another topic. This is the tale that one can be poisoned after eating a *Coprinus* dish together with alcohol, but fortunately it is based on a misunderstanding. The substance coprine that is responsible for the horrible reaction is not at all present in the shaggy ink cap.

This mushroom is interesting for those seeking a healthy diet due to the 20 amino acids it contains. These include all eight that are essential for humans. In infectiology the shaggy ink cap has also made a name for itself among the medical mushrooms. Russian scientists have demonstrated the excellent antibacterial and antifungal effects of the shaggy ink cap. Above all its results fighting *Staphylococcus* are interesting because this pathogen, known above all as a feared hospital germ, reacts badly or not at all to available antibiotics.

### Significance in naturopathy

In the Traditional Chinese Medicine *Coprinus* is frequently used to treat digestive problems and haemorrhoids. Interesting research results show that the mushroom has a regulatory effect on the blood sugar level. It was demonstrated that it reduces the blood sugar, improves glucose tolerance and works against the occurrence of long-term damage from diabetes. These genial properties make the *Coprinus* interesting to treat diabetes Types I and II.

Beyond that Chinese scientists have shown that it has a 100 percent arresting influence on the growth of sarcoma 180 and up to 90 percent arresting effect on the Ehrlich carcinoma.

In addition it has good results on hormone-dependent tumours.

### Main areas of usage

**All types of inflammations**

**Diabetes Types I and II  
(reduces blood sugar,  
reduces long-term damage)**

**Constipation**

**Treatment of haemorrhoids**

# Cordyceps sinensis

## Chinese caterpillar fungus

Cordyceps sinensis, also known as the 'Chinese caterpillar fungus', originates in Tibet, where it grows in altitudes from 3000 to 5000 metres. Its natural food resource is not wood or another plant substrate like that of other mushrooms but rather a specific type of caterpillar. It infests the caterpillar beneath the soil, kills it, and sprouts a finger-shaped fruiting body in spring.



Along with numerous vitamins, trace elements and essential amino acids, the Chinese caterpillar fungus also contains valuable polysaccharides.

Now the ingredients cordycepin, ophicordin and galactomannan are also known; they have a stimulating influence on the immune system. Commercial powders and extracts mostly come from cultivation using a nutrient solution, because otherwise this mushroom would be much too expensive to use as a dietary supplement.

### Significance in naturopathy

This extraordinary mushroom has become especially well known as an aphrodisiac. It encourages sexual activity and helps with sexual malfunctions and irregular menstruation. Studies have shown that it forces higher production of  $17\beta$ -oestradiol in women and of testosterone in men. It also positively influences the psychic condition.

It stabilises adrenal activity, regulating and optimising the stress hormones. An explanation for this is its proven influence on the neuroendocrine system. Cordyceps inhibits the enzyme monoaminooxidase, causing a sunnier mood. This medicinal mushroom is also gladly taken by athletes because it has a remarkable performance-enhancing effect.

Asian Olympic athletes have always consumed Cordyceps to improve performance in competitions and to recover from strenuous workouts because it speeds up muscle regeneration. Scientists believe that the positive effects of Cordyceps, the improvement of performance and endurance, are linked to the improvement of blood oxygenation and the blood supply to the lungs and the entire cardiovascular system.

Cordyceps is helpful for joint and muscle pain as well as rheumatism. It protects and strengthens the kidney, lungs, and liver. This medicinal mushroom is equally effective for anaemia, weakness, and chronic fatigue, as well as in respiratory diseases such as asthma. It is also a natural antibiotic in cases of bacterial infections.

Furthermore it stimulates the immune system and is recommended for AIDS and in cancer therapy. Here it also noticeably relieves the side effects of radiation or chemotherapy.

### Main areas of usage

**Exhaustion / tiredness / stress / depression**

**Improves performance and increases endurance**

**Sexual functional disturbances**

**Cancer and tumour therapy (accompanying conventional medicine)**

**Chronic kidney diseases**

## Coriolus versicolor

### Turkey tail

Coriolus versicolor is known in Europe but is especially well known in Asia and South Africa, where it naturally grows on dead wood and is also cultivated. It has been used for a very long time in Traditional Chinese Medicine to treat a wide range of diseases such as infections and candidiasis. It has been tested for verifiable medicinal effects in several studies.

In Europe, it was regarded as uninteresting for a long time because it is not suitable for eating but in the meantime this medicinal mushroom has established itself in Europe due to its ingredients.

### Significance in naturopathy

The turkey tail contains the two highly effective polysaccharide compounds PSK and PSP. Both have been shown to have a strong regulatory effect on the immune system and are effective against tumours. Like most medicinal mushrooms Coriolus belongs to the biological response modifiers. These mushrooms contain Beta-glucanes that are able to provide compensation to the metabolism. This means that underfunctioning is increased and excessive functioning reduced, both without negative reactions.

The turkey tail can be a blessing to those suffering from chronic inflammations, allergies or auto-aggressive illnesses. Another area of use, in addition to the demonstrated direct effect of PSK on cancer cells, is in accompanying cancer therapy, where side effects are substantially reduced and well-being can be improved.

Studies of leukaemia therapy show that the deterioration of health during cancer therapy can be significantly slowed with the help of Coriolus versicolour. Already in 1977, one of the substances found in the mushroom, krestin, was approved as the first cancer medication from a mushroom. The first studies point towards an antioxidant effect on strained liver cells. This way the turkey tail can mitigate the side effects of other medicaments and provide more vitality.

Furthermore, Coriolus is rich in minerals, trace elements, and vitamins such as provitamin D.

### Main areas of usage

**All types of inflammations**

**Cancer and tumour therapy  
(accompanying conventional medicine)**

**Infections**

**Immune system regulation**



# Hericium erinaceus

Pom pom mushroom or lion's mane

Hericium erinaceus is also called the 'pom pom mushroom' or 'lion's mane' because of its appearance.

Its Chinese name means 'monkey head mushroom'. This is because the shaggy appearance of this mushroom is reminiscent of a type of monkey found in China that is so hairy that the face cannot be recognised.



## Significance in naturopathy

In Traditional Chinese Medicine, Hericium is beneficial for five organs; kidney, liver, spleen, heart and stomach. It sustainably supports digestion, serves to generally strengthen the organism, promotes vitality and prevents cancer.

Indeed, the potential effects of the pom pom mushroom on the complete digestive system are considerable. It regulates digestion and has a calming effect. At the same time it contributes significantly to the regeneration of stomach, intestinal and esophageal mucous, relieves disturbances of enteric flora and helps with over-acidification and heartburn.

Clinical studies have shown that Hericium is very successful in countering all infections and ulcerations as well as cancers of the digestive tract; so it can be used for stomach ulcers, esophageal cancer, stomach cancer, ulcerative colitis, Crohn's disease, colon carcinoma and pancreatic cancer. The effects of this mushroom against tumours can be attributed to the polysaccharides and polypeptides found within and their immunostimulatory effects. Also confirmed are antimicrobial substances which inhibit, for example, the growth of the bacterium *Helicobacter pylori*, a bacterium made responsible for causing stomach ulcers and stomach cancer.

This medicinal mushroom also has many more virtues. It helps with infections, asthma, allergies and neurodermatitis. Erinacines present in Hericium can stimulate the nerve growth factor (NGF). After damage due to injury nerve cells can sprout, which could be useful for all diseases involving the nervous system.

After several weeks of intake, Hericium has a balancing and harmonizing effect on the central nervous system. It can alleviate states of anxiety, depression, menopausal complaints, and especially insomnia. Studies report a mood-enhancing effect from Hericium.

## Main areas of usage

**Stomach and intestinal illnesses**

**Neurological diseases  
(i.e. Alzheimer's)**

**Cancer and tumour therapy  
(accompanying conventional  
medicine)**

**Alleviates side effects  
of chemotherapy**

## Maitake

*Grifola frondosa* / hen-of-the-woods

The Japanese word maitake stands for 'dancing mushroom', maybe because a successful collector would dance for joy at the sight of one of these mushrooms. Maitake is also translated as 'ram's head', presumably because of its growth form.

*Grifola* grows in autumn in Europe, where it is also known as 'hen-of-the-woods'. It mostly thrives at the foot of old oak trees, but also on linden, chestnut and beech trees.

Since 3000 BC it has been collected and eaten in China and Japan.



### Significance in naturopathy

Traditionally maitake is successfully used by those struggling with obesity, to regulate blood pressure, and for Type II diabetes. This medicinal mushroom protects the liver, leads to improvements in cases of hepatitis and relieves irritable colon conditions. Maitake sustainably lowers blood cholesterol levels and prevents arteriosclerosis. It has a beneficial effect on heart attacks, coronary vessel diseases and cardiac irregularity. Due to its high ergosterol (the antecedent of Vitamin D) content, the consumption of this mushroom can counteract osteoporosis.

The anti-tumour effect is especially worth highlighting. The main active ingredient of maitake, the so-called 'D fraction' in the mushroom's extract, has proven to be particularly effective against chest, lung, liver, and prostate cancer. The polysaccharide activates and strengthens the immune system, boosting resistance to various infections and reducing the side effects of radiation and chemotherapy.

During the intense search for ways to fight HIV infection, the effectiveness of maitake against the AIDS pathogen was confirmed by the National Cancer Research Institute in the USA and the National Health Authority in Japan. Tests showed that with the use of the maitake D fraction, the depletion in the number of T helper cells in the immune system caused by the HIV virus is reduced. This leads to the assumption that the development of an HIV infection into AIDS can either be considerably slowed or even prevented.

### Main areas of usage

**Diabetes Type II**  
(regulates metabolism)

**Overweight**

**Cancer and tumour treatment**  
(accompanying conventional  
medicine)

**Alleviates side effects**  
of radiation and chemotherapy

# Meshima

*Phellinus linteus*

The 'freedom-loving' meshima grows on mulberry trees and elms and in meadows. Its fruiting body needs at least 30 to 40 years until it has built up the ingredients relevant to healing and is medically useful. It is rare to find it in nature because it is extremely sensitive to changes in its growing conditions such as temperature, humidity and light. The oldest book about oriental herbal knowledge, 2000 years old, mentions *Phellinus linteus* in the first place in the category of superior medicaments.

It was used for eternal youth and long life. The emperors of the great Chinese and Japanese dynasties drank tea from meshima to keep body and mind fit for a long life and to maintain their vitality. In the 'Pen ts'ao kang mu', the best-known 16th century book of medications, the author Li Shizhen describes the positive effects of 'hwang sang', that is *Phellinus linteus*, on the Qi, the life energy. If taken regularly for a long time the body maintains its powers of regeneration and the available years of life will be lengthened to those of the immortal elves.



## Significance in naturopathy

*Phellinus linteus* is clearly another highlight from nature's treasury. It has been used for centuries in the Orient to treat cancer; the positive effects have been confirmed by a number of studies.

In addition to its success destroying cancer cells the meshima has a regulating influence on the hormone system. It can provide good service in cases of prostate carcinoma and diabetes.

It is effective against inflammations and helps to regulate the immune system, which can provide great relief for allergies, neurodermatitis and asthma.

## Main areas of usage

**Cancer**

**Leukaemia**

**Protection against oxidative stress**

**Inhibits inflammations**

**Immune system**

**Blood sugar**

**Asthma**

**Neurodermatitis**

**Cirrhosis of the liver**

# The 16 most important medicinal mushrooms

## Pleurotus ostreatus

Oyster mushroom

The oyster mushroom is popular in Europe for eating but Pleurotus is not just a tasty and versatile food mushroom.

Many positive qualities as a medicinal mushroom have been attributed to it, including bone growth, metabolism and blood formation.



### Significance in naturopathy

For the first time in 1951 a process was developed to extract the antibiotic substance pleuromulin from oyster mushrooms. Since then it has been used in medicine. Traditional Chinese Medicine uses the oyster mushroom to strengthen the vein system and for muscle and tendon complaints.

It is also used for back pains, lumbago, stiff limbs and blood formation. The medicinal mushroom Pleurotus contains various vitamins of the Vitamin B complex such as B1, B2, B5, B6 and B7. These are necessary to win and convert energy in the human organism; as a rule they are taken by eating meat.

About a quarter of the mass of the mushroom consists of proteins; it also contains a variety of vital amino acids and folic acids that are important in connection with blood formation and the growth of bone marrow.

Vitamin D has also been detected; it encourages the growth of bones and cartilage and contributes to the prevention of osteoporosis.

Another very important ingredient in the medicinal mushroom Pleurotus is the polysaccharide pleuran, that has an anti-oxidative effect and can help to contain free radicals and metastases in cases of cancer.

What makes the oyster mushroom special among medicinal mushrooms is its probiotic effect, which can regulate and positively stimulate the bacteria household in the intestinal mucosa.

After treatment with antibiotics Pleurotus can help to quickly reproduce a regulated digestive process.

### Main areas of usage

**Positive effect on blood fat values**

**Overweight (weight reduction)**

**Cancer and tumour treatment  
(accompanying conventional  
medicine)**

**Alleviates side effects  
of radiation and chemotherapy**

# Polyporus umbellatus

## Umbrella polypore

Polyporus umbellatus is found in the entire northern hemisphere even though it prefers warmer regions. It is found growing mainly in woodlands.

The first traceable mention of the mushroom was as early as 2000 years ago in China. Since then it has been a solid component of the Traditional Chinese Medicine. It contains ergosterol, folic acid, niacin and biotin as well as polysaccharides and polypeptides. At the same time it is rich in fibre and minerals. Substantial levels of iron, calcium and potassium as well as copper, manganese and zinc have been found.

### Significance in naturopathy

This medicinal mushroom is said to have diuretic effects. As opposed to synthetic compounds it does not wash out vital potassium, which would subsequently need to be replaced. Hence it is a gentle alternative for the treatment of irritations of the urinary tract as well as for various forms of fluid retention and oedemas. Besides its diuretic effects it is also believed to have antimicrobial effects, which help to treat infections.

Studies from China conclude that Polyporus inhibits the growth of sarcomas and lung cancer. There are also studies of liver diseases such as hepatitis B, which show a relationship between treatment with Polyporus and improved liver function readings, as well as an antioxidant effect in the blood plasma. Especially the polyporusteron B found in this medicinal mushroom is said to effectively capture radicals.

The bioactive components polyporusterone A and B play a decisive role in the growth of new hair.



### Main areas of usage

**Water retention / oedemas (diuretic)**

**Improvement of hair growth**

**Overacidity**

**Activation of lymph flow**

# The 16 most important medicinal mushrooms

## Reishi

Lingzhi / *Ganoderma lucidum*

Reishi is familiar all around the world. In Traditional Chinese Medicine (TCM) today it plays a prominent role as a remedy, as it has done for more than 4000 years. In Japan this particular mushroom has been approved as a cancer medication.

Reishi is almost exclusively cultivated for processing into medicinal mushroom products. Over four million people regularly consume reishi! Of all known medicinal mushrooms, it has the largest range of effects. This is attributable to the amounts of highly effective polysaccharides and triterpenes found in this astounding mushroom.



### Significance in naturopathy

Recent scientific studies confirm that reishi has a positive effect on high blood pressure, circulatory disorders and arteriosclerosis as well as in the regulation of blood fat and blood sugar levels. This can be attributed to triterpenes, which are abundant in this medicinal mushroom. These furthermore inhibit the release of histamines; hence reishi is also used successful in the therapy of allergies and neurodermatitis. It has a special regenerative effect on lung tissue and can be particularly successful in treating ailments like chronic obstructive bronchitis (COB) or asthma, even when caused by smoking. It leads to improvements in shingles, exhaustion, fibromyalgia and menopausal complaints.

Several substances found in reishi have relaxing and calmative effects on the central nervous system. The ingestion of reishi extract leads to improvements in shingles, fatigue, fibromyalgia and menopausal complaints. This medicinal mushroom can reduce migraine, sleep disturbances, nervous disorders, restlessness and anxiety.

Clinical studies have also confirmed a positive effect on the cardiovascular system. Scientists discovered a component of the mushroom's extract which improves the oxygen uptake of blood and improves blood flow, distinctly raising the performance of the heart muscle. Its use is therefore advised as a natural prophylaxis and as a remedy to treat a weak heart, diseases of coronary vessels, cardiac arrhythmias and for heart attack prevention.

This mushroom has a remarkable ability to activate the immune system. Reishi is traditionally recommended for the treatment of numerous diseases of the liver, such as hepatitis A, B and C and for strengthening the liver. It is also proven effective in treatment of infections and autoimmune diseases. It has been used successfully for decades in the accompanying therapy for stomach, liver, lung, skin, brain, kidney, and pancreas cancer.

It also mitigates the side effects of chemotherapy and radiation. Studies have also shown effectiveness in detoxification and a particular protective function against chronic environmental effects.

### Main areas of usage

**Heart and circulatory illnesses**

**Allergies**

**Immune system regulation**

**Liver diseases (liver protection)**

**Psychovegetative complaints**

**Cancer and tumour treatment  
(accompanying conventional  
medicine)**

# Shiitake

Lentinula edodes

The medicinal mushroom shiitake is considered the 'king of mushrooms' and is among the most consumed mushrooms in the world. For over 2000 years it has been considered a delicacy in Asia, where it is also coveted for its legendary healing powers. A doctor of the Chinese Ming Dynasty described the mushroom as a 'means of preserving health that heals colds and stimulates blood circulation'.

## Main areas of usage

**Immune deficiency /  
common cold /  
Influenza infection**

**Arthritis and arthrosis**

**Cardiovascular illnesses**

**Alleviates the side effects  
of radiation and chemotherapy**

## Significance in naturopathy

Shiitake is traditionally advised for colds, flu-like infections and immunodeficiency, for blood pressure regulation, gout, rheumatism and arthritis, for various diseases of the liver, tumours, chronic fatigue syndrome, for diabetes, migraines, allergies and for many other afflictions.

Numerous scientific studies in the past decades were able to prove and explain the positive effects of shiitake. This medicinal mushroom is very helpful for all cardiovascular diseases and especially for lipometabolic disorders. It regulates the cholesterol balance in a remarkable way, strengthens the arterial walls and can sustainably counter arteriosclerosis.

Eritadenin, a substance found in this medicinal mushroom, takes care that cholesterol is already eliminated in the intestines. The provitamin D (ergosterol) present in shiitake promotes the calcium metabolism. The essential organic substances in Lentinula edodes stimulate collagen production.

The natural amino acids found in shiitake are components of the collagen molecule and are needed to provide cell structure. They also protect against new inflammations and deposits in the blood vessels. Even the long known anti-tumour effects have meanwhile been scientifically proven. After isolating the polysaccharide lentinan from shiitake in 1969, it was determined that it could inhibit or even fully degenerate various tumours which were implanted into mice. Since then, studies have repeatedly showed that lentinan is effective in cancer therapy to fight against tumours and mitigate the side effects of chemotherapy.

In China, Japan and even the USA, shiitake (or an extract from it) is approved as a medicament in accompanying cancer therapy.



## Tinder fungus

Fomes fomentarius

What was a tinder beater or a mushroom beater? It is hard for us to guess what people with these jobs did. In fact it was an extremely lucrative profession that was very common in wooded areas before the invention of matches. These people processed tinder fungus in different forms so that it would ignite quickly, providing both fire and light.

The tinder fungus is a secondary parasite and saprobiont that is usually at home in old deciduous woods almost everywhere in the world. It enters the tree through a wound and causes a strong white rot that eventually kills the tree. This is no problem for the tinder fungus because it can live for years from the dead material. The loose felt-like middle layer of the mushroom glows as soon as a spark is lit and quickly catches fire together with wood shavings or brushwood, which explains the expression 'burns like tinder'.



### Main areas of usage

**Cancer of the lung, stomach, intestine, skin, uterus**

**Accompanying chemotherapy**

**Arthrosis**

**Detoxification**

**Haemostatic agent**

### Significance in naturopathy

Just like the old jobs have died out, the importance of tinder fungus for chemists has also been affected. For centuries it was used to cauterise and disinfect wounds, for haemostasis and the rapid healing of wounds. Here modern inventions such as cotton wool and sterile wound dressings have pushed Fomes fomentarius out of the sickroom. The tinder fungus and the knowledge about it were long forgotten and left in a deep sleep.

About twenty years ago curious researchers pushed back the curtain and woke up the tinder fungus with its potential uses to heal and maintain health. The researchers won a natural complex from the mushroom. It consists of Beta 1.3 /1.6 D-glucan, one of the strongest immune modulators, together with melanin and chitin. This combination can be isolated from the tinder fungus and numerous other medicinal mushrooms. What is interesting about this complex of active agents is that it produces hollow fibres that are resistant to acids and alkalis; in the cosmetic and pharmaceutical industries they can be used to transport active ingredients.

The tinder fungus is simpler and easy to use in its natural form. Prepared as a powder or extract, this gift from Mother Nature provides a grandiose opportunity to successfully treat health problems like infections, arthrosis and cancer. In TCM it is used for stomach, uterus and throat cancer.

# Tremella fuciformis

Snow fungus, silver ear fungus, white jelly mushroom

With the snow fungus, also known as silver ear fungus or white jelly mushroom, nature has given us yet another gift. Over a thousand years ago the ladies at the Chinese court used it to maintain their beauty. Tang Dynasty emperor Xuanzong fell in love with the breathtakingly beautiful Yang Guifei, of whom it was said that even blossoming flowers retired in shame in the presence of her beauty. It was reported that Yang Guifei used snow fungus to take care of her body and skin. In fact today Tremella fuciformis is often used in the cosmetic industry because its water-binding and moistening properties are stronger than those of hyaluronan. It also helps with circulation and is effective against inflammation and allergies. Its use results in a healthy, tight and lissom skin.

An additional anti-aging effect is caused by the polysaccharides in snow fungus because they increase the superoxide dismutase activity.



## Significance in naturopathy

The mushroom's potential is long not exhausted by its use in cosmetics. In Asian cuisine it is very popular and most often used in desserts because of its slightly sweet taste. There are benefits from Tremella in nutritional physiology. Due to its high content of fibre and vitamin D and its enormous ability to bind water, those who eat it are quickly satiated and have good digestion. Cholesterol resorption from the intestine is blocked; a side effect is the reduction of the blood cholesterol level.

In the pancreas the snow fungus protects the B cells, ensures their regeneration and raises insulin production. Tremella positively influences blood flow and prevents circulatory disorders. Blood vessels are protected from damage caused by histamines; the bonding of plaques and the subsequent arteriosclerosis is prevented.

Tremella fuciformis serves well in cases of memory disturbance. Depending on dosage it can stimulate the growth of PC12h cells in axons. It also has the potential for use in cases of neurological damage. Its high content of polysaccharides, particularly Glucuronoxylomannan, is the basis of anti-tumour and immune modulation effects. It has a preventive effect against cancer and protects against the side effects of radiation therapy.

## Main areas of usage

**Damage from radiation therapy**

**Infections**

**Hypercholesterolemia**

**Diabetes Type II**

**Metabolic Syndrome/  
Weight regulation**

**Anti-aging**

**Chronic inflammations**

**Allergies**

**Cancer prevention**

# Medicinal mushrooms used by humans

The following summary includes common complaints and illnesses and the respective medicinal mushrooms to treat them.

This table of possible applications serves for orientation. No claim is made that it is complete. It does not replace personal consultation and care by a medical doctor, veterinarian, practitioner of alternative medicine, or practitioner of alternative medicine for animals.

	Agaricus	Auricularia	Chaga	White button mushroom	Coprinus	Cordyceps	Coriolus	Phellinus linteus	Hericium	Maitake	Pleurotus	Polyporus	Reishi	Shiitake	Tremella	Tinder fungus
ADHS	◆					■ ■			■				■ ■			
Acne	■ ■	■				■ ■	■ ■					■ ■			■	
Anxiety- restlessness						■ ■			■ ■				■ ■			
Allergies	■ ■		■	■ ■		■	■	■ ■				■	■ ■		■ ■	
Arteriosclerosis		■ ■			■						■ ■		■ ■	■ ■	■ ■	
Arthritis-joint inflammation	◆					■	■	■ ■			■ ■	◆	■ ■	■ ■		■ ■
Arthrosis- cartilage damage						■ ■				■ ■		■	■ ■	■ ■		■ ■
Asthma	■ ■					■ ■		■ ■					■ ■			
Autoimmune disease	■ ■	■	■			■ ■	■ ■	■		■			■ ■	■		
Pancreas	■ ■	■	■		■ ■				■ ■	■ ■				■ ■	■	
Radiation effects	■ ■						■ ■						■ ■		■ ■	
Bladder infection	■		■			■ ■	■ ■					■				■ ■
Blood pressure regulation	■ ■	■ ■		■ ■		■ ■				■ ■		■ ■	■ ■		■ ■	
Borreliosis						■ ■	■ ■		◆							
Bronchitis	■ ■	◆				■	■ ■						■ ■		■ ■	
Burnout syndrome- exhaustion	■ ■					■ ■							■ ■	■		■ ■
Candida fungus							■ ■			■ ■			■ ■	■ ■		■ ■
Chemotherapy side effects		■ ■	■ ■				■ ■	■ ■	■ ■	■ ■		■ ■		■ ■		
Cholesterol	■ ■	■ ■		■ ■		■ ■					■ ■		■		■ ■	
Intestinal illnesses	◆	■	■ ■	■ ■	■ ■				■ ■	■	■ ■		■ ■	■ ■		■ ■
Intestinal flora disturbance			■ ■	■ ■			■ ■		■							■ ■
Depressive mood						■ ■							■ ■			
Diabetes	Type 1+2	Type 2			Type 1+2	Type 2		Type 2		Type 2					Type 2	
Circulation- blood flow		■ ■	■ ■										■ ■		■	
Ovaries	■ ■			■ ■			■ ■									
Sleep disturbances													■ ■			
Inflammation		■ ■	■ ■				■ ■	■ ■				■ ■	■ ■		■ ■	■ ■
Lipometabolism		■ ■		■ ■						■ ■	■ ■		■ ■	■ ■	■ ■	
Fibromyalgia	■					■ ■		■ ■					■ ■			
Gastritis- stomach inflammation		■ ■	■ ■					■ ■	■	■			■ ■			
Gout				■ ■		■ ■						■ ■		■ ■		
Influenza infection	■		■ ■				■ ■			■ ■				■ ■	■ ■	■ ■
Shingles			■ ■				■ ■									■ ■
Hair growth						■					■ ■	■ ■	■			
Skin diseases- rash	■ ■	■ ■	■ ■			■	■ ■					■ ■	■ ■		■ ■	

■ ■ well proven   ■ proven   ◆ only for certain indications



	Agaricus	Auricularia	Chaga	White button mushroom	Coprinus	Cordyceps	Coriolus	Phellinus linteus	Hericium	Maitake	Pleurotus	Polyporus	Reishi	Shiitake	Tremella	Tinder fungus
Haemorrhoids		■ ■			■ ■	■ ■				■ ■		■ ■				■ ■
Hepatitis	■ ■		■ ■			■	■ ■			■		■ ■	■ ■			■ ■
Herpes	■		■ ■				■ ■									■ ■
Heart and circulation	■	■ ■	■			■ ■				■	■		■ ■	■ ■		
Immune deficiency	■ ■		■ ■	■ ■		■ ■	■ ■	■ ■		■ ■			■ ■	■ ■		■ ■
Infections	■ ■		■			■	■ ■	■ ■		■ ■		■ ■	■ ■	■ ■	■ ■	■ ■
Headaches -migraine	■	■ ■											■ ■	■		■
Cancers	■ ■	■	■ ■	■ ■	■ ■	■ ■	■ ■	■ ■	■ ■	■ ■		■ ■	■ ■	■ ■		■ ■
Liver diseases	■ ■		■ ■			■	■	■ ■					■ ■	■ ■	■ ■	■ ■
Libido disturbances		◆				■ ■							■	■	■	
Lung diseases	■ ■	◆	■			■ ■	■ ■						■ ■		◆	◆
Stomach			■ ■	■ ■			■ ■	■ ■	■ ■	■			■ ■	■ ■		■ ■
Menstrual disturbances						■ ■							■ ■			
Metastasis prevention	■ ■		■ ■				■ ■	■ ■		■ ■						■ ■
Spleen	■ ■		■ ■				■ ■						■ ■			
Multiple sclerosis	■ ■						■ ■		■ ■				■ ■			
Nerve diseases						■			■ ■				■ ■	■	■ ■	
Neurodermatitis	■ ■							■ ■					■ ■		■ ■	
Kidney diseases				■ ■		■ ■						■		■ ■		
Oedemas						■						■ ■	■			
Osteoporosis										■ ■			■ ■	■ ■		
Polyarthritis	■ ■					■ ■	■ ■	■ ■				◆	■ ■			■ ■
Prostate	■ ■		■ ■	■ ■	■ ■		■ ■			■ ■	■ ■					
Rheumatism	■ ■							■ ■					■ ■			■ ■
Thyroid problems	■ ■					■ ■							■	■		
Sleep disturbances						■ ■			■ ■				■ ■			
Psoriasis		■	■ ■			■			■			■	■ ■			
Stress	■ ■					■ ■				■ ■			■ ■	■ ■		
Tinnitus		■ ■											■ ■			
Tumour diseases	■ ■	■	■ ■	■ ■	■ ■	■ ■	■ ■	■ ■	■ ■	■ ■	■	■ ■	■ ■	■ ■		■ ■
Overweight		■	■	■	■ ■	■				■ ■	■ ■				■ ■	
Constipation- obstipation		■ ■	■		■ ■					■ ■			■	■ ■		■ ■
Menopausal complaints		◆				■ ■			■				■ ■		◆	
Aging well	■ ■		■			■ ■		■ ■				■	■ ■		■ ■	■

■ ■ well proven    ■ proven    ◆ only for certain indications

## Gifts from Nature for Humans and Animals

Medicinal mushrooms are an outstanding dietary supplement not just for humans; these gifts from nature also work for animals.

Since there are hardly differences in the organisms of humans and animals more and more veterinarians are gaining mycotherapeutic knowledge and collecting practical experience.



Most scientific studies with medicinal mushrooms were and are performed with animals. In fact the effectiveness of medicinal mushrooms for animals is even better documented than it is for humans. The active ingredients in medicinal mushrooms help animals to stay healthy and prevent illness.

The mycotherapeutic knowledge of a growing number of vets and alternative practitioners for animals as well as successful use and experience have led to the greater popularity of this holistic and side effect-free treatment alternative. The ingredients of medicinal mushrooms extend from the eight essential amino acids, important minerals, essential trace elements and ballast compounds to the vitally important B vitamins. There are also the unique bioactive polysaccharides, which are only found in the mushroom kingdom and vary from type to type. Medicinal mushrooms are adaptogen, contributing to re-establishing the balance (homeostasis) in the body.

This compensatory effect of medicinal mushrooms in the organism is beneficial for well-being not just in humans but also in animals. In particular domestic animals are subject to a wide range of stressors and it is the responsibility of each animal owner to take care of it appropriately and to ensure its health through comprehensive care. Medicinal mushrooms provide an outstanding alternative due to their wide and varied fields of application; they are also an ideal dietary supplement for animals.

**You can find possible applications for animals in the following list of indications.**

*Use of medicinal mushrooms supports an optimal immune function and also strengthens reactions of the organism against bacteria and tumours.*

	Agaricus	Auricularia	Chaga	White button mushroom	Coprinus	Cordyceps	Coriolus	Phellinus linteus	Hericium	Maitake	Pleurotus	Polyporus	Reishi	Shiitake	Tremella	Tinder fungus
Fatigue	■ ■		■		■ ■								■ ■	■		■ ■
Anxiety- restlessness					■ ■				■ ■				■ ■			
Allergy- Autoimmune illness	■ ■	■	■ ■	■ ■	■ ■		■ ■	■ ■	■ ■	■		■	■ ■	■	■	
Anal sac inflammation	■ ■	■ ■											■ ■		■ ■	
Arteriosclerosis		■ ■				■					■ ■		■ ■	■ ■	■ ■	
Arthritis- joint inflammation	◆				■		■	■ ■			■ ■	◆	■ ■	■ ■		
Arthrosis- cartilage damage					■ ■					■ ■		■	■ ■	■ ■	◆	■ ■
Asthma- COPD	■ ■				■ ■			■ ■					■ ■			
Eye diseases		■ ■										■ ■		■ ■		■
Bacterial infections					■ ■	■ ■	■ ■	■ ■	■ ■	■ ■		■ ■	■ ■	■ ■		
Bladder infection	■		■ ■		■ ■		■ ■					■ ■				■ ■
Intervertebral disc degeneration		■ ■													◆	
Illnesses of the pancreas	■ ■	■				■ ■			■ ■	■ ■				■ ■	■ ■	
Borreliosis					■ ■		■ ■		◆							
Bronchitis	■ ■	◆			■		■ ■						■ ■		■ ■	
Cushing	■ ■				■ ■		■ ■						■ ■			
Intestinal illnesses/ inflammation	◆	■	■ ■	■ ■		■			■ ■	■	■ ■		■ ■	■ ■		■ ■
Diabetes Type 2	■ ■	■			■	■ ■		Type 2 ■ ■		■ ■					■ ■	
Circulation		■ ■	■ ■										■ ■		■	
Eczema	■ ■	■ ■			■ ■							■ ■	■ ■			
General inflammation		■ ■	■ ■				■ ■	■ ■				■ ■	■ ■		■ ■	■ ■
Eosinophilic granuloma	■ ■						■ ■					■	■ ■			
Equine sarcoid	■ ■						■ ■			■ ■						
Fur growth					■						■ ■	■ ■	■			
Lipometabolic disorder		■ ■		■ ■						■ ■	■ ■		■ ■	■ ■	■ ■	
Fertility disturbances					■ ■		■ ■						■ ■	■ ■	■ ■	
Gingivitis	■ ■	■ ■	■				■ ■						■ ■		■ ■	
Skin diseases/ inflammation	■ ■	■ ■	■ ■		■		■ ■	■ ■				■ ■	■ ■		■ ■	■
Heart-circulation	■	■ ■	■		■ ■					■	■ ■		■ ■	■ ■		
Laminitis		■ ■				■ ■					■ ■	■ ■	■ ■	■ ■	■	
Immune system regulation	■ ■		■ ■	■ ■	■ ■		■ ■	■ ■		■ ■			■ ■	■ ■		■ ■
Bone-building										■ ■			■ ■	■ ■		
Cancer illnesses	■ ■	■	■ ■	■ ■	■ ■	■ ■	■ ■	■ ■	■ ■	■ ■		■ ■	■ ■	■ ■		■ ■
Heat disturbances					■ ■		■ ■									
Liver illnesses	■ ■		■ ■		■		■	■ ■		■ ■			■ ■	■ ■	■ ■	■ ■
Pneumonia	■ ■				■ ■		■ ■	■					■ ■			■
Stomach			■ ■						■ ■	■			■ ■			
Metabolic syndrome			■ ■	■ ■		■ ■				■ ■	■ ■			■ ■	■ ■	
Spleen disease	■ ■		■ ■				■ ■						■ ■			
Muscle cramps		■ ■														
Neural disease					■				■ ■				■ ■		■ ■	
Kidney illnesses			■ ■	■ ■	■ ■									■ ■		
Oedemas					■							■ ■	■			
False pregnancy					■ ■		■ ■									
Thyroid dysfunction	■ ■				■ ■		■ ■									
Promote symbiosis						■ ■	■ ■		■		■ ■				■	
Overweight			■	■		■ ■				■ ■		■ ■			■ ■	
Constipation			■			■ ■			■ ■	■ ■					■	■ ■
Viral infections	■ ■		■ ■	■ ■	■ ■		■ ■	■ ■	■ ■	■ ■		■ ■	■ ■	■ ■	■ ■	■ ■
Wundheilungsstörung							■ ■	■ ■		■ ■						■ ■

■ ■ well proven   ■ proven   ◆ only for certain indications

# Questions & Answers

## Frequently asked questions about medicinal mushrooms and their answers



### **What side effects are known?**

Mycotherapy is free of damaging side effects. However there are people with food allergies who basically cannot take mushrooms. Many people also respond to the shiitake, where the result is a detoxifying reaction of the skin that is expressed in an itching rash. In this case the dosage should be reduced or the medicinal mushroom replaced by a different one. Healing often takes a cyclical course so that a brief worsening during the first week is not unusual. The main mechanism of medicinal mushrooms is cleansing, detoxification and purification of the body.

### **When does the first healing success occur?**

Most users observe a noticeable change and reduction of existing symptoms already after a few days after starting to take medicinal mushrooms. For chronic illnesses effects can be seen after an average of four to six weeks.

### **What is the difference between mushroom powder and mushroom extract?**

Powder is made from dried mushrooms by grinding the fruiting body. It contains all ingredients of the respective mushroom. Through very fine grinding the bioavailability of the effective ingredients is raised, particularly that of polysaccharides that sit in the cell walls and are broken open during the grinding process.

Extracts are won from the mushroom powder in an additional step through extraction with a solvent like water or alcohol. They are 20 to 30 times more concentrated than the pure powder and their effects on the immune system are correspondingly stronger. Extracts contain only the soluble components of medicinal mushrooms. These include a range of active ingredients, in particular the highly active polysaccharides in concentrated form.

Extracts provide fast delivery to the corresponding disturbance in the system. Nevertheless they should be taken with consideration and consultation, even for serious illnesses, in order to avoid a strong reaction. On the other hand pure mushroom powder is usually taken for support or its strengthening effects.

### **When and how should I take medicinal mushrooms?**

The best way to take medicinal mushroom products is before a meal with a lot of water. Separating the daily dosage of each product into two or three portions can hinder flatulence (for example after taking mushroom powder). There is no reason not to take mushrooms for your whole life. But it is often not necessary; after reaching a certain stable well-being an annual cure of three months is sufficient. The following recommendations are average values for dosages:

<b>Normal dosage:</b>	0.25 to 1 g of extract daily – for a duration of around three to four months
<b>High dosage:</b>	around double the normal dosage - duration of around one to two months
<b>Prevention:</b>	half of the normal dosage

### **Where can I find medicinal mushrooms?**

On different Web pages, Internet shops on the Internet or ask your chemist. Look for serious suppliers, particularly for medicinal mushrooms, from ecological growth from suppliers who give top priority to hygiene and quality control. Medicinal mushrooms with the BIO seal give you the security of buying a controlled high-value product.

### **Why should I buy organic medicinal mushrooms?**

Organic agriculture is oriented toward environmental requirements and encourages the development of plants and animals. Controlled organic planting is in harmony with nature, encouraging the variety of species and renouncing gene technology. The highest priority is given to working to maintain the health of humans, animals and plants with natural means and deal gently with the earth's resources. This is a sustainable investment in the future of our planet.

### **Organic products from other countries or even Asia – is that serious?**

Products produced outside the EU are regularly checked at qualified control points recognised by the EU. Imported organic products may only carry the EU BIO seal and be marketed as BIO goods if they were produced and controlled according to the standards set by the EU. Before using the EU BIO seal for the first time to identify his products, a manufacturer, processor, trader or importer of certified BIO products must register this use at the government agency for agriculture and nutrition. Regular controls from authorities recognised by the government ensure that they are met.

### **Do not delay visiting an experienced mycotherapist to accompany your therapy!**

# Edible Medicinal Mushrooms

## Medicinal mushrooms you can eat

Medicinal mushrooms are not just dietary supplements but are often very tasty to eat. Above all for vegetarians and vegans, mushrooms are a valuable source of vital amino acid nutrients. Mushrooms are convincing due to their protein content and are a fully fledged substitute for meat, particularly in dried form!

### **Oyster mushroom (*Pleurotus ostreatus*)**

This popular cultivated mushroom grows in thick clusters and is attractive due to its white meat, which also reminds one of veal. A white coating is natural and harmless; it is just visible spores.

### **White button mushroom (*Agaricus bisporus*)**

The most popular cultivated mushroom is a pleasure as a side or main dish. With some luck you can find this meadow mushroom growing in the wild.

### **Maitake (*Grifola frondosa*)**

It is used particularly in Japanese cuisine and has a fine mild taste.

### **ABM (*Agaricus blazei*)**

This mushroom with its typical fine almond aroma is ideal for meat and fish dishes but also used in desserts. When dried it has a mild smell of marzipan.

### **Wood ear (*Auricularia*)**

In trade it is mostly found dried. It has a slight taste of its own but is excellent at taking up the aromas of other cooking ingredients.

### **Shaggy ink cap (*Coprinus*)**

It also occurs in our latitudes but is only enjoyable when young. An undervalued delicacy!

### **Shiitake (*Lentinula Edodes*)**

Next to the oyster mushroom and white button mushroom it is one of the most important cultivated mushrooms. In Eastern Asia it is in first place, not least due to the interesting fifth taste of 'umami'.

### **Snow fungus (*Tremella fuciformes*)**

Chinese cooks love to use this slightly sweet-tasting mushroom in desserts, soups and drinks.

**Mushrooms are suitable for salads, meat and fish dishes, as a side dish, in sauces or in soups, and sometimes also in desserts.**



# Cooperation Partners



A selection of sources from controlled ecological cultivation

## Germany:

- **Pilze Wohlrab GmbH & Co. KG**  
85307 Entrischenbrunn  
[www.wohlrab-pilze.de](http://www.wohlrab-pilze.de)

## International:

- **BIO-ENER, S.L.**  
08024 Barcelona  
Spain  
[www.bioener.com/es](http://www.bioener.com/es)
- **Balev BIO,**  
1517 Sofia  
Bulgaria  
[www.balevbiomarket.com](http://www.balevbiomarket.com)
- **Health foods & supplements**  
11146 Athens  
Greece  
[www.bioshop.gr](http://www.bioshop.gr)
- **Pharma BAU Ltd.**  
4029 Debrecen  
Hungary  
[www.pharmabau.hu](http://www.pharmabau.hu)
- **Biomarket**  
10415 Tallin  
Estonia  
[www.biomarket.ee](http://www.biomarket.ee)



# Reference Literature

## Literature about Mushrooms and Medicinal Plants

**Cheung, Peter C.K.**  
**Stamets, Paul**  
**Wolfe, David**  
**Powell, Martin**

- Mushrooms as Functional Foods
- Growing Gourmet and Medicinal Mushrooms, Third Edition
- Chaga – King of the Medicinal Mushroom
- Medicinal Mushrooms – A Clinical Guide

## Books by Dipl.-Ing. (FH) Jürgen Guthmann



**Fleischhauer S., Guthmann J., Spiegelberger R.**

Essbare Wildpflanzen: 200 Arten bestimmen und verwenden.  
*AT Verlag, Aarau Schweiz*



**Guthmann J., Hahn C., Reichel R.**

Taschenlexikon der Pilze Deutschlands.  
*Quelle & Meyer Verlag*



**Fleischhauer S., Guthmann J., Spiegelberger R.**

Enzyklopädie der Essbare Wildpflanzen: 2000 Pflanzen Mitteleuropas;  
Bestimmung, Sammeltips, Inhaltsstoffe, Heilwirkung,  
Verwendung in der Küche.  
*AT Verlag, Aarau Schweiz*

vitalpilzratgeber.de



[www.vitalpilzratgeber.de](http://www.vitalpilzratgeber.de) · [info@vitalpilzratgeber.de](mailto:info@vitalpilzratgeber.de)