### A HIDDDEN SOLUTION

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### A Hidden Solution

# Introduction To the Benefits of Mushrooms

Mushrooms have existed on Earth for over 800 million years and have played an important role in every ecosystem they have lived in. Playing the role of a decomposer and a producer, Scientists believe that mushrooms may have been one of the reasons life continues to exist today on Earth. Animals have been eating mushrooms for as long as their

existence. On the other hand, humans have had mushrooms in their diet for millennia. Hunter-Gatherer people consumed mushrooms, and even today, mushrooms are packed with nutrients and minerals crucial to health. Beyond these benefits, medicinal mushrooms such as Lions Mane, Chaga, and Reishi have improved brain health and even kill cancer cells. Today, mushrooms can be grown at home with ease in 1-2 weeks and are the second-fastest-growing food industry in the United States. Millions of people are beginning to take advantage of the plethora of benefits. Mushrooms have a low environmental impact, being very resilient and growing in many different climates. If every American grew 1 pound of mushrooms for 1 meal instead of using imported foods, over 200 million pounds of co2 emissions could be reduced.



Lions Mane Growing in nature, which is commonly on trees or decaying wood

Hericium Erinaceus mushrooms, at First glance, may not look like a mushroom or anything you've ever seen before. Its long tendrils may suggest it looks inedible. Commonly known as Lions Mane, Hericium Erinaceus. A number of polysaccharide

compounds can improve brain health. These compounds have been found to reduce the risk of dementia, slow the spread of dementia, and even repair neurological pathways that have been injured during TBI's. Lions Mane mushrooms have been found to strengthen procedural memories and hence can improve learning and focus. Lions Mane is very popular among the UFC community; professional fighter Cody Garbrandt praises the sharpness and mental boost he receives from Lions Mane Mushrooms. Hericium Erinaceus stimulates brain growth which strengthens all aspects of brain health.

Ganoderma lingzhi, commonly known as Reishi, mushrooms, and even called the mushroom of immortality, is an incredible species. These mushrooms have lab proven ability to slow down and even stop the growth of cancer cells. Reishi mushrooms include a number of complex sugars, which are called beta-glucans; these sugars stimulate an immune response that can cause the immune system to attack cancer cells, which doctors believe to be the way of curing cancer in the future. Reishi mushrooms have been used as medicine for thousands of years, dating back to ancient China, in which it was called Ling zhi. The Chinese knew its potential, and scientists believe it to be the first cancer treatment humans used. Reishis immune-stimulating properties have even been speculated to be an effective treatment of autoimmune diseases such as HIV.



Reishi Mushrooms grow in large plate shapes, commonly at the base of trees.

### What Are Mushrooms?

This question may sound simple, but there is a lot of contradicting information about mushrooms, and fungi in general, which makes it not only difficult to classify but even make distinctions between fungi and other living organisms. Scientists generally believe Mushrooms to be the body spawned from a spore-based fungus. This makes things complicated because many fungi species have a number of life stages that are completely different. The basic life cycle of a fungus begins as a spore, which grows into mycelium, consuming nutrients, fats, and carbohydrates that are in the spawn, which can be in organic compost, soil, wood, or even other living things. After the mycelium matures, it sprouts a body, which we call a mushroom, the mushroom, serves the purpose of releasing spores that are produced by the mycelium. It is fair to say that the spores and mushroom bodies are simply tools of the mycelium, which is very uncommon and strange. This would be as if a tree existed solely to create more roots. To complicate things more, there are over fourteen thousand known species, and they are all so wildly different. Some mushrooms a single bite of can kill you, some have cancer-fighting nutrients, and some mushrooms are psychoactive drugs. The variety of mushrooms is so wildly more extreme than any other group of living things; fungi command their own category, being somewhere between plants and animals.



Mushrooms have played crucial roles in the development of the current life on Earth. Fungi are one of the largest decomposers on Earth. Fungi grow on decaying matter, and during the process of

decomposition, they supply the surrounding soil with nutrients and continue to grow their mushroom bodies. Mushrooms also have been providing humans with food and medicine for thousands of years



# The Nutritional Benifits Of including Mushrooms In A Diet

Mushrooms, even with their variety, are generally very healthy. Mushrooms are some of the most nutrient-rich superfoods and are only lacking the marketing of other "SuperFoods." Some Mushrooms have been found to reduce cholesterol, reduce risks of heart attack, and even improve liver health. Mushrooms overall have been documented to provide aid in many health problems, some of which already have pharmaceutical solutions. The Natural power mushrooms have, when used correctly, can alleviate many illnesses and health problems through their superfood ingredients. Mushrooms are effective dietary supplements, and they should have a place in the average diet; there is no reason that mushrooms shouldn't be enjoyed more regularly and have a reputation as a superfood. Mushrooms, by nature, are found to protect not only the brain but even the aging of your skin, hair, heart, and muscles. Certain mushrooms have also been found to be immune boosters, more effective than other supplements such as Vitamin C. People who consume mushrooms as well as a well-balanced diet live longer, have lower rates of cancer, and get sick less often

### The Lies

#### How Big Pharma and The FDA are Lying to you

At this point, many may be surprised they've never heard of these benefits, and I was too, and then It made sense. Mushrooms' existence, medicinal, nutritional, and even psychoactive, pose a significant threat to capitalistic structures, specifically Big Pharma. Mushrooms pose a threat to over 400 billion dollars of business, with the potential to disrupt the chemotherapy industry, the supplement industry, and the anti-depressant industry. Before continuing, it needs to be said that chemotherapy and antidepressants have undoubtedly saved countless lives, and mushrooms are not some magic cure. Still, with the nature of capitalism, it is alarming that Mushrooms are not being looked at more carefully. The FDA has been lobbied by big pharma for decades. This is why the United States is one of the only developed nations not Running clinical trials on Mushrooms as pharmaceutical alternatives. Physcedlic mushrooms are a Schedule 1 Drug, which would suggest, by definition, they have a high level of abuse, and no medical uses, which would compare it to heroin. Psychedelic Mushrooms are not addictive and are now being studied and be highly effective in depression treatment. Even when private research groups investigate Medicinal mushrooms for cancer treatment, they are required by the FDA to include a disclaimer. Check for yourself, go to Memorial Sloan Kettering's page about Reishi mushrooms, and read the FDA disclaimer, which directly contradicts their findings. It is clear that the FDA has little interest in public health and prioritizes Big Pharma's profits. This is one of the consequences of having Private health care

### When The Profit Motive Fails

The Profit Motive exists, and there is no getting around it. This can create innovation and produce remarkable technologies that can move humanity forward. The Profit motive fails one thing, and that is in health care. The United States has a private health care system that also follows the profit motive. For this reason, we may never see a cure to cancer simply because chemotherapy is so profitable. If Reishi mushrooms did cure cancer, the FDA would never admit it; if they were found to be effective, it wouldn't be surprising to see them banned or even scheduled. This principle also affects many other health care areas, including diabetes treatment and especially anti-depressants. The multibillion-dollar industry of anti-depressants is highly profitable due to these medications' nature; they require continuous, even daily dosings and can cause dependencies and are expensive. Psychedelic mushrooms have been found to help patients suffering from depression. These Physcoactive mushrooms are not dangerous and cannot cause overdoses, but the Government classifies them as dangerous as heroin. Big Pharma has used lobbying to control the FDA and the Federal Government for over one hundred years, and the truth is finally coming out, at least regarding psychedelics. On the other hand, the FDA hasn't budged on cancer-killing mushrooms, despite a study in Taiwan proving their effectiveness in killing tumors.

### 75%

When looking into the FDA, the most pressing issue is immediately visible, and that is where the FDA's budget originates from. Seventy-Five Percent of the FDA's funding for Drug reviews comes Directly from the Big Pharma corporations they are reviewing. In Nations with universal health care, there is a natural reason for the government to have your best interest in mind. Suppose a pharmaceutical drug will send thousands of people to the hospital. In that case, that's potentially millions of dollars the government will spend for your health care, giving them incentives to keep everyone healthy. In the United States, they have no skin in the game and only care about protecting Big Pharma's profits. This is why the United States is only one of 4 developed countries not studying Medicinal and Physcoactive Mushrooms' effectiveness at the federal level. Across the Pharmaceutical industry, we see patients spending ridiculous fees for life-saving medications and only because Big Pharma can and will make as much money as possible. The FDA aids Big Pharma in creating monopolies allowing them to price rare drugs at thousands of dollars, and in some cases, treatments at over one million dollars, for drugs that cost them less than a fraction of this.

### The Cancer Problem

The Cure for cancer may exist and be possible, and it might not be some magical shot or even a medicinal Mushroom such as reishi (Even though the evidence is promising.) In the United States, only a tiny fraction of cancer research goes to Cancer prevention, which is arguably the most important aspect, after that is a cure, and the top-grossing section is Chemotherapy and Radiation. These treatments net Big Pharma up to two-hundred thousand dollars per patient to be lucky to survive for 5 years. This again brings us to the FDA's issue of not being interested in disease

prevention. Treatment is much more profitable; this becomes obvious when looking at our food standards compared to other countries. One example is rBGH and rBST growth hormones, which are present in some American Milk companies and it is known to cause cancer and banned in almost every other country. The argument for universal health care is obvious and needs to be done to have a Government regulatory system with the peoples best interest, not Big Pharma

Big Pharma is the modern-day Merchant of Death, directly profiting from ten million annual deaths from cancer alone, not counting the endless life-saving treatments that many die trying to fund. Big Pharma has the FDA in their pocket, and after decades of building strength, they exploit essentially every American and play with their health, life, and wallet. Big Pharma makes life-saving treatments extremely effective due to no competition and the fact that the patient must purchase them. One example of this is insulin, which is priced hundreds of times more than it costs. The structure of Big Pharma, the FDA, and American Capitalism is why alternative treatments to cancer don't exist, and the war on drugs affecting Physcadelics. In other nations, such as Taiwan, researchers have found Reishi mushrooms to kill cancer, and even in the US, some researchers are finding psychedelic mushrooms. Other psychedelics compounds have beneficial effects when used as a medicine rather than a recreational drug. All of the lies of the US government in this regard are to protect the profits of Big Pharma

It needs to be noted that none of my prior points are to put distrust in modern medicine. Excellent doctors and scientists are working around the clock to develop treatments and vaccines that save millions of lives. Vaccines and antibiotics are some of the most amazing inventions of all time. It is essential to identify and distinguish the difference between these people and the CEOs and executives of Big Pharma that have no interest in public health. Big Pharma is the only thing holding back modern medicine. Big Pharma is holding back the possibility

of living in a world with a cure to cancer and even

medications and treatments to diseases we think of as incurable, such as diabetes, AIDS, and even dementia. This is why Big Pharma only focuses on Chemo and Radiation instead of a cure for cancer and tries to cover up demonized substances in favor of profitable pharmaceutical drugs. And the issue is not that these don't work; the problem is that Big Pharma is driven by profit and would consider less profitable but more effective treatments, but even block and demonize them.

### The Next "Super Food"

Asking if mushrooms are healthy is like asking if plants are healthy; there are thousands of kinds, some poisonous, some psychoactive, some inedible. The edible Mushrooms are rich in vitamins, minerals, proteins and have low fat and carbs but have protein and fiber. Mushrooms check all the boxes of superfoods, and their variety in benefits qualify them to be a centerpiece of a well-balanced diet. Mushrooms can aid in all life areas, from

digestive health to heart health to weight loss and even brain health. Some of the most beneficial nutritional mushrooms include shakes, oysters, and portobello, and some mushrooms like lion's mane benefit beyond nutrition. Mushrooms can easily be incorporated into a diet, offer rich umami flavors, and add minerals, protein, and vitamins.

Mushrooms can be used for all kinds of problems. They can treat Parkinson's disease, Alzheimer's disease, high blood pressure, and cancer. Lions Mane has a benifical impact on brain health, Reishi is believed to kill cancer cells, and Portabellas have almost as much potassium as a banana. Mushrooms can be used to cut costs on food and even be used to lose weight. Mushrooms have everything that other "superfoods" have bar the marketing. Though early on, times are changing, and many researchers analyze the possibility of medicinal mushrooms and maybe even placement in modern medicine. Mushrooms are cheap to grow, very resilient, and can be produced at home in small batches. Edible mushrooms have been growing on trees, on the ground, even in compost and other waste.

### Growing Mushrooms At Home

Growing mushrooms is at home and can quickly produce 1-2 pounds of mushrooms for 10-30\$, which is more than enough to add to a meal for 2-3 people. Common edible mushrooms include oysters, shiitake, and portobello, but more exotic medicinal ones such as lion's mane can easily be grown and prepared in the same way. Mushrooms are one of the most accessible foods to grow, and their unique protein concentration allows them to serve as the centerpiece of a meal. Mushrooms can be grown indoors or outdoors and are very flexible and resilient. Growing mushrooms can be done 2 ways; the first way is fully DIY; after purchasing liquid mushroom cultures and mixing them with grain spawn, all you have to do is wait, add them to soil or substrate and give them water and wait. Another option is buying a mushroom grow kit, which a retailer pre inoculates substrate and all you need to do is add water. If growing is too complicated, you can always take advantage of your local farmer's market until you are ready to grow your own.

## Cooking And Eating Mushrooms

Mushrooms can be intimidating to many eaters, and some may not look the most appetizing, and raw mushrooms can be quite the acquired taste, which is why preparing them is so important. I found the best results from treating the mushroom like protein or meat across my study of mushrooms. Some mushrooms such as lion's mane can be fried and prepared like chicken, while other more decadent mushrooms such as black oyster mushrooms and be prepared as a beef substitute. My best result came from a Truffle Oyster mushroom Pasta. For consuming medicinal mushrooms, not as a meal replacement, these can quickly be dried in the oven and ground up. A popular alternative to beef jerky also exists, which involves drying and seasoning strips of mushrooms.

### **A Great Recipe** Oyster Mushroom Truffle Pasta

Step 1 Preparing the mushrooms; After dicing the oyster mushrooms, heat a pan to high heat for 3 minutes, add oil, and reduce heat to medium and then add mushrooms, and continue to fry for 1-3 minutes or until browned and slightly crispy (this can be cooked for more or less time, as, unlike meat, mushrooms are perfectly safe raw)

Step 2: remove the mushrooms and in the same pan, add ½ or 1 diced onion, and saute until caramelized. Step 3: In the same pan, add 1 cup of any high-quality marinara or pasta sauce; I chose a wonderful truffleinfused sauce from TRUFF. After simmering on low heat, add 1-2 ounces of cream, and reduce, at this time, add the onions and mushrooms. Add the pasta to the boiling water and continue to simmer the sauce for 10-15 minutes. Step 4. Remove 2-4 ounces of pasta water, drain the pasta, then add the pasta, the sauce with mushrooms and onions, and the pasta water into the pot. Stir on low heat for 2-4 minutes, then remove from heat. Step 5: Plate with some arugula or spinach, add some Parmigiano Reggiano cheese and carefully shave 3-10 slices of either black or white fresh truffles.

This is a rich and complex pasta elevated by the earthy flavor of mushrooms and truffles and complimented with onions and some greens.