Psilocybin Overview

Benefits

Psilocybin is an amazing neuroregenerative medicine that is only now beginning to be more fully understood. It acts as a nootropic. (a cognitive enhancer-improving executive functions, memory, creativity, or motivation) Evolving from the times when it was seen as a hippy pastime, psilocybin mushrooms are now rightly being recognized as potent allies against degenerative brain disorders, depression, and mental stress. People are finding increased creativity, reduced anxiety, and a breakthrough in habitual patterns by the use of psilocybin as they often enable the building of new connections in the brain. Paul Stamets, in his book *Mycelium Running*, also highlights that psilocybin can be helpful for neuropathy, hearing loss, and end-of-life anxiety. They have even been studied as allies in the struggle with alcohol and tobacco addiction. (1)

History/Background

We know that for at least 500 years mushrooms have been in use going all the way back to the Aztecs, but have likely gone back to the Mayans and much farther. Stamets states that use goes back at least seven thousand years and could even go to paleolithic times. *(Psilocybin Mushrooms of the World 1996 by Paul Stamets)*

From Wikipedia "Imagery found on prehistoric_murals and_rock paintings of modern-day Spain and Algeria suggests that human usage of_psilocybin mushrooms predates recorded history. In Mesoamerica, the mushrooms had long been consumed in spiritual and divinatory ceremonies before Spanish chroniclers first documented their use in the sixteenth century. In 1959, the Swiss chemist Albert Hofmann isolated the active principle psilocybin from the mushroom Psilocybe mexicana. Hofmann's employer Sandoz marketed and sold pure psilocybin to physicians and clinicians worldwide for use in psychedelic psychotherapy. Although the increasingly restrictive drug laws of the late 1960s curbed scientific research into the effects of psilocybin and other hallucinogens, its popularity as an entheogen (spirituality-enhancing agent) grew in the next decade, owing largely to the increased availability of information on how to cultivate psilocybin mushrooms."

Between 1950 and the mid-1960s there were more than a thousand clinical papers discussing 40,000 patients, several dozen books, and six international conferences on psychedelic drug therapy. It was recommended for a wide variety of problems including alcoholism, obsessional neurosis, and childhood autism.

General Effects

Common effects include expanded conscious awareness, euphoria, visual and mental_hallucinations (typically with higher doses), dilated pupils, increased heart rate or blood pressure, changes in_perception, a distorted_sense of time, and perceived_spiritual experiences. Positive traits of openness can also be enhanced lasting up to a year post-experience. (2) Dreamy states, dry mouth, synesthesia, euphoria, yawning, and increased empathy are also common effects. Adverse reactions such as_nausea and_panic attacks are a possibility. Some articles online will point out the potential for addiction with psilocybin but Paul Stamets- a world expert on the subject states that this is highly unlikely.

Note - The effects of psilocybin are highly variable and depend on the mindset and environment in which the user has the experience (ie set & setting)

Dosing

• Microdosing

Microdosing is the act of consuming sub-perceptual amounts of psychedelics.(ie Psilocybin) Sub-perceptual means the effects are subtle, but can have a noticeable influence on your life.

Typically, individuals integrate sub-perceptual doses into their weekly routine. Microdosers often report higher levels of creativity, more energy, increased focus, and improved relational skills. Many people microdose in order to treat depression or anxiety, (3) with often remarkable results. Some enthusiasts also report microdosing helps to heighten spiritual awareness and enhance all five senses.

How to microdose with psilocybin:

Take 1 capsule a day for 4 days on and 3 days off OR start slow with 1 capsule every 3 to 4 days.

Also recommended is watching or listening to the podcast with Joe Rogan and

Paul Stamets. (LINK) Paul talks in detail about how low doses of psilocybin are safe to take 5 days on and 2 days off, and the nootropic qualities.

• Macrodosing

Macrodosing is consuming higher amounts of psilocybin mushrooms that range from low to heroic doses. (0.3-28g. Most commonly done in a range between 1-7g) While it can be incredibly profound and healing it can also offer hard or challenging moments as well. Being mindfully prepared for the experience can help make the difference between an unpleasant trip and the journey of a lifetime. Set and setting and being in a good state of mind to start become even more important with macrodoses.(4) Visuals may be more intense with eyes closed in a dark setting.

Also it's worth considering Andrew Weil's advice that it's best not to take mushrooms casually simply because they are available when the time is not right. Best to avoid this mistake and be mindful, intentional and respectful of these medicines. Also be sure you have reviewed potential interactions & contraindications before macrodosing to ensure safety.

Interactions/Contraindications

Since psilocybin is a potent serotonin agonist, it's best to avoid using it while on any medications that alter the serotonin system, such as SSRI antidepressants (ie Prozac).

Psilocybin is contraindicated in people with a family history of schizophrenia or early-onset health problems, in developing children, and in pregnant and lactating women. Avoid taking psilocybin if you're feeling nervous, stressed or depressed. Psilocybin is not recommended for those with serious hypertension. Psilocybin should not be mixed with Tramadol, as it can lead to Serotonin Syndrome. Be very cautious if mixing psilocybin with stimulants.

Tolerance will also be an issue if taking psilocybin in close proximity to other psychedelics and potency will be reduced.

References

(1) Matthew W. Johnson et al., "Pilot Study of the 5-HT2AR Agonist Psilocybin in the Treatment of Tobacco Addiction," Journal of Psychopharmacology 28, no. 11 (2014), pp. 983–992; Michael P. Bogenschutz et al., "Psilocybin-Assisted Treatment for Alcohol Dependence: A Proof of Concept Study," Journal of Psychopharmacology 29, no. 3 (2015), pp. 289–299

(2) Persistent Positive Effects

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3308357/

(3)

"Over the last decade, the psychedelic drug class, notably psilocybin, has also been investigated as a treatment approach to MDD (Major Depressive Disorder)(Nichols, 2016; Geiger et al., 2018; Nutt, 2019). At psychotomimetic doses, psilocybin has been reported to produce a rapid relief of depressive symptoms in patients with treatment resistant, moderate to severe depression (Carhart-Harris et al., 2016) and also in patients with life-threatening cancer (Griffiths et al., 2016; Ross et al., 2016). These clinical studies have utilized two to three treatment sessions plus intensive personal support and therapist counseling and demonstrated antidepressant efficacy that persists beyond the pharmacodynamic/pharmacokinetic property of psilocybin, suggesting a long-term neuroadaptation or a reset of the "default networks" (Carhart-Harris et al., 2012; Kyzar et al., 2017; Nutt, 2019; Vollenweider and Preller, 2020)." Excerpt from https://www.frontiersin.org/articles/10.3389/fphar.2021.6 40241/full

(4) Further info on Set&Setting, Macrodoses etc <u>https://mindfulmeds.io/macrodosing101/</u>

(5) End of Life Research (numerous studies) <u>www.maps.org/</u>