

# Guide to Functional Mushrooms for Relaxation and Sleep



#### INTRODUCTION

From extended working hours to pandemics and eco-anxiety, it seems that stress is the curse of the modern world.

Team this with our detachment from earth's natural circadian rhythms - we sit up till late under bright lights and in front of screens and devices - it's no wonder that we're experiencing more anxiety, depression and sleep problems than ever before.

Exercise, meditation, yoga and, of course, getting a good (7-9 hours) night's sleep are all wellknown tonics to the stresses of modern living. But did you know that functional mushrooms can also help ease anxieties, help you relax and aid restorative sleep?

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# 01

# WHAT IS A **FUNCTIONAL MUSHROOM?**

Functional or medicinal mushrooms are species of fungi that possess incredible health benefits. These fantastic fungi are loaded with life-giving antioxidants that help our bodies tackle illness and disease while simultaneously helping us relax, sleep well, and stave off the effects of aging.

Functional mushrooms also act as adaptogens, natural bioregulators for our bodies. These particular mushrooms are known to aid the body in improving our resistance

to stress while balancing our minds and bodies.

Adaptogens come in plant form, too - think Ginseng, Rhodiola and Ashwagandha - at <u>SuperMush</u>, we like to sprinkle a few of these into the mix. In the fungi world, we have stress-reducing superstars like Cordyceps, Lions Mane, Chaga and of course, Reishi - the queen of REM sleep!



#### 02

### THE EFFECT OF STRESS ON OUR **BODIES**

Whether you're late for a meeting, about to sit for an exam, or a bear is chasing you - the body reacts with the same complex chain reaction.

Your hypothalamus, your brain's control center, decides you're in danger and sends out the order: release the stress hormones! These stress hormones - including cortisol - trigger your body's "fight or flight" response - as if it's a life or death situation. As a result, your heart rate skyrockets, and your breath quickens - priming your body for immediate action.

This response hasn't changed since caveman times when we would have been fighting wild animals; it's a clever design that protects your body in an emergency by readying you to react lightning-fast.

However, in today's world, our stresses are very different. Although it's rarely a life or death situation, the long-term effects of that same caveman stress response firing daily could seriously affect our health.

The long term effects of prolonged stress include; a weakened immune system, high blood pressure, digestive problems, high blood sugar and insomnia.



## WHAT'S SO BAD **ABOUT INSOMNIA**

Sleep is essential to brain health. Good sleep improves memory recall, regulates metabolism, and reduces mental fatigue.



During sleep, the brain recharges itself, makes sense of the information it has absorbed and expels toxic waste byproducts.

Regular restful sleep also allows your body to heal, cells to regenerate, and your immune system to recharge. In a nutshell, deep, uninterrupted sleep is



essential to physical and mental health, rendering the mantra' sleep when you're dead' more insidious than imaginable.



# HOW **MUSHROOMS CAN HELP**

Due to their adaptogenic nature, functional mushrooms are a powerful aid in reducing anxiety while improving relaxation and aiding sleep.

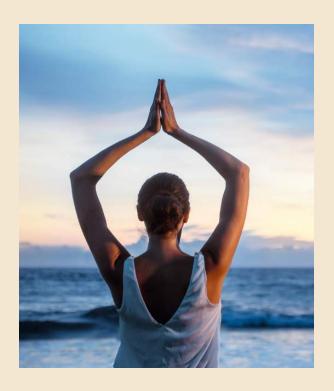
A stressed-out adrenal gland can pump cortisol throughout the day, flooding our body and disrupting the cycle - preventing a good night's sleep. Lack of sleep can lead to depression, mood swings, memory loss and a severely depleted immune system.

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Adaptogens help our bodies to

regain balance - they allow our bodies to relax and the adrenal gland to close. This action restricts the amount of cortisol circulating, assisting the body to recover its natural circadian cortisol cycles.

The result is a healthy cortisol cycle that peaks in the morning with the sunrise and slows through the afternoon, reaching its lowest as darkness falls and we head off to catch those valuable z's.



# THE FUNGI **HALL OF FAME -RELAXATION AND SLEEP SUPERSTARS**

How these fantastic fungi work in harmony with our bodies to promote health and restfulness has mystified scientists, mycologists and medical practitioners for millennia.

Paul Stamets - mycologist, author and medicinal mushroom advocate, noted "Mushrooms are miniature pharmaceutical factories. Of the thousands of mushroom species in nature, our ancestors and modern scientists have identified several dozen with a unique combination of talents that improve our health".





Eastern medicine has used functional mushrooms for thousands of years. Over time they've garnered a reputation as some of the best organic solutions for boosting sleep and relaxation.

SuperMush has made functional mushrooms super accessible, effective and delicious by combining Reishi, Lions Mane and Ashwagandha in a small spray bottle.

Let's explore the most beneficial mushrooms for sleep and relaxation.

#### Reishi (Ganoderma lucidum)

Reishi, AKA the mushroom of immortality, is one of the most popular mushrooms for sleep. Unlike melatonin supplements and sleeping tablets, Reishi does not make you feel drowsy. Instead, its compounds work to support stress management and calmness naturally.

This highly revered mushroom is one of

the "most powerful adaptogens present in nature" it contains numerous bioactive compounds, including Polysaccharides, Triterpenoids, Nucleotides, Steroids, Fatty Acids, Protein and Glycopeptides.

The high levels of triterpenoids in Reishi's fruiting body give this fungus its potent adaptogenic powers. Reishi also helps to regulate adrenal secretion and can help the adrenal glands stop producing cortisol following a stressful event, all of which aids in improved sleep and a calmer state of mind.





A study published in the Pharmacology Biochemistry and Behavior journal stated that the Reishi extract "decreased sleep latency, increased sleeping time, non-REM sleep time, and light sleep time in pentobarbitaltreated rats."

This means that after three days of use, the test subjects fell asleep quicker and slept longer. The test subjects also slept more deeply, showing way less fidgeting and anxious movement. Scientists deduced that the mushroom might have benzodiazepine-like effects.

Other studies have shown that Reishi may help you fall asleep faster, sleep for longer and spend more time in non-REM (NREM) sleep.

\*NREM sleep includes the deepest phase when your body does much of the important restorative work that's essential for good mental and physical health.

Aside from its sleep benefits, Reishi bestows myriad health benefits, strengthening the immune system and even fighting cancer.

#### Lion's Mane

Lion's Mane is the ultimate brain food. This impressive mushroom has been effectively used to heal neurodegenerative diseases like Parkinson's, dementia and Alzheimer's.





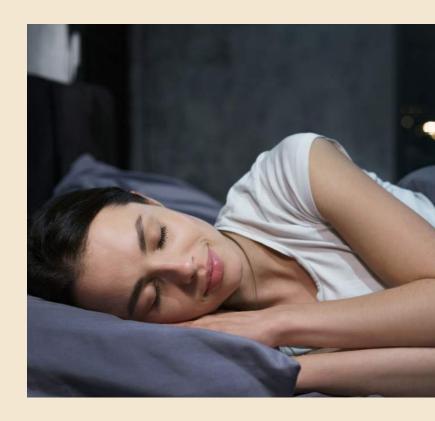
Not only this, but Lion's Mane can improve short-term memory, enhance intelligence, and super-charge our creativity.

How? It's almost too mind-blowing to believe! Lion's Mane promotes the growth of neurons - it helps us grow NEW brain cells (neurogenesis) while supporting remyelination - which keeps the brain's electrical system functioning as it should.

Lion's Mane is also a powerful adaptogen; it contains an abundance of Hericenones and Erinacines - two compounds that boost brain and nerve health. Adaptogens, as we know, support the body in coping with stress and keeping us balanced.

And as if that wasn't enough, Lion's Mane also displays anti-diabetic, anti-inflammatory, antioxidant, anticancer and anti-microbial properties. It's a medicinal POWERHOUSE.

When combined with Reishi, this fungal power couple becomes a sleep and relaxation dream team! What's not to love about these fantastic fungi?



#### Ashwagandha Root

Not a mushroom, but a seriously powerful adaptogenic root, Ashwagandha is most famed for its stress-busting superpowers.



We've added it to our mouth spray to complete the SuperMush sleep and relaxation power triangle.

The herb is a significant part of Ayurveda, India's traditional and centuries-old system of medicine. This incredible herb is used to treat a myriad of conditions, from rheumatism to insomnia.

Several studies have also demonstrated that ashwagandha supplements may help relieve stress and anxiety, therefore, aiding in a restful night's slumber.

In a small study of 58 participants, compared with those who took a placebo, those who took Ashwagandha extract for two months showed an impressive reduction in perceived stress and lower levels of cortisol (the stress hormone).

In addition, the ashwagandha-taking participants experienced significant improvements in sleep quality compared with the placebo group.





How? Ashwagandha seems to help regulate stress mediators, including stress-activated c-Jun N-terminal protein kinase (JNK-1), heat shock proteins (Hsp70), and cortisol. All of this aids your body's ability to deal with stress.

To conclude, Ashwagandha beholds numerous health benefits, from lowering blood sugar to helping build and repair muscles and improving sexual health while elevating brain function and memory. So, as you can imagine, when teamed with our fantastic fungi, they hold the most incredible combined brain and health-boosting powers.

#### In a nutshell...

Today- via modern science - we can see what ancient cultures have known for millennia; the tremendous health benefits that functional mushrooms hold. These fantastic fungi have the capacity to improve our general health, sleep and brain function.

we combine Αt SuperMush, our functional mushrooms to create an incredibly dreamy sleep and relaxation aid. 0ur products contain TWO mega mushrooms combined and further strengthened by a crew of healthful and tasty allies.





We combine mushrooms and adaptogens like Ashwagandha with delicious superfoods like hibiscus, lavender, honey, lemon and monk fruit. This amalgamation means you can enjoy the full scope of Mother Nature's healing daily via a simple spray on top or underneath your tongue.

In addition to supporting immune response, each functional mushroom species also offers a superabundance of benefits that support your entire body. Check out our entire range; there's something for all.

