

MIRACULOUS MYKOTHERAPY IN TCM / TCVM

PRESENTED BY

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Heutzutage werden viele vor allem chronische Erkrankungen als sogenannte Zivilisationserkrankungen bezeichnet, was bedeutet, dass Umweltfaktoren und Lebensstil als mit verursachend eingestuft werden. Schleichende Entzündungsreaktionen und oxidative Zellzerstörung durch freie Radikale werden als wichtige Aspekte in der Krankheitsentstehung angesehen. Vitalpilze stellen mit ihren interessanten Inhaltsstoffen, den Beta-Glucanen, Triterpenen oder ihren Enzymen, ein geeignetes therapeutisches Werkzeug dar inflammatorischen und oxidativen Stress zu senken. Sie triggern vielfältige Immunmechanismen, reduzieren metabolische Belastungen, unterstützen die stressadaptiven Systeme des Organismus und wirken stark entgiftend. Mit diesen Eigenschaften können sie sehr wirkungsvoll im Rahmen der Gesundheitsprävention eingesetzt werden.

TCM Mycotherapy 2000 years ago

1928 Alexander Fleming

1938 B. Chain, Howard Florey und Norman Heatley →

1942 USA

Penicillium chrysogenum/notatum

Allergies

- The generic term of vital-mushroom and healing-mushroom are synonyms. We call them also nutraceuticals
- Mushrooms are real health conductors and power generators for our multiple diseases of the modern society
- Side effects: heavy metal- and environmental pollutants

Mycotherapy

TCM mushrooms live invisible in the soil (mycelia, hypha's)

What we collect are their fruit-bodies

They tonify therefore especially our YIN-aspect

Mushrooms transform and transport. They strengthen and nourish. They regulate and harmonise, drain and calm the Shen.

Vitality mushrooms belong to the earth element.

Nature needs mushrooms fulfilling important duties, **detoxifying** the soil similar to the alges in the water.

They **metabolise** oligoelements and foodstuffs thus that plants may profit from them.

They **decompose** dead organisms in its units in order to bring them back to the natural life. Fungi may decompose wood and therefore they contain ingredients which we cannot find anywhere in nature. Especially an appropriate amount of fibre-, taste- and aroma-ingredients.

We call them **natural biological adaptogens**. Definition: An adaptogen is a substance, enabling the body to act against psychic- chemical- and biological stress factors. This allows the organism to adapt to circumstances in which the body is exposed to extremely stress.

Virus, bacteria's, chemical substances, noise, extreme climate, allergens, radiation, electromagnetic waves, operations, pregnancy, birth, trauma, difficult sicknesses, poisoning, strong emotions, environmental pollutions

Adaptogens act primarily onto physical regulation systems. E.g the hypothalamus-hypophysis-adrenal axis (HHA) or the sympatho-parasympatho-adrenergic system (SPA) or comonly onto the immune system.

Secondarily they promote the activity onto the liver, heart/PC, pancreas and kidneys.

Adaptogens are mostly **mushrooms, roots and plants**, which are utmost adapto to extremely to environmental conditions, like coldness, altitude, oxygen, sunshine and dryness.

There adaptogens consist of polyphenols (flavonoids), triterpenes and saponines, polysaccharides (β -glycane) all of them **Qi tonifyer** and balancing homöostasis

Our body has two ways to react onto stress:

1st. The HHA-system (hypothalamus-hypophysis-adrenal-system) emitting by means of CRH (corticotropic-releasing-hormone) ACTH (adreno-corticotropic hormone) producing glucocorticoid hormone (cortisol) mobilising Qi.

2nd. The SAS (sympatho-adrenergic-system) the neuronal way, fight-or-flight-response by means of the production of adrenalin and noradrenalin.

Nearly all vitality mushrooms increase stress tolerance; they are also suitable for the use over longer periods of time.

Ancient knowledge about vitality mushrooms can be found in both Western and Eastern folk medicine, as well as dietary and nutritional teachings.

Since the 1970s, the interest in vitality mushrooms has risen, since more scientific research has been conducted.

We have to differ between natural collected and cultivated vital mushrooms

Natural collected mushrooms differ every year in its quality. Environmental pollutants may harm the mushrooms all the time

Indoor cultivated mushrooms have always the same substrate, fertilizer, temperature, illumination, moisture and at the end a desirable quality

Today's major diseases in the civilised world

lifestyle diseases

Stress

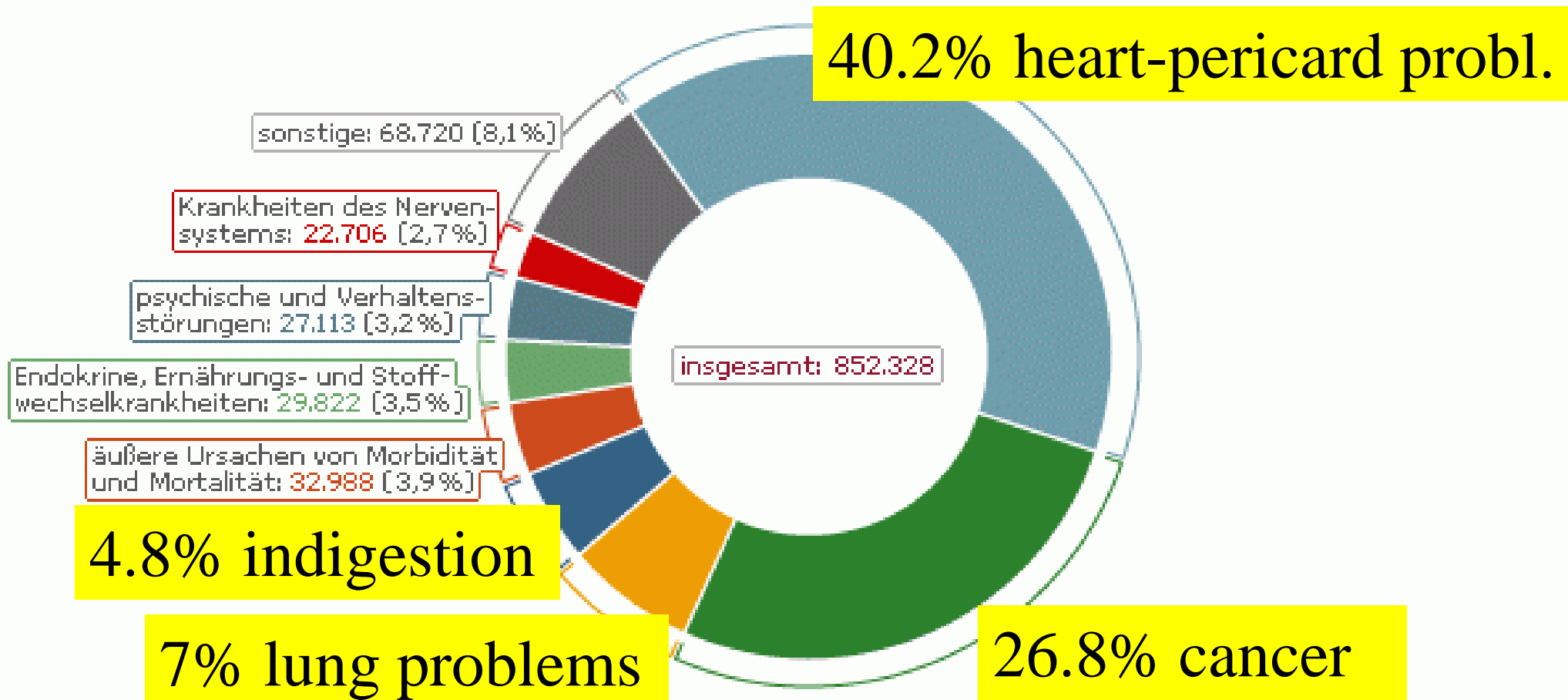
Smoking & alcohol

Arteriosclerosis
heart infarction
brain strokes
cancer

Wrong nutrition

Too little movement, tiredness

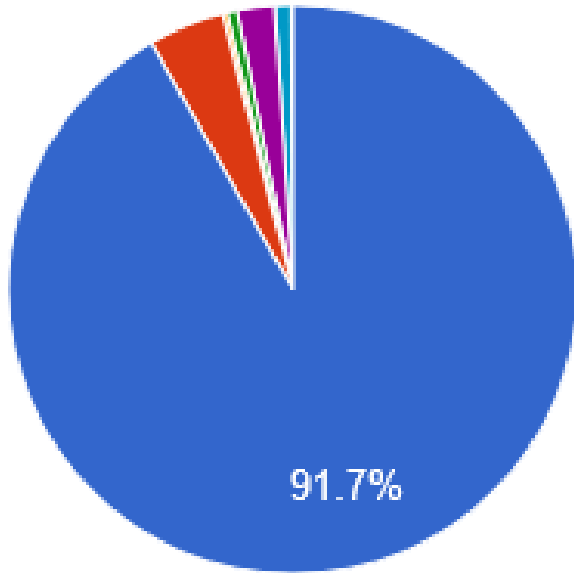
Death causes, absolute numbers in %, 2011



*die Klassifizierung der Todesursachen folgt der Internationalen Klassifikation der Krankheiten [ICD- International Classification of Diseases]

What is in a mushroom?

Content



- water **91.7%**
- **protein, polypeptides, AA**
- fat
- carbohydrates, polysaccharides starch, glycogen, cellulose, chitin
- fibre
- minerals, oligo-elements
- vitamins

The therapeutic effect of mushrooms is given through bio vital ingredients

polysaccharides (starch, glycogen, chitin, (hemi-) cellulose)

polypeptides (many different essential amino acids)

minerals

oligo elements

vitamins

Polysaccharides, e.g. $C_6H_{12}O_6$ in the mushrooms

Polysaccharides are polymeric carbohydrate molecules (e.g. starch, cellulose, glycogen) composed of long chains of monosaccharide units bound together by glycoside linkages, and by means of hydrolysis arouse the constituent mono- or oligosaccharides

- Storage polysaccharides: starch, glycogen
- Structural polysaccharides: cellulose, chitin

Storage polysaccharides: starch ($C_6H_{10}O_5$)

Nutritional polysaccharides are common sources of energy, easily to break down into **starch** or glucose. Only ruminants and termites use bacteria and millions of microorganisms to process cellulose

In humans they are called **dietary fibres** which enhance digestion, promote absorption of chemicals, stimulate bile acid, lowers blood lipid levels and produces short-chain fatty acids

Starch is a glucose polymer (amylose & amylopectin). It is a component of food, plants, vegetables, etc., storing glucose. By means of amylases we may therefore digest potatoes, rice, wheat, maize, etc.

Storage polysaccharides: Glycogen

Glycogen serves as the second long-term energy storage in animals and fungal cells. It is made and stored primarily in the **liver** and mobilized by **glycogenesis**

Glycogen is stored in granules in many cell types. As energy reserve it can quickly be mobilized in a sudden need for glucose. More immediately than triglycerides in fat (lipopolysaccharides)

Fungi are bio-degradable organisms which can digest **chitin** by means of the **enzyme chitinase**. Converting chitin into sugar and ammonia

Polypeptides in the mushrooms

Polypeptides are short chains of amino acids (specially essential AA).

Proteins are made up of one or more polypeptide molecules linked together with carboxyl groups. Mushrooms contain several polypeptides

Proteins include transporting things in and out of the cell, speeding up chemical reactions (metabolism), helping cells recognize and join up to one another

FUNGI / MUSHROOMS

Are natural promoters of a
biological cell metabolism

Fungi / mushrooms, why do we collect them?

The different, individual, multiple, beneficial, wholesome **taste** components of mushrooms serve as appetisers, anti-oxidants, oligo- and vitamin suppliers

They stimulate stomach enzymes, acids and catalysers

Food becomes more adaptable and is better digested through the gut system



Project: mushrooms traded as food

Background information and risk assessment of 110 food mushrooms acc. to the “Codex Alimentarius Risk Analysis” and the “European Community for Food stuffs” and the” European Food Safety Authority” (EFSA) strategy. Performed by Jorn Gry and Christer Andersson

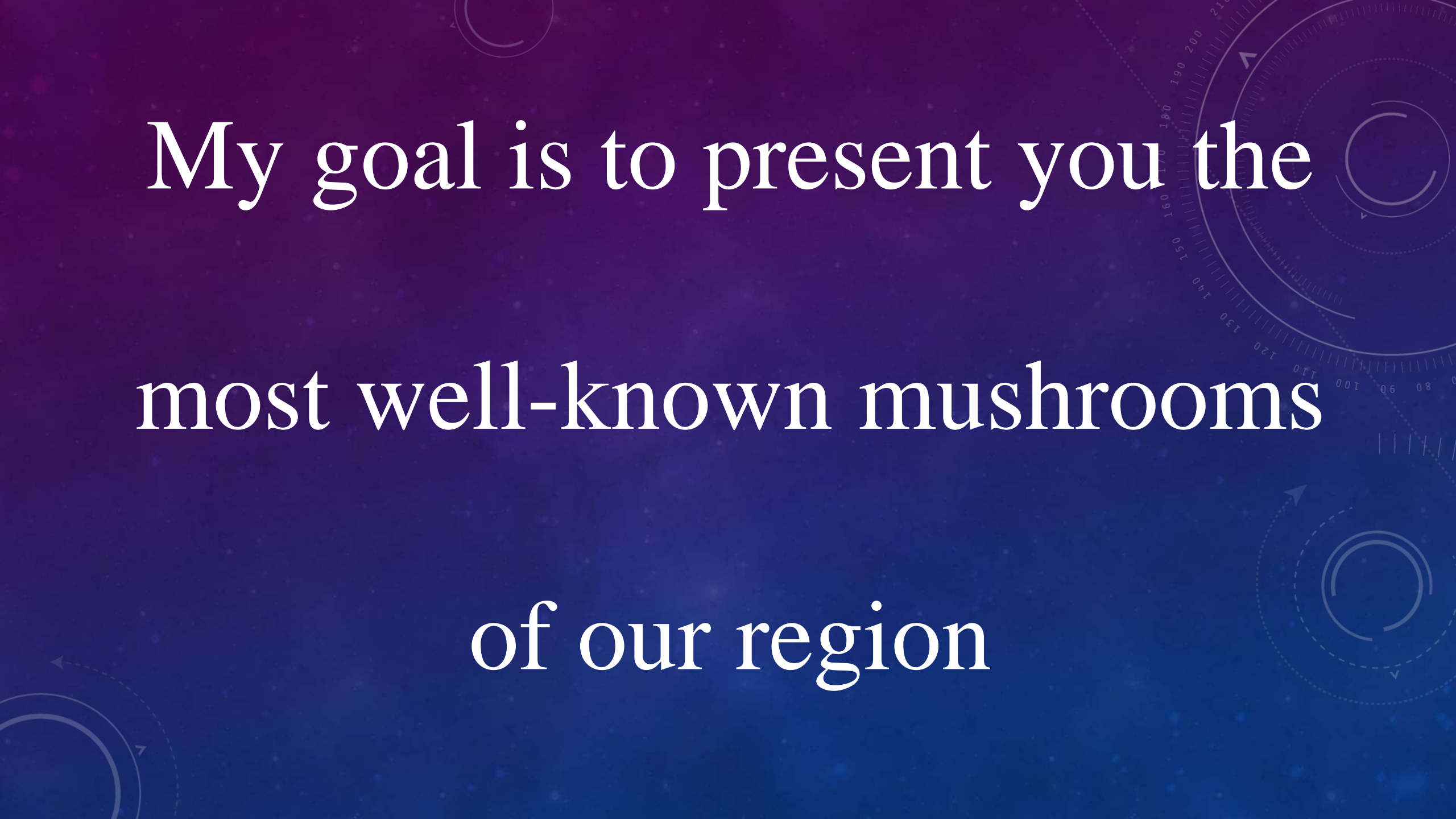
Control system

e.g. False Morel, smoking process and its contamination with carcinogenic aromatic hydrocarbons (PAH).

e.g. Boletus edulis on the market contained nicotine and other environmental pollution above statutory pesticide- and heavy metal residue levels

e.g. Chanterelles from eastern Europe with high amount of radioactive ^{137}Cs

I don't want to speak about
psilocybin- (psychedelic-) and
toxic mushrooms

The background is a dark blue gradient with a subtle pattern of white stars. Overlaid on this are several faint, light blue technical diagrams. These include circular gauges with numerical scales (e.g., 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220) and dashed lines, as well as circular arrows indicating rotation or flow. The text is centered and reads:

My goal is to present you the
most well-known mushrooms
of our region

Agaricus bisporus, button mushroom, mo gu, Zucht-Champignon

The button mushroom is the utmost well known and cultivated fungus.



Content: The button mushroom consists of more than 90% of water, 3% of hydro carbonates and proteins, 0.3% of fat. High content of vitamins (B2, B3, B5, B7, B9, D, E and K, Fe and Zn. Cultivated agaricus, radiated with UV light, contain a significantly amount of vit. D2 (491ng/100g)

The mushrooms contain the hydrazine-derivate agaritin and many essential enzymes.

It was already cultivated in the catacombs of Paris at the time of the King Ludwig XIV in the 19th century. The wet underground climate was essential for its cultivation.

Effect: The polysaccharides, the proteins, enzymes, vitamins and oligoelements promotes it, even with anti-cancerogen properties

Agaricus blazei murrill (ABM), almond mushroom, Ji song rong, himematsutake, Mandelpilz

Content: Very balanced combination of vitamins (B2, B6, biotin, folic acid and ergosterin-Vit D) minerals (K, Cu, Zn, Fe, Ca, Mg) **amino acids** and a high portion of **polysaccharides**. Especially β -glycanes, γ -interferon and interleukin

Effect: Immunomodulation (T-Lymphocytes), anti-allergic, anti-diabetic, anti-inflammatory, anti-viral properties and preventing metastasis (leukaemia, lung-, intestine-, uterus-, pancreas-, mamma-, prostate- and liver **cancer**). Promotes apoptosis and angiogenesis.

Autoimmune- and heart problems

The flesh of A. blazei is white, and has the taste of "green nuts", with the odour of almonds

Side effect: Agaricus products may have toxic effects on liver function by inhibition of P450 enzymes, especially in people with ovarian cancer



BL30, sacro-coccygeal joint, anus

Average nutritional value of 100 g cultivated agaricus blasei mushroom in %

Calories	362.00	18.1 %
Protein	35.19 g	6.30 %
Fat	3.39 g	5.0 %
Saturated FA	0.37 g	0.2 %
Unsaturated FA	1.72 g	0.8 %
Muip. Unsat. FA	1.51 g	0.7 %
Thiamin, B1	0.26 mg	0.24 %
Riboflavin, B2	2.40 mg	0.171 %
Niacine, B3	58.50 mg	0.365 %
Pantothenic acid, B5	14.20 mg	0.237 %
Vit. D	18.40 mcg	0.368 %
Iron	1.90 mg	0.14 %
K	5200.0 mg	0.260 %
Selenium	350.0 ng	0.636 %

Cocking with agaricus blasei

Fresh almond mushrooms may even eaten raw in salads or cooked. The special almond aroma initiates also sweet deserts. Add honey, cinnamon or clove.

Rp. Almond mushroom tea: 1 Lt coking water, add 80 g fresh cuted in slides or 10 g dried almond mushrooms, let the tea stand for 10 minutes. Sweetened as you wish. Drink it hot or even cool as an ice tea.

Rp. Salad: 200 g fresh almond mushrooms, coloured leaved salad, according to season, oil for roasting, one onion, two garlic toes, salt pepper, balsamic vinegar, olive oil plus salad dressing.

Roast almond mushrooms in a very hot pan with olive oil, garlic and onion, the more intensive, the more develops its aroma. Then spicy them with pepper, thyme, rosemary, parsley and nutmeg. Spread the salad leaves onto the plate, add salad dressing and on top the roasted marinated mushrooms.

Rp. Fillet with almond mushrooms

Marinate the fillets with oil, salt and pepper. Roast onions in butter, add little maple syrup and let it caramelize, douse with red wine and sauté almond mushrooms, spice as you will. Offer it with rice or noodles

Rp. Vanilla ice with almond mushrooms

Mix 200 g mushrooms and 200 g apples, cube shaped with cinnamon, maple syrup, raisins and nuts and pack them in an alu-foil for 20 min in 200°C. Give them in a plate and add an adequate portion of vanilla ice with whipped cream and decorate it with almond splinters

Pleurotus eryngii, king oyster mushroom, ping gu, Kräuterseitling



Today the king oyster mushroom is cultivated. In the wilderness it lives on host plants (Ferula communis, Laserpitium latifolium, etc.) in the Trentino, Sicilia, Atlas mountains, western alps.

Contains: Vit. B Complex, such as B1 (Thiamin), B2 (Riboflavin), B5 (Niacin), B6 (Pyridoxine) and B7 (Biotin), folic acid, vitamin C and D (Calciferol), 30% polysaccharides (β -Glucan)

Effect: Tonifies the immune system, lowers cholesterol. The absorption of the β - Glucan 1-3 and 1-6 enhances significantly by adding vit. C. Optimal fungus to strengthen tendons, ligaments and cartilage



BL30, sacro-coccygeal joint, anus

Auricularia auriculajudae, juda's ear, yung nge, mu err, Judas Ohr



Content: K, Ca, Mg, P, Fe, Si, B-Vit., β -D-glucanes, proteides, glycoproteins, polysaccharides and different secondary bioactive ingredients not yet differentiated

Effect: Adenosine acts anti-coagulation, anti-thrombotic, reduces arteriosclerosis, lowers blood pressure, prevents strokes and heart infarction, phlebitis and varicose veins, lowers triglyceride and LDL-cholesterine through auricularia-biopolymer. Immunomodulation properties through γ -interferon-secretion. Enhancing the NO-synthesis and the tumor-necrose-factor- α . In the connective tissue. Caches free radicals. Resolves spasms

Coprinus comatus, shaggy mane (-incap), mao tou gui san, Schopftintling



Content: Much Vit. C, proteins (22-38%), 20 free essential amino acids, $K \leftrightarrow Na / 130 \leftrightarrow 1.$, Mg, Fe, Mn, Zn, Vanadium, Vit. B1 B2, B3. High content of lectines, L-ergothionine, β -glycane, complex glycoproteins

Effects: Against haemorrhoids and stomach-intestine syndrome, excellent protective effects in diabetes Type I/II, the content of vanadium lowers the glucose level significantly. HT/PC tonification, reduces sarcoma-cells and malignant tumours of the connective tissue, breast- and prostate- cancer. The whole body metabolism is to such an extent ameliorated, that you may even reduce your body weight. Shaggy mane in combination with alcohol may provoke gastrointestinal symptoms, similar to disulfiram (antabus-like).

ST10, M. Pt of the Larynx; “Singer Pt.”

Cordiceps sinensis, caterpillar fungus, dong chong xia cao, Tibetischer Raupenpilz



GB01-04 Ex Tai yang, lateral cross axis with activating the hypophysis, and LI04

Bauhinia AUSB; Black Kangaroo Paw AULE; Wild Oat, Bach, teeth 3/2 and 4/2

Cordiceps is only growing on a special caterpillar (Hepialus armoricans) in the soil. It's food. Therefore the most expensive mushroom of all, growing in 3000m- 5000m in Tibet.

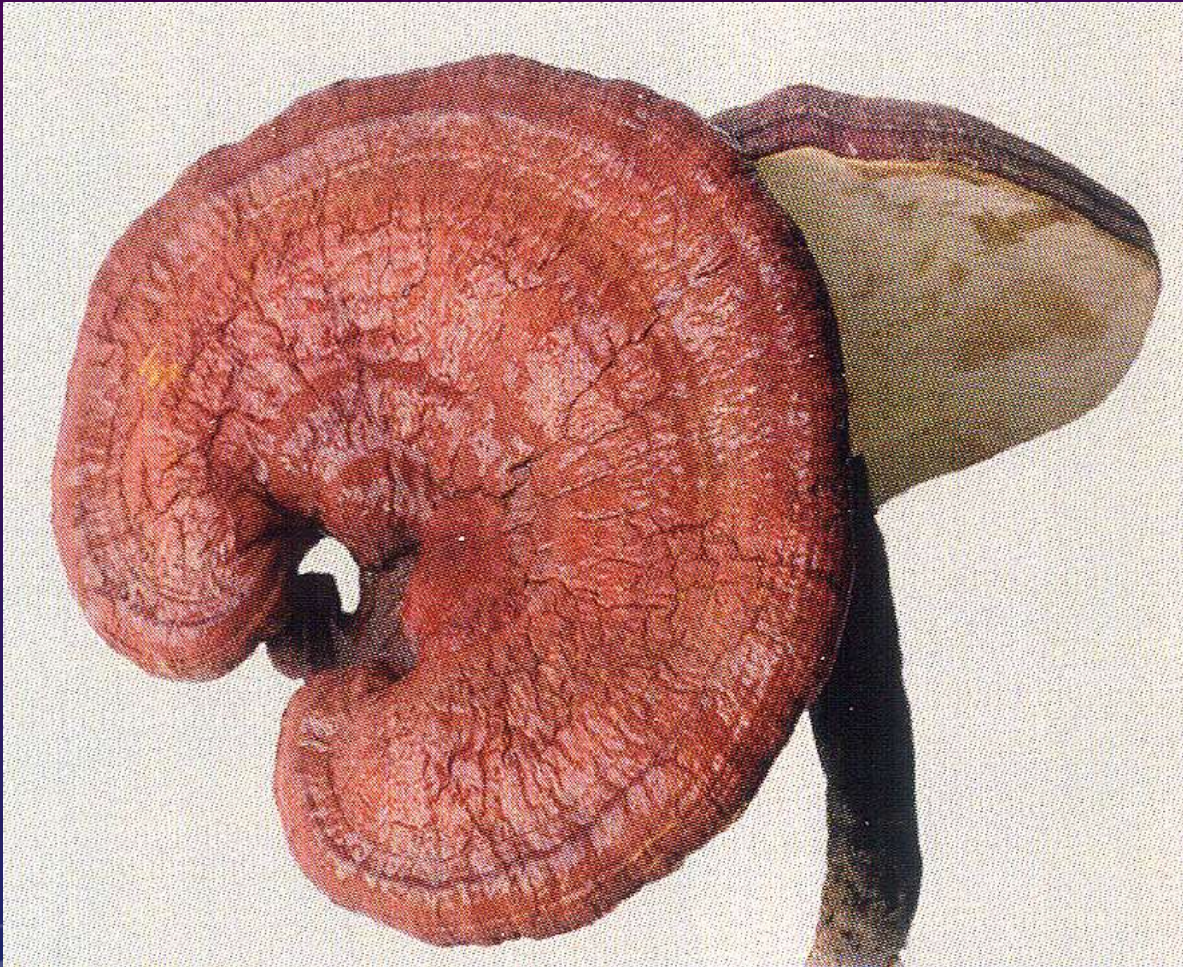
Content: Many vitamins and oligoelements, 8 essential amino acids (cordicepin, ergosterol, ophiocordin, galactomannan, L-tryptophan, different specific polysaccharides and glycoproteins. Vit.B, D

Effect: Magnificent aphrodisiac through enhanced blood influx into the genital organs and production of testosterone. Also enhanced hormone production of the adrenals (Cushing syndrome), reducing stress symptoms, depression, and sleeplessness. Activates serotonin. Impede MAO. Acts as a natural anti-biotic agent (Staph, Strept. Bac. Anthracis) without damaging bifido- and lactobacillus as an immune stimulation in chronic bronchitis, COPD, anti-sclerotic, anti-diabetic, burn out syndrome. Promotes longevity, endurance, reconvalescence, wei Qi, essence, jing, xue, kidneys, bones, ears, marrow

- Warm, sweet, tonifies LU, KI, Qi and Yang
- Impotence, painful week back and legs
- Tonifies Lu Yin, stops bleeding and disperse mucous
- Restless shen, nourishes HT and Jing

- Sexual dysfunction: 197 patients, 3 x 1 g daily over 40 days → 64% success rate
- Hyperlipidemia: 273 patients, 3 x 1 g daily. Significant decline of LDL and triglyceride
- Low thrombocytes: 30 patients, 83% success rate
- Restricted KI function: 117 patients. 3 x 6 g daily with good success rate
- Chronic tracheitis: 656 patients. 3 x 6 g daily with good success rate
- Allergic rhinitis: 43 patients 3 x 2 g daily over 4 weeks → 93% success rate

Ganoderma lucidum, reishi, ling zhi, glänzender Lackporling



Reishi is a saprophyte and grows on dead oak-, beech- alder-, birch-wood trees and is totally lignified, very bitterly and fresh not ready to eat

Content: Triterpenes (ganodermic acid), polysaccharides (heroglycan and glycan), carbohydrates, proteins, fat, alkaloids, vit. D2, Mg, Ca, Zn, Mn, Fe, Cu, Gm.

Effect: The utmost interesting mushroom against aging.

Multiple healing effects: tonifies the pericardia-heart system, enhances the oxygen intake, lowers blood pressure and blood fat (arteriosclerosis). Against AMS (acute mountain sickness, O₂ deficiency), promotes killer cells (cancer) and is an effective immune stimulator, anti-rheumatoid, anti-bacterial, anti-viral, anti-allergic (promotes histamine), anti-tussivum (dissolves mucus) anti-oxidative (catches free radicals) against autoimmune sickness, liver- (hepatitis) kidney- (nephritis) CNS- (neurasthenia, nervousness, sleeplessness, memory loss) problems. Reduces UV-rays (skin tumour). Overweight, allergies

- Ling Zhi is neutral, sweet and activates HT, LV, LU
- Tonifies Qi & Blood, ameliorates digestion, promotes appetite, listlessness and painful back
- Expels mucus, sedates and stops whooping cough, asthma, dyspnea
- Nourishes the heart and spleen → sleeplessness, forgetfulness, tiredness, listlessness, loss of appetite

- Neurasthenia: 225 patients 3x3 over 10-60 days → 85% success rate
- Hyperlipidemia: 120 patients 3x 6 ml Ling Zhi syrup over 3 Mths → 85 % success rate
- Chron. LV disease: 367 patients: chron. hepatitis & LV-zirrhose: 3 Mths Ling Zhi tea → 67%
- Scleroderma: 173 → 79% success rate
- Dermatomyositis 40 → 95% success rate
- Lupus erythematosu 84 → 90% success rate
- Alopecia aerate 232 → 79 % success rate
- Frost damage 428 → 89% success rate

**Coriolus versicolor, rainbow bracket,
turkey tail, yun zhi,
Schmetterlingstramete**

Coriolus is a saprophyte growing on dead wood and is not edible fresh

Content: Very high content of polysaccharides, especially protein-bound PSK and PSP, many vitamins and oligoelements

Effects: PS-K (Krestin), PS-P (Peptide) are scientifically proven, strongly stimulating the immune system. Activating leucocytes, t-, β -lymphocytes, monocytes, macrophages and naturally killing cells, cytokines, interleukins and interferon are indicating against flu, HIV, herpes - simplex, -labialis, -cytomeglia, many bacteria's: E. coli, staph., strept., klebsiella, listeria, toxoplasma and candida albicans. Revitalises the damaged liver cells and reduces the symptoms in hepatitis A, B and C.

Therefore excellent anti-viral, anti-bacterial, anti-tumoral properties, enhances life quality and minimises chemotherapeutical side effects



ST10, M.Pt of the larynx

Inonotus obliquus, Chaga mushroom, Bai Hua Rong, Schiefer Schillerporling



The Chaga mushroom has a circumboreal spreading in Russia, Scandinavian, Northern Europe, Japan, Korea, Kazakhstan. I have never seen it in my region till now. The very black lumps are already described in the 15th century in the Russian complementary medicine, acting as a tea against cancer. You cannot eat this mushroom fresh

Content:

More than 200 biological active substances. Different polyphenols, -triterpenes (C₃₀H₄₈) and -polysaccharides

Effect: acting against cancer, stimulating the immune system, anti-inflammatory effect, tonifying and protecting the liver, balancing and harmonizing the spirit

Hericium erinaceus, bearded tooth, lion's mane, yamabushitake, hou tou jun, Igelstachelbart



LV03, M.Pt of spasmolysis, anger Pt.

Hericium lives onto dead wood. Prefers beech, oak and fruit trees

Content: 32 aromatic- and bio-vital-ingredients, smells sea food-, lemon- or coconut-like. 8 essential AA, high K and low Na, Zn, Fe, Se, Ge, many polysaccharides and polypeptides, erinacerin, hericine, phytosterin, cyathane diterpenoids, statins, lectins, ergothioneine.

Effect: Ameliorates oesophagus-stomac-gut-large intestine syndrome, has anti-coagulation properties, anti-cancerogenic (sarcomas) and anti-bacterial (helicobacter pylori) effects, enhances by means of macrophages, t- and β -lymphocytes the general immune system. Regenerates nerve tissue in case of Alzheimer, dementia, MS, Parkinson and sleep disorders. Lowers the cholesterol- and LDL-level significantly and therefore arteriosclerosis.

Grifola fondosa, ram's head, hen of the woods, maitake, hui shu hua, Klapperschwamm

Grows at the roots of oak, beech, linden- and chesnut-trees



BL60, aspirin Pt

Content: High contents of the polysaccharide β -D-Glycan (grifolan), ergosterin (vit.-D-precursor), Vit. B1, B2, B3, biotin, folic acid and many oligoelements: Fe, Zn, K, Mg have revealed an intensive agreeable aroma.

Grifola may contain cyanogenic compounds, lectins may agglutinate human erythrocytes

Effect: Activating immunocompetent cells, macrophages, interleukin, interferon and acts anti-cancerogen, lowers blood sugar and blood pressure, enhances the glucose tolerance in diabetes type 2. Ergosterin prevents osteoporosis and lowers excessive weight. Bioavailable vit. C cumulates the effect of the Maitake.

Pleurotus ostreatus, oyster mushroom, hao gu, Austernseitling



Pleurotus can be cultivated onto pressed straw bales with a mild, spicy odour or in nature at dying beech-, willow-, alder- or poplar wood. 1997: 875'000 tons.

Content: Vit. B1, B2, B5, B6, B7, folic acid, D, 25% proteins, essential AA's, polysaccharides (pleuran, lovastatin)

Effect: Has as enormous prebiotic effect in the gut system, promotes cartilage and bone growth, acts anti-thrombotic (against heart stroke), anti-inflammatory, immunomodulation, anti-oxidative, anti-cancerogen, reduces free radicals, lowers the cholesterine- and homocysteine level. Relaxes muscles, tendons and joints

BL30, sacro-coccygeal joint, anus

Polyporus (Grifola) umbellatus, lumpy bracket, zhu ling, Eichhase



BL30, sacro-coccygeal joint, anus

Polyporus grows in beech- and oak-woods

Content: specific polysaccharides and polypeptides, Vit. A, B6, folic acid, biotin, provitamin D, oligoelements: Fe, Ca, K, Mn, Zn.

Effect: A soup against infection and as a general Yin-tonic. **The most ancient antibiotic-, diuretic-, diaphoretic- and anti-coagulant mushroom.** Özi had already two close related mushrooms in his pocket, fighting against intestinal parasites (protozoa's) and malaria (plasmodium falciparum). Promotes hair growth, lymph drainage, oedemas, diarrhoea. Eliminates much Na and Cl, and not K, which is utmost important for the muscle and nerve function. Recent studies show the anti-cancerogenic effect against liver-, lung-, bladder-tumours. Reduces side effects of chemotherapy.

Flammulina velutipes, velvet foot, winter fungus, Enokitake, Gemeiner Samtfußrübling

Content: β -glycane, flammulin, flammin, velin, velutin, proflaammin

The production of Enoki in China belongs over 1.5 Mio t/year. It is a well known mushroom in the Chinese kitchen (soups, salad, etc.). Tonifies Yin

The mushroom naturally grows on the stumps of the Chinese hackberry tree (*Celtis sinensis*, "enoki" in Japanese) and on other trees, such as ash, mulberry, willow, poplar, elder, elm and persimmon trees. There is a significant difference in appearance between the wild and cultivated types of the mushroom. Cultivated mushrooms have not been exposed to light, resulting in a white colour, whereas wild mushrooms usually display a dark brown colour. Cultivated mushrooms are grown in a carbon dioxide (CO₂)-rich environment to nurture the development of long thin stems, whereas wild mushrooms produce a much shorter and thicker stem.



Enoki Mushrooms with Garlic & Scallion Sauce

Enokitake mushrooms contain antioxidants, like ergothioneine, many AA, especially lysine.

Animal testing has indicated possible applications in the development of vaccines and cancer immunotherapy. Research at the National University of Singapore, first published in 2005, stated that the stalk of the golden needle mushroom contains a large quantity of a protein, named "Five"/"FIP-five" by the researchers, that helps in the regulation of the immune system.

Proflamin acts against sarcoma, lymphoma and prostate cancer. Helps in dementia, Alzheimers and heart diseases. Prevents gastro enteric ulcers and liver disease.

The mushroom also contains flammutoxin, a cytolytic and cardiotoxic protein that has proven to be non-toxic when absorbed/taken orally.

Nutrition

Calories: 112kcal | Carbohydrates: 10g | Protein: 4g |
Fat: 7g | Saturated Fat: 1g | Sodium: 758mg |
Potassium: 385mg | Fibre: 3g | Sugar: 1g | Vitamin A:
30IU | Vitamin C: 1.1mg | Calcium: 5mg | Iron: 1.5mg



Lentinula edodes, shiitake, shanku, xiang gu, Pasaniapilz



In earlier days growing on dead beech-, oak-, chesnut-, and other broad leafed-trees. Today cultivated in mushroom farms in Japan, China, Korea. ~24 tons an year. Must be cooked thoroughly, otherwise may provoke dermatitis.!

Content: broad spectrum of bio vital substances. Ergosterol, folic acid, B6, minerals: Fe, Ca, K, Zn. Glutamine, nucleotides, essential AA, peptides, organic acids, polysaccharides (lentinan, “biological response modifiers”), alkaloids (eritadenin). May content formaldehyde and xenobiotics (strange for biological systems, halogenated hydrocarbons, synthetic materials)

Effect: Stimulation of the immune system, promotes IgA, monocyte specific t-cells, intensifying the cytotoxic effect of the macrophages against bacterial and viral invasion. Positively proved against HIV patients. Lentinan is additively applied in cancer patients together with chemo- and irradiation therapy. Regulates the lipid metabolism, lowering VLDL , LDL, homocysteine (arteriosclerosis) and the blood pressure. Promotes vitality as a probiotic with bifido- and lactobacillus in the gut system. Optimal fungus against arthritis-arthrosis. Parasympatholytic.

Boletus edulis, yellow boletus, cep, meiwei niúgānjùn, Steinpilz



ST36, Dog Rose, AUSB; Madia, Cal

Nutritional value per 100 g (3.5 oz) Energy 342.4 kJ (81.8 kcal)

Fat		1.70 g
Protein		7.39 g
Thiamine (B1)	9%	0.105 mg
Riboflavin (B2)	8%	0.092 mg
Niacin (B3)	40%	6.07 mg
Pantothenic acid (B5)	53%	2.64 mg
Vitamin B6	4%	0.051 mg
Folate (B9)	73%	290 µg
Vitamin C	5%	4.21 mg
Ergosterol		5.00 mg
Calcium	10%	1.195 mg
Copper	39%	0.786 mg
Iron	6%	0.739 mg
Phosphorus	3%	22.26 mg
Potassium	4%	203.3 mg
Zinc	44%	4.127 mg
Selenium		13–17 ppm

Carbohydrates make up the bulk of the fruit bodies, comprising 9.23% of the fresh weight and 65.4% of the dry weight. The carbohydrate component contains the monosaccharides glucose, mannitol and α - α -trehalose, the polysaccharide glycogen, and the water-insoluble structural polysaccharide chitin, which accounts for up to 80–90% of dry matter in mushroom cell walls. Chitin, hemicellulose, and pectin-like carbohydrates—all indigestible by humans—contribute to the nutritionally desirable high proportion of insoluble fiber in *B. edulis*.

The **total lipid**, or crude fat, content makes up 2.6% of the dry matter of the mushroom. The proportion of fatty acids (expressed as a % of total fatty acids) are: **palmitic acid, 9.8%; stearic acid, 2.7%; oleic acid, 36.1%; linolic acid, 42.2%, and linolenic acid, 0.2%**

A comparative study of the **amino acid composition** of eleven Portuguese wild edible mushroom species showed *boletus edulis* to have the highest total amino acid content, about 2.3 g per 100 g of dried mushroom. This total includes a full complement of **20 essential and nonessential amino acids**. Analysis of the free amino acids (that is, those not bound up in protein) revealed **glutamine** and **alanine** to be the principal amino acids (each about 25% of total compounds); a separate analysis concluded that **lysine** is another predominant compound.

Lectins (lectin A, B1, B2 and isolectin) and sesquiterpenoids may provoke discomfort by eating *Cep* raw. The same in *boletus pinophilus*, pine bolete and *boletus aestivalis*, summer bolete

Effect: anti-microbial and anti-inflammatory activity, and cytotoxicity to various tumour cell lines grown in laboratory culture. Eastern Boletus are often polluted with mercury, cadmium, polonium, caesium

Boletus edulis fruit bodies contain about 500 mg of ergosterol per 100 g of dried mushroom. Ergosterol is a sterol compound common in fungi. Additionally, the fruit bodies have about 30 mg of ergosterol peroxide per 100 g of dried mushroom. Ergosterol peroxide is a steroid derivative with a wide spectrum of biological activity, including anti-microbial and anti-inflammatory activity.

The mushroom also contains a sugar-binding protein (lectin), that has affinity for the sugars xylose and melibiose. The lectin is mitogenic—that is, it can stimulate cells to begin the process of cell division, resulting in mitosis. Further, the lectin has anti-viral properties: it inhibits the human immunodeficiency virus enzyme reverse transcriptase. Other studies suggest that *B. edulis* also has anti-viral activity against vaccinia virus and tobacco mosaic virus grown in culture. Anti-viral compounds from mushrooms are a subject of interest in biomedical research for their potential to advance the knowledge of viral replication, and as new drugs in the treatment of viral disease.

The fruit bodies have a high anti-oxidative capacity, due probably to a combination of various organic acids (such as oxalic-, citric-, malic-, succinic- and fumaric- acids), tocopherols, phenolic compounds and alkaloids; the highest anti-oxidant activity is in the mushroom caps. Furthermore, fruit bodies were determined to have 528 mg of the anti-oxidant compound ergothioneine per kilogram of fresh mushroom; this value was the highest among many food items tested in one study.





Boletus often seen with fly agaric

Rp. Boletus edulis soup

Heat 7 dl bouillon and 1 dl milk. Add 150 g of boletus mushrooms steamed with 2 soup spoons of flour for 20 min. Add one egg well whipped and 2 soup spoons cream and decorate it with many herbs. Chives, parsley, coriander, oregano, marjoram, basil

Rp. Risotto with boletus edulis

Warm one soup spoon oil with some onion and one garlic toe add 200 g middle size rice by stirring it non stop. Add 200 g boletus edulis (20 g dryed). Deglaze it with 6 dl bouillon. Cooking for 15-20 min with low power. Serve it with parmesan cheese



Xerocomus badius, bay bolete, heronggainiuganjun, Maronenröhrling



Bay bolete looks like the boletus edulis, however when you touch the lower side, the tubes became immediately bluish-blackish

Content: the dark brown skin of the cap contains two colorings (pulvin acids): badion A and norbadion A. These two components cumulate the radioactive Caesium¹³⁷. Even 20 years after the Tschernobil catastrophe the ¹³⁷Cs amount of 600 Becquerel per Kg was above the EU-level

Their aroma taste like nuts
It is a very good edible mushroom.
Should not be eaten raw.

Cantharellus cibarius, chanterelle, liyoujun, Eierschwamm, Pfifferling



Cantharellus species may hardly be cultivated, because they live symbiotically with other plants. They react sensible onto sulfuric acid and ozone

Content: β -carotene-ketolase, keto-carotinoid, terpenoids, Vit. A, E, C. anti-oxidants, canthaxanthin, ergocalciferol (vitamin D2) 2.12 mg. The german name reminds the taste of pepper or fruit-like apricots. The cell walls contain chitin and therefore they should not been eaten raw

Effect: cibaric acid has week potential insecticidal and nemacitidal effect

Also amatoxins may occur in chanterelles. By cooking some min. both ingredients are destroyed

HT08, Rock Rose, Bach; Five Corners & Spinifex, AUSB; Nat.mur.;

**Mushroom carpaccio with
boletus edulis and
cantharellus cibarius**

Rp. Cut both mushrooms in tiny slices, pour on olive oil extra vergine, add salt, pepper, spicy herbs and different berries. Let it amalgamise and eat it raw.





Nutritional value per 100 g (3.5 oz) Energy, 160 kJ (38 kcal)

Carbohydrates	6.86 g	
Sugars	1.16 g	
Dietary fibre	3.8 g	
Fat	0.53 g	
Protein	1.49 g	
Riboflavin (B2)	0.215 mg	18%
Niacin (B3)	4.085 mg	27%
Pantothenic acid (B5)	1.075 mg	22%
Vitamin B6	0.044 mg	3%
Vitamin D	5.3 µg	35%
Calcium	15 mg	2%
Iron	3.47 mg	27%
Magnesium	13 mg	4%
Manganese	0.286 mg	14%
Phosphorus	57 mg	8%
Potassium	506 mg	11%
Sodium	9 mg	1%
Zinc	0.71 mg	7%

Rp. Pie-crust with local mushrooms

Cut different fresh mushrooms into small slices. Roast them in a wok with fresh spicy herbs and crystalline Himalayan salt and pepper. Butter, onions, garlic, and vegetable sauce. Add additionally peas and carrots with much cream. Serve in the original pie-crusts with the cap.



Rp. Omelette filled with mushrooms

200 g flour, 4 eggs, 2dl milk 2dl water and some salt, mix it and prepare it in a pan. Steam the mushrooms with onion, garlic and fresh herbs. Put them onto the omelette and cover it.



Morchella esculenta, yellow morel, yangdujun, Speise Morchel



Morels are very difficult to cultivate. There exist different species: *M. conica*, *M. gigas*. They are very delicious fungus

Content: 38 % carbohydrates, 32,7 % protein (a special amino acid: cis-3-Amino-L-Proline), 17,6 % crude fiber (especially chitin), 9,7 % ash, 2 % fat within 90 % water. Ergothioneine and lovastatin may cause gastrointestinal problems.

You should not eat morels raw. They contain hydrazine, an anorganic poison formula of N and H (N_2H_4). It disappears by cooking. Be aware of forgeries. They put plumb beads, stones, etc. in the hollow stem

Effect: Very compatible because of the special aromas. High hydrazine content may cause ataxia and vision problems. They are immunomodulation and they have more anti-oxidative effect than α -tocopherol (vit. E).

TCM uses them in digestive problems, as a mucolytic and in case of a short breath. The morel makes a solid-state fermentation with the fatty meals of today

LV10 & LI04, hypothalamus, Bauhinia, AUSB; Wil Oat, Bach

Cratharella tubaeformis, yellow foot, 中文: 喇叭菌, Kraterelle



Tubular chanterelles live in groups in acid pine woods. Not only people like this mushroom, no also turitella snails. They have a typical orange stem!

Content: They contain a high amount of linolenic fatty acids

I use them dried in wintertime in a Swiss-Fondue or pies

Good appetite

Cratarellus cornucopioides, black trumpet, (horn of plenty), Totentrompete



Black trumpet is very good, delicate and aromatic.
A fine dish- and seasoning mushroom.
I dry them all. Dried they develop a very nice, more intensive smell.

They have very little nutritional value, with low calories.
Approximately 10kcal/100 g per fresh mushroom. However their aromas and smell components, their colors and hormone-like curative effect is marvelous.

Proven is the anti-mutagene inhold, being able to neutralize dangerous exogenic toxins.

Content: The black trumpet has a high amount of vit. B₁₂, D, C, all oligo-elements, Fe and an optimal composition of the fatty acids. 20% protein, 20% fiber. High amount of natural colorings, especially β -carotene and lycopene, the oligo-elements and secondary additive components.

KI08, progesterone Pt.

Nutritional value of eatable mushrooms in g/ 100g fresh mass

		Delicate champignon	Steinpilz	Morchel	Truffle	Herbsttrompete
		Pavement mushroom	Boletus edulis	Yellow morel	White or grey truffle	Black trumpet
Wasser	water	90,0	88,0	90,0	75	91,0
Eiweiß	protein	3,0	3,8	1,7	5,5	1,5
Mineralstoffe	oligoelements	1,0	0,9	1,0	1,9	1,7
Ballaststoffe	fibres	2,8	2,1	1,6	9,7	4,0
Gesamtzucker	sugar	2,9	4,8	5,4	7,4	3,0
Gesamtfett	fat	0,3	0,4	0,3	0,5	0,5

Sarcodon imbricatus, hinged hedgehog, sha ke dun, Habichtspilz



Sarcodon imbricatus, commonly known as the shingled hedgehog or scaly hedgehog, is a species of tooth fungus in the order Thelephorales. The mushroom is edible. Many sources report it has a bitter taste, but others have found it delicious and suspect that the bitter specimens may be similar related species

Taste and smell are lovely spicy and I use it as a spicy ingredient

We find it often in fairy rings



Hydnum repandum, terracotta hedgehog, chijun, Semmelstoppelpilz



Content: May contain cyathane diterpenoids (sarcodonin A and B), egothioneine and acetylene dioxide.

However, there are no intoxications reported after consumption and no natural toxicant constituting a risk for humans.

Effect: They are bioactive in vitro. Repandiol has potent cytotoxic activity against different tumour cells.

Leccinium aurantiacum, orange bolite, biǎn dòu ào lán tā, Rotkappe



Edible after thorough cooking

Content: containing several phenolic and hydroxylated pigments, indole compounds and serotonin

By cutting the stem he becomes totally black, however we can eat it without problems



Lactarius salmonicolor, saffron milkcap, sung rugu, Lachreizker



Is an appreciated, edible mushroom

Content: contains sesquiterpenes, two different orange-yellow guanine esters having the same azulene alcohol moiety (lactarovioline and deterrol). After consumption the urine may become a red brown discoloration. Contains 5-hydroxytryptophan, serotonin, melatonin and kynurenine sulphate, lectins.

I add in my mushroom mixture only one or two saffron milk caps

Clitocybe geotropa, trooping funnel, 杯伞属, Mönchskopf



It looks tubular like with a central node looking like a mamma tit. Its taste is aromatic, sweetish with bitter almond taste

The fungus is popular in northern Italy, where it is roasted or cooked in stews and frittatas, or preserved in oil



Clitocybe nebularis, clouded funnel, white domecap, 杯伞属, Nebelkappe



Some people like it. However white domecaps are not anymore considered as edible mushrooms. Aliphatic azoxy components (elaiomycin, cycasin, macrozamin), lyophyllin, hydroxyurea derivate and chromogen connatin are suspected to be mutagenic and carcinogenic.

Content: Nebularine, phenylacetin acid, purine, uridine, adenine, uracil, benzoic acid, mannitol and lectin agglutinate erythrocytes, however has an anti-fungal and immune stimulatory effect. Sweet fruity smell, more or less unpleasant.

May cause gastric problems or drowsiness, however the thermolabile toxins disappear quickly

Agaricus campestris, meadow mushroom, cao dian mo gu, Wiesenchampignon

Very good tasty edible mushroom.



Content: Bioactive constituents:

Phanyhydrazine derivate, e.g. aldehyde agaritine giving rise to tumours by genotoxic mechanisms.

The bioaccumulation is apparently due to some low molecular weight Cd-binding protein. Cd is a highly toxic metal with a very long half-life time in humans, ranging from 10-30 years. It cumulates in the kidneys causing renal dysfunction, progressing to renal failure. Further a demineralisation.

However water extraction has been shown to enhance the secretion of insulin

Macrolepiota procera, shaggy parasol, yangsan, Parasol, Schirmling



Shaggy parasol is an excellent edible mushroom, but must be cooked or fried before consumption, otherwise it may provoke gastrointestinal problems. Normally I fry them with breadcrumbs (panko) and eat them like wiener-schnitzel with crispy roast potatoes and bacon

Content: macrocypins protease inhibitors (clitocypin, mycocypin)

Effect: protease inhibitors (papain, cysteine, cathepsin-B &-H). Therefore anti-nutritional effect.

Cortinarius caperata, the gypsy, zhougai luolinsan, Zigeuner



SP07, Iris, Cal, Gestagen Pt.

It's a good edible mushroom with a mild flavour. Bitter taste if eaten raw, but pleasant nutty flavour when cooked. Often infested with maggots. However it seems to be, since Tschernobil, utmost polluted with the radioactive ^{137}Cs and mercury.

Content: Heat resistant lectins, being able to clot red blood cells of the blood group A.

Sparassis crispa, wood cauliflower, hanabiratake, Krause Glucke



Content: β -glucans, phenylpyrrolidines, chalcones (xanthoangelol) flavonoids, sesquiterpenoids, tetrahydrofuran, ergothionein, naringenin, cytokine

Effect: These substances have anti-fungal activities. Inhibits melanin synthesis in resistant staph. aureus

Raises the hemoglobin level, acts against anemia, malaria, leukemia, strengthens the immune system, has anti-tumour properties (sarcoma)

It should be harvested fresh and not overstay, otherwise it may give you indigestion.

Tuber magnatum, white and black truffle, kuaijun, songlu, w-& s- Trüffel



The truffles are growing in the soil and therefore they are the utmost expensive mushroom over all, called “the diamond of the kitchen” (1kg ~9000 Euro) Truffles provide a special aromatic flesh.

They have valuable nutrients to plants (hosts, e.g. oaks) in exchange for carbohydrates.



Their spores need to be spread by mycophagus- animals (birds, deer's, rodents, voles, fly's, squirrels, kangaroos and chipmunks) instead of wind and water. The spores must be digested – must survive undamaged the digestive tract of animals – and after that they fall to the soil with the manure and may grow.

HT06, Agrimony, Bach

In exchange of carbohydrates, truffle fungi provide their host plants with valuable micro- and macronutrients. Plant macronutrients include Na, P, N, S, whereas micronutrients include Fe, Cu, Zn, Cl, Mg

Truffles have been suggested to co-locate with the orchid species *Epipactis helleborine* (breitblättriger Sumpfwurz) and *Cephalanthera damasonium* (weisses Waldvögelein)



Truffle dogs (Lagotto Romagnolo) have a keen sense of smell (dimethyl sulphide) but must be trained

Truffle hogs innate the ability to sniff them out, however they eat them quick, because they are attracted through the hormone androstanol, the sex pheromone of the boars saliva. Therefore they have an aphrodisiac effect



Content per 100 g Perigordtrüffel

Energy	105 kJ / 25 kcal
Water	75.0 g
Protein	5,5 g
Fat, digestible	0.5 g
Carbohydrate	0 g
Fibre	16 g
Minerals	2 g

Vitamins: per 100 g

B2 (Riboflavin)	0,4 mg
B3 (Niacin)	5.0 mg
B5 (Pantothen-acid)	2.5 mg
D3 (Calciferol)	2 mcg
K2	15 mcg

Elements in 100 g Perigordtrüffel

Na	77 mg
K	520 mg
Mg	24 mg
Ca	24 mg
Fe	3,5 mg
P	62 mg

Content of 100 g fatty acids

saturated	0,13 g
unsaturated	0,01 g
polyunsaturated	0,31 g

Truffles have since Jesus Christ aphorising-, anti-biotic-, anti-microbial- (staph aureus, pseudom. aeruginosum) properties and additionally mildly laxative effect.



In Las Vegas you may buy a burger for 5000 Dollars. Inclusive Kobe-beef-meet, duck foie gras, gold foil, truffles, pommes and a bottle of red wine

Calvatia gigantea, giant puffball, damabo, Riesenbovist



Content: The puffballs contain considerable amounts of Mg, K, P, Zn, Se, Ca. Several AA, ergosterin and an anti-cancer glycoprotein calvatin

Effect: The fungus spores are used in medicine as healers of wounds in cases of amputation, chilblain, hemorrhoids, bruises and infected areas. Acts as an anti-coagulans against nose bleeding and menstruation. Also as a disinfective agent in the mouth, the throat, in case of bronchitis, etc.

Gomphus clavatus, pig's ear, zhu er duo, Schweinsohr



Extracts prepared from *G. clavatus* fruit bodies have a high anti-oxidant activity and a high concentration of phenolic- and flavonoid compounds.

Content: Phenolic compounds identified from the fungus include protocatechuic-, norcaperatic-, gallic-, gentisic -, vanillic-, syringic-, cinnamic-, caffeic-, ferulic-, and tannic-acids

In a chemical analysis of collections from the south Aegean Region of Turkey, the fungus was shown to have bio accumulated the toxic metal Cd to levels exceeding the maximum intake recommended by the European Union Scientific Committee on Food





Practical procedure

Most vital mushrooms have several positive effects
So we need to have an **evaluation method** that fits

- RAC/VAS-pulse controlled method

- Kinesiologically control method

- Körbler rod

- Pendulum

List of the utmost important vital mushrooms

- | | |
|--------------------------------|---------------------|
| 1. Agaricus bisporus | Mo gu |
| 2. Agaricus blazei | Himematsutake |
| 3. Agaricus campestris | Cao dian mo gu |
| 4. Auricularia auriculojudae | Mu-err |
| 5. Boletus edulis | Maiwei niuganjun |
| 6. Calvatia gigantea | Damabo |
| 7. Cantharellus cibarius | Liyoujun |
| 8. Clitocybe geotropa | |
| 9. Clitocybe nebularis | |
| 10. Coprinus comatus | Maotou qisan |
| 11. Cordiceps sinensis | Dong chong chia cao |
| 12. Coriolus versicolor | Yun zhi |
| 13. Cortinarius caperata | Zhougai luolinsan |
| 14. Cratarellus cornucopioides | |
| 15. Cratharella tubaeformis | 中文: 喇叭菌 |
| 16. Ganoderma lucidum | Reishi |
| 17. Gomphus clavatus | Zhu er duo |
| 18. Grifola fondosa | Maitake |
| 19. Hericium erinaceus | Yamabusitake |
| 20. Hydnum repandum | Chijun |
| 21. Inonotus obliquus | Bai Hua Rong |
| 22. Lactarius salmonicolor | Sung rugu |
| 23. Leccinium aurantiacum | |
| 24. Lentinula edodes | Shiitake |
| 25. Macrolepiota procera | Yangsan |
| 26. Morchella esculenta | Yangdujun |
| 27. Pleurotus ostreatus | Hao gu |
| 28. Polyporus umbellatus | Zhu ling |
| 29. Sarcodon imbricatus | |
| 30. Sparassis crispa | Hanabiratake |
| 31. Tuber magnatum | Songlu |
| 32. Xerocomus badius | Heronggainiuganjun |

By means of the vital mushroom list you are evaluating the corresponding mushrooms, which give you the utmost electromagnetic emanating enlargement (Aura)

I have also dried encapsulated samples of some most important mushrooms to check



23.1.2019 16:03

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Dosage

No general information can be given for the dosage of vitality mushroom products. The dosage depends on the type (weight) and extent of the symptoms and the individual response of the patient to the products. TCM recommends the following guidelines:

- Adults with a body weight up to 65 kg:
0.9 to 1.2 g per mushroom extract per day
1.5 to 2 g per mushroom extract per day
- Adults with a body weight above 65 kg:
1.2 to 1.8 g per mushroom extract per day
2 to 3 g per mushroom extract per day
- Up to three different vitality mushrooms can be combined in well-founded, individual cases.
- As a rule, vitality mushroom products are taken separate from meals (at least a half hour before, or an hour after, at the earliest).

In Veterinary medicine mycotherapy becomes by now very popular. However, contrary to the human medicine, there exist little scientific evidence based studies. In the last few years we made the hard way exchanging knowledge's.

Horses need, in relation to her bodyweight, a much lower dosage, compared to humans. On the other hand they react extremely well to the resonating mushrooms.

Vital mushrooms may activate chronic diseases and therefore we should apply them slowly in creeping. Primarily reactions are fairly quick visible, as a rule within the first four days after medication, respectively after the enhancing of the appropriate dosage. The utmost positive reaction we obtain by applying several different mushrooms at the time.

e.g. Maitake & Coprinus have a positive reaction onto the glucose metabolisms (metabolic syndrome).

e.g. Coprinus & Hericium have a positive effect onto a digestion syndrome. Coprinus activating the pancreas its enzymes and Hericium has an anti-inflammatory, and a positive supporting effect onto all mucous membranes.

e.g. Reishi & Cordiceps both with anti-inflammatory, anti-histaminic effect. (Triterpenes). Especially in cases of allergy and COPD. All together tonifying kidney Qi and the well fair. Additionally active onto the hormonal system, especially the Cushing syndrome (! Doping)

e.g. Cordiceps (anti-stress, etc.), Reishi (sport, hormone- and oxygen promoting), Coriolus (immune stimulating) and Hericium (nerve system)

Anaplasmosis in dogs Coriolus, ABM, Reishi, Auricularia and Polyporus

Feline leucosis Coriolus, Reishi, Agaricus, Cordyceps and Shiitake

Diabetes Type I, dogs Coprinus, Agaricus, Cordiceps, Reishi

Diabetes Type II, cats Coprinus

Diabetes Type II, horse Coprinus

Founder horse Auricularia, Maitake, Reishi

HT/PC Auricularia, Reishi, Cordiceps Coriolus

Cancer Maitake, Agaricus.....

Which mushroom should you take at the following symptoms? Mostly there are different mushrooms indicated. By means of RAC/VAS, kinesiology, tensor or pendulum it would be easy to evaluate the optimum one. We may also combine several mushrooms, however you must consider the individual constitution and dosage! (powder, capsules, tablets)

Alzheimer, MS, Parkinson:	Hericum (CNS)
Anemia:	Sparassis (Xue)
Anti-allergy:	Agaricus, Coriolus, Hericum (gut), Reishi (skin), Shiitake, Ganoderma, Polyporus (Lnn), Pleurotus (probiotic)
Anti-aging:	Cordyceps, Reishi, Coriolus
Anti-bacterial:	Cordyceps, Coriolus, Shiitake, Hericum, Polyporus, Ganoderma, Lentinula, Tuber magnatum
Anti-biotic:	Tuber magnatum, Pleurotus, Poliporus
Anti-coagulation:	Hericum, Polyporus, Pleurotus, Auricularia, Reishi, Cordiceps
Anti-diarrheal:	Polyporus
Anti-diabetic:	Agaricus, Cordyceps, Grifola, Coprinus, Reishi
Anti-fungal:	Sparassis
Anti-inflammation:	Agaricus, Cordyceps, Coriolus, Reishi, Pleurotus, Boletus
Anti-nutritional:	Macrolepiota
Anti-oxidative:	Pleurotus, Ganoderma, Morchella, Boletus, Enokitake
Anti-sclerotic	Cordyceps
Anti-thrombotic:	<u>Auricularia</u> , Cordiceps, Reishi
Anti-cancerogen:	Coprinus, Coriopus, Hericum, Grifola, Pleurotus, Polyporus, Ganoderma, Lentinula, Morchella, Hydnum, Sparassis, Chaga, Maitake, Enokitake
Anti-viral:	Agaricus, Coriolus, Lentinula, Morchella

Aphrodisiacum:	Cordyceps, Tuber magnatum
Arteriosclerosis:	Auricularia, Reishi, Shiitake, Hericium Ganoderma
Arthritis:	Agaricus, Maitake, Reishi, Shiitake, Pleurotus
Arthrosis:	Cordyceps, Reishi, Shiitake, Enokitake
Autoimmune problems:	Agaricus, Cordyceps, Maitake, Reishi, Shiitake, Ganoderma
Bacterial- und viral sickness:	Cordyceps, Coriolus, Shiitake, Chaga
Bladder, urinary tract problems:	Agaricus, Coprinus, Coriolus, Maitake, Polyporus, Reishi
Blood pressure	Agaricus, Auricularia, Maitake, Polyporus, Reishi, Shiitake, Grifola, Ganoderma, Lentinula
Blood fats/ <u>Cholesterol</u> :	Coprinus, Coriolus, Reishi, Shiitake, Hericium, Pleurotus, Ganoderma, Lentinula
Brain tonifyer:	Agaricus, Reishi
Burn-out syndrome:	Agaricus, Cordyceps, Reishi, Shiitake
Cancer, additive possibilities:	Agaricus, Auricularia, Coprinus, Cordyceps, Coriolus, Hericium, Maitake, Polyporus, Reishi, Shiitake, Chaga
Catching cold:	Agaricus, Cordyceps, Coriolus, Reishi, Shiitake
Chemotherapy, side effects:	Coriolus, Hericium, Maitake, Reishi, Shiitake, Polyporus
Chronic hyperacidity:	Agaricus, Maitake, Reishi
Chronic pain:	Hericium, Reishi
Circulatory disorders:	Auricularia, Cordyceps, Reishi
COPD/LU:	Agaricus, Cordyceps, Coriolus, Reishi, Ganoderma, Morchella

Desinfective:	Calvatia
Diaphoretic:	Pleurotus
KI, Diuretic:	Polyporus
Depression:	Cordyceps, Hericium, Reishi
Diabetes mellitus:	Agaricus, Coprinus, Maitake
Gout:	Reishi, Shiitake
Gut problems:	Coprinus, Hericium, Maitake, Shiitake, Hericium, Morchella
Haemorrhoids	Coprinus, Calvatia
Hair problems:	Coprinus, Polyporus
Hay fever:	Agaricus, Reishi
Headache:	Auricularia, Hericium, Reishi
Herpes:	Agaricus, Coriolus, Reishi, Shiitake
HT-PC probl.:	Auricularia, Coprinus, Coriolus, Reishi, Shiitake, Maitake, Cordiceps, Polyporus
Immune tonifying, anti-infection:	Agaricus, Auricularia, Coprinus, Cordiceps, Coriolus, Hericium, Maitake, Pleurotus Polyporus, Reishi, Shiitake, Grifola, Ganoderma, Lentinula, Morchella, Sparassis, Enokitake
Laxative:	Agaricus, Polyporus, Truffle
Libido problems:	Agaricus, Cordyceps, Reishi, Truffels
LIV, Hepatitis:	Hericium, Maitake, Polyporus, Reishi, Shiitake
Menopause problems:	Cordyceps, Hericium, Reishi
Menstrual problems:	Cordyceps, Coriolus, Reishi, Calvatia,



Migraine:	Auricularia, Polyporus, Shiitake
Mountain sickness	Ganoderma
KI, Nephritis:	Agaricus, Cordyceps, Ganoderma,
Nervousness, sleeping problems, stress:	Cordyceps, Hericium, Reishi
Neurological problems:	Cordyceps, Hericium, Reishi
Osteoporosis:	Maitake, Shiitake, Grifola,
Overweight:	Coprinus, Hericium, Maitake, Reishi, Shiitake
Performance efficiency:	Cordyceps, Reishi
Probiotic:	Lentinula
Prostate problems:	Agaricus, Coriolus, Maitake
Rheum:	Auricularia, Coriolus, Reishi, Shiitake
Skin repair:	Polyporus
Skin problems:	Agaricus, Auricularia, Hericium, Calvatia gigantean
Stomach ache:	Hericium, Maitake, Shiitake
Thyroid problems:	Agaricus, Cordyceps

Any Symptom:

Check by means of the VAS



Namaste



References

Internet, Vitalpilze

Ahn WS, Kim DJ, Chae GT, et al. Natural killer cell activity and quality of life were improved by consumption of a mushroom extract, *Agaricus blazei* Murill Kyowa, in gynecological cancer patients undergoing chemotherapy. *Int J Gynecol Cancer* 2004;14:589-94. [View abstract](#)

Ahn WS, Kim DJ, Chae GT, et al. Natural killer cell activity and quality of life were improved by consumption of a mushroom extract, *Agaricus blazei* Murill Kyowa, in gynecological cancer patients undergoing chemotherapy. *Int J Gynecol Cancer* 2004;14:589-94. [View abstract](#)

Delmanto RD, de Lima PL, Sugui MM, et al. Antimutagenic effect of *Agaricus blazei* Murrill mushroom on the genotoxicity induced by cyclophosphamide. *Mutat Res* 2001;496:15-21

Guterrez ZR, Mantovani MS, Eira AF, et al. Variation of the antimutagenicity effects of water extracts of *Agaricus blazei* Murrill in vitro. *Toxicol In Vitro* 2004;18:301-9.

Hashimoto T, Nonaka Y, Minato K, et al. Suppressive effect of polysaccharides from the edible and medicinal mushrooms, *Lentinus edodes* and *Agaricus blazei*, on the expression of cytochrome P450s in mice. *Biosci Biotechnol Biochem* 2002;66:1610-4.

Pilz D, Norvell L, Danell E, Molina R (March 2003). Ecology and management of commercially harvested chanterelle mushrooms. Gen. Tech. Rep. PNW-GTR-576 (PDF). Portland, OR: Department of Agriculture, Forest Service, Pacific Northwest Research Station. Retrieved 2011-03-25.

Pilz D, Norvell L, Danell E, Molina R (March 2003). Ecology and management of commercially harvested chanterelle mushrooms. Gen. Tech. Rep. PNW-GTR-576 (PDF). Portland, OR: Department of Agriculture, Forest Service, Pacific Northwest Research Station. Retrieved 2011-03-25.

I. R. Hall, A. J. E. Lyon, Y. Wang, L. Sinclair: Ectomycorrhizal fungi with edible fruiting bodies. 2. *Boletus edulis*. In: *Economic Botany*. Band 52, Nummer 1/Januar 1998, ISSN 1874-9364, S. 44–56. S. 44

M. Moriguchi, S.-I. Sada, S.-I. Hatanaka: Isolation of cis-3-amino-L-proline from cultured mycelia of *Morchella esculenta*. In: *Applied and Environmental Microbiology*. 38, Nr. 5, 1979, S. 1018–19. PMID 16345456. PMC 243624 ([freier Volltext](#)).

Bert Steffan, Wolfgang Steglich: Die Hutfarbstoffe des Maronenröhrlings (*Xerocomus badius*). In: *Angewandte Chemie*. Band 96, Nr. 6, 1984, S. 435–437, doi:10.1002/ange.19840960619.

Gry J., Black L., Eriksen FD., Pilegaard K., Plumb J., Rhodes M., Sheehan D., Kiely M., Kroon PA (2007): EuroFIR-Basis – a combined composition and biological activity database for bioactive compounds in plant-based foods. *Trends in Food Science & Technology* 18: 434-444.

IARC (2012): International Agency for Research on Cancer. Arsenic metals, fibres and dusts. A review of human carcinogens. Cadmium and cadmium components 100C: 121-145

Clifford A. Wright (2001). *Mediterranean vegetables: a cook's ABC of vegetables and their preparation in Spain, France, Italy, Greece, Turkey, the Middle East, and north Africa with more than 200 authentic recipes for the home cook*. Harvard Common Press. p. 229. ISBN 1-55832-196-9.

Вячеслав Степанов: Грибы Калужской области - Говорушка дымчатая (*Clitocybe nebularis*)". mycoweb.narod.ru

Brzin J, Rogelj B, Popovic T, Strukelj B, Ritonja A. Clitocypin, a new type of cysteine proteinase inhibitor from fruit bodies of mushroom *Clitocybe nebularis*. *J Biol Chem*. 2000;275:20104–20109. [PubMed] [Google Scholar]

Rücker T, Peer T (1988). "Pilzsoziologische Untersuchungen am Stubnerkogel (Gasteiner Tal, Salzburg, Österreich) unter Berücksichtigung der Schwermetallsituation". *Nova Hedwigia* (in German). 47: 1–38.

Andrea Rubini, Francesco Paolocci, Claudia Riccioni, Giovanni G. Vendramin, Sergio Arcioni: Genetic and Phylogeographic Structures of the Symbiotic Fungus *Tuber magnatum*. In: *Applied and Environmental Microbiology*. Band 71, Nr. 11, November 2005, S. 6584–6589, doi:10.1128/AEM.71.11.6584-6589.2005 (PDF).

Puttaraju NG, Venkateshaiah SU, Dharmesh SM, Urs SM, Somasundaram R (2006). "Antioxidant activity of indigenous edible mushrooms" (e.g. pigs ear). *Agricultural and Food Chemistry*. 54 (26): 9764–72. doi:10.1021/jf0615707.

Georges M. Halpern, MD,PhD: „Healing Mushrooms“; Squareone Publishers; 2007

Prof. Dr. med Ivo Bianchi: „Moderne Mykotherapie“; Hinckel Druck, 2008

Stamets, P.: „MycoMedicinals: An Informational Treatise on Mushrooms“, Myco Media, 2002

Christopher Hobbs, L.Ac.: „Medicinal Mushrooms“, Botanica Press, 1995

More literature and references from the author on request