

Learn Everything You Need To Know About The Psychedelic 5-MeO-DMT

Overview

01

5-MeO-DMT is a psychedelic of the tryptamine class, four to six times more powerful than its better-known cousin, [DMT](#) (N,N-dimethyltryptamine). It can be found in a wide variety of trees and shrubs, often alongside DMT and bufotenine (5-HO-DMT).

In Central and South America, some of the best known plant sources are *Anadenanthera peregrina* (yopo or cohoba) and *Virola theiodora*—both of which are traditionally harvested to make psychoactive snuff. It's also found in the milky white venom of the *Bufo alvarius* toad native to the southwestern United States and northwestern Mexico.

In keeping with its ceremonial use among indigenous Amazonians, 5-MeO-DMT shows great promise in the treatment of certain medical conditions. Many people also find its effects to be personally useful or even life changing.

History & Stats

02

Traditional use of 5-MeO-DMT in the Americas goes back hundreds – maybe even thousands – of years. Ancient snuffing paraphernalia and traces of the compound found in northern Chile date the practice to at least the 8th century.^[1] The use of 5-MeO-DMT-containing snuff was first recorded in 1496 by Friar Ramón Pané. Reporting to Christopher Columbus on the Taíno people of Hispaniola, Pané observed inhalation of *cohoba* snuff through reeds. Typically, it was used as a purgative for the sick, as well as a medium through which to obtain medical diagnoses from spirits.^[2]

In 1737, Joseph Gumilla observed a similar practice, with *yupa* (or *yopo*), among the Otomac of southern Venezuela.^[3] Some time later, Alexander von Humboldt described how the snuff was made. First, the seeds of the *Acacia niopo* (*Adenanthera peregrina*) were left to blacken, then mashed into a paste with cassava flour and lime from snail shells. This mixture was dried over a fire and pulverized for use—typically inhaled through a Y-shaped bone tube, such as a plover leg, with the forked ends straddling the septum.^[4] Another account from Richard Spruce in the mid-1800s described the use of tubes between two people—one to blow the snuff into the nostrils of the other.^[5] Spruce also collected specimens of the *Adenanthera peregrina* for identification.

In 1936, 5-MeO-DMT was synthesized by the chemists Toshio Hoshino and Kenya Shimodaira.^[6] But it wasn't until 1959 that it was finally identified as the major psychoactive component of *yopo*/*cohoba*.^[7] It was also found in the venom of the *Bufo alvarius* (Sonoran Desert or Colorado River toad), sometimes at levels of up to 15% by volume.^[8]

From the early 1970s, 5-MeO-DMT could be legally ordered in the US and other countries via mail order from the Church of the Tree of Life^[9] and the Church of the Toad of Light.^[10] Since scales

accurate to the milligram weren't widely available, it was typically added to parsley or cannabis to help with dosing.^[11]

Recreational use steadily increased over the ensuing decades while remaining underground. In the 1990s, ethnobotanist [Jonathan Ott](#) and others popularized 5-MeO-DMT and developed it for sale on the internet. In 2001, research chemical vendor Mark Niemoller was arrested under the Controlled Substances Analogue Act of 1986. He was released on house arrest after agreeing to stop selling 5-MeO-DMT and a number of other substances.^[12] In July 2004, "Operation Web Tryp" saw the DEA shut down five more research chemical vendors, prompting numerous others to stop trading voluntarily. In January 2011, 5-MeO-DMT was declared a Schedule I drug in the United States.

Current use

5-MeO-DMT is often conflated with other tryptamines or "novel psychoactive substances" in [major drug surveys](#), so it's difficult to gauge its exclusive prevalence.

However, it's possible to get a general feel for its popularity over time by looking at [Google search statistics](#). Between 2004 (the year of "Operation Web Tryp") and 2007, searches for 5-MeO-DMT fell dramatically and have remained at a steady low ever since.

Pharmacology

03

Like the other tryptamines, 5-MeO-DMT has the same basic indole ring structure as [DMT](#). It is so-called for having a methoxy group in the R5 position.

RECEPTOR BINDING

5-MeO-DMT works primarily through the serotonin (5-HT) system, with a particular binding affinity for the 5-HT_{1A} receptor subtype.^[13] It also binds to 5-HT_{2A} and trace amine receptors, possibly mediating hallucinogenic effects via the latter.^[14]

SAFETY AND TOXICITY

There is some evidence that indolealkylamines, including 5-MeO-DMT, cause serotonin syndrome when overdosed or combined.^[15] Of particular concern are possible interactions with monoamine oxidase inhibitors (MAOIs) such as harmaline or harmine.^{[16][17]} These are sometimes combined with the drug to enhance its effect, but can dangerously increase exposure to both 5-MeO-DMT and its active metabolite bufotenine.^[18]

Some other safety concerns have been flagged up by animal studies. In rats, 5-MeO-DMT was found to induce hypothermia at low doses (0.5-1 mg/kg) and hyperthermia at high doses (3-10 mg/kg). In sheep, grazing on the 5-MeO-DMT-containing *Phalaris tuberosa/aquatica* (or bulbous canary-grass) caused fatal tachycardia and respiratory failure.^[13] Although more likely due to other toxins in the plant^[19], this severe reaction underscores the need for caution when approaching 5-MeO-DMT's many and varied natural sources.

Effects

04

In its crystalline form, 5-MeO-DMT is often vaporized or insufflated (snorted). Effects from vaporizing are usually felt within the first 30 seconds, peaking from 1-15 minutes and lasting for up to half an hour. A threshold dose is around 1-2 mg, while a moderate-to-strong dose is 5-10 mg.

Insufflated, it may take up to five minutes to feel the effects, despite the higher dose ranges involved (threshold: 3-5 mg; moderate: 8-15 mg). Effects tend to peak after 10-30 minutes and subside from around 30-45.^[20]

5-MeO-DMT may also be swallowed^[21], taken sublingually (under the tongue), or injected.^[22] Much higher doses are required for swallowing and results can be unreliable.

WHAT TO EXPECT

Effects come on strong, often with a loss of physical coordination and control. Users experience bright colors, moving environments, or recursive patterns, and perhaps even “environmental orbism” at higher doses. However, visual effects are limited. Unlike DMT, 5-MeO-DMT isn’t known for its visionary properties. The experience is more often described as a “perspective shift” characterized by physical, emotional, and conceptual effects.

One of the most common features of the 5-MeO-DMT experience is an enhancement of tactile awareness to the point of sensory overload. The body may also feel heavier. Intense emotions are typical, ranging from extreme fear to euphoria, and especially include anxiety or excitement during onset. It’s common to experience an overwhelming sense of oneness with the universe, or a sense of being outside of time and space while seeming to experience the totality of both. The concept of the ego as a separate entity is typically lost. Other effects include auditory hallucinations, time distortion, nausea, and memory loss.

[\[22\]\[23\]\[24\]\[25\]\[26\]](#)

[***Click here to listen to Ashley Booth describe her life-changing 5-MeO-DMT experience***](#)

PRECAUTIONS

5-MeO-DMT should not be taken with MAOIs, including some antidepressants. Combining them may cause severe hypertensive symptoms (elevated blood pressure, heart rate, and temperature), seizures, long-term kidney damage, serotonin syndrome, and death.^[27]

Because of the somewhat unpredictable nature of 5-MeO-DMT, a sitter is definitely recommended. Short-term unconsciousness, respiratory depression, and delusional interactions with the environment are some of the things to watch out for.^[28] At the very least, it should be taken in a comfortable seated or lying position to avoid falling over.

Those new to 5-MeO-DMT should start out with a low dose, weighed on a scale accurate to 0.002 g (2 mg). Since people tend to react differently to the same doses (and it’s not entirely clear why) caution is advisable even if you have prior experience of tryptamines.

As with any psychedelic, follow [the 6Ss of psychedelic use](#) to minimize the risks of a bad experience.

Myths

05

“5-MeO-DMT is a form of DMT”

This myth is based on a common, and potentially very dangerous, misunderstanding of pharmacology. It's no more a form of DMT than psilocybin is. Although chemically related, 5-MeO-DMT has a substantially different toxicity profile. It's also active at much lower doses, so a case of mistaken identity could lead to overdose. [\[29\]](#)

“LICKING TOADS IS AN EASY WAY TO GET HIGH”

Alexander Shulgin attributed this myth (or rather, very bad idea) to sensationalism in the media. [\[30\]](#) Licking *Bufo alvarius* toads has never been a common method for obtaining 5-MeO-DMT, for the simple reason that it's deadly. Other chemicals in raw toad secretions are known to be cardiotoxic, which means they'll disrupt the functioning of the heart. Numerous humans have died after licking toads and one child who was hospitalized with seizures from *Bufo alvarius* venom took a week to recover. [\[31\]](#) Given that just this one, geographically isolated species is known to be psychoactive, there's also the danger of licking the wrong toad entirely, which can cause death or permanent paralysis.

Therapeutic Use

06

5-MeO-DMT is routinely used to alleviate depression, anxiety, PTSD, and addiction. [\[32\]](#)[\[33\]](#) It's sometimes used alongside ibogaine treatment to help patients integrate what they've learned. [\[34\]](#)

Limited clinical research appears to support such use of 5-MeO-DMT in treating addiction and depressive disorders. After administering the compound to mice, researchers found a major downregulation in mGluR5, a receptor involved in the reward mechanism of drug abuse. Not only are mice without the mGluR5 gene less likely to self-administer cocaine and ethanol, they also show less severe symptoms of nicotine withdrawal. Furthermore, cells treated with 5-MeO-DMT showed an upregulation of integrins, a response similar to that of depressed patients to antidepressant medications. [\[35\]](#)

5-MeO-DMT also appears to have a placebo analgesic effect comparable to hypnosis. [\[36\]](#)[\[37\]](#)[\[38\]](#) Like the other classical psychedelics, it may be useful in the treatment of acute and chronic inflammatory conditions [\[39\]](#)[\[40\]](#), including some cancers. [\[41\]](#)[\[42\]](#)

More indirectly, 5-MeO-DMT helps researchers to better understand the neurobiological basis of schizophrenic hallucinations—ultimately paving the way for more effective antipsychotic drugs. [\[43\]](#)

Personal Growth

07

Ego loss on 5-MeO-DMT is often described in positive terms—even if the experience was terrifying at the time. Many see it as a process of death and rebirth followed by lasting self-improvements, including mental clarity, increased motivation, enhanced awareness, joy in living, and a sense of inner peace. Some have also had empowering “enlightenment” experiences characterized by a sense

of [inseparability from the universe](#) or of being “[all that exists](#).”^{[44][45][46]} Often, these experiences come in waves or ‘reactivations’ over the following days or weeks.

Being forced to let go of the ego is precisely what draws many people to 5-MeO-DMT. The dissolution experience can impart an understanding and acceptance of mortality that helps to overcome the fear of death.^[32] It can also break attachments with past trauma, negative behaviors, and habitual negative thought patterns.

One group of [5-MeO-DMT ‘practitioners’](#) have suggested a number of specific [integration and grounding techniques](#) to make the most of the potential for growth. These include acupuncture, massage, physical exercise, certain foods, and even just talking to others. Interestingly, they advise against meditation because it could end up prolonging the grounding/integration period by triggering additional ‘reactivations’.

Legality

08

5-MeO-DMT is a Schedule I controlled substance in the United States, which means it’s illegal to manufacture, buy, possess, or distribute. It’s also illegal in the United Kingdom, Australia, New Zealand, and many European countries—although in Denmark, at least, it’s permitted for use in research.

In Canada, it remains unregulated and widely available for purchase online.^[47]

FAQ

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Can it be detected in a drug test?

5-MeO-DMT isn’t detected in any standard or extended drug tests, nor are there specialized tests to look for it. Also, since it’s unlike other drugs tested for, it shouldn’t trigger a false positive.

Will it make me go crazy?

Most people find the effects overwhelming. Consensus reality, the physical environment, body, and self tend to fall away and behavior can become [irrational](#). While long-term psychosis seems improbable, it may take [some time to fully recover](#) from the experience.

After higher doses, some users have reported persistent psychological difficulties, including paranoia and the subtle (but controllable) resurfacing of effects, that can last for several weeks.^{[48][49][50]}

“White-outs” and memory suppression are also common during the trip itself, negatively affecting users’ ability to form memories of the altered state.^{[22][24]}

Are there risks?

Taken in the presence of a sitter with no other drugs or contraindicated medications (like MAOI antidepressants), 5-MeO-DMT appears to be relatively safe. That said, persistent anxiety has been

reported after just one use, along with sleep disruption and panic attacks. To help minimize the risks, it's a good idea to start with low, precisely measured doses, and have an experienced sitter present.

Alternatively, you may wish to have a more actively engaged facilitator, or 'practitioner', present—a 5-MeO-DMT specialist trained to guide and help integrate your experience. [Click here for in-depth tips](#) on how to choose the right person or group for the job and what you should expect them to do.

Is it legal to keep toads or grow plants containing 5-MeO-DMT?

Cultivating natural sources of Schedule I drugs (except in specified cases like cannabis and peyote) is a bit of a legal grey area. While the law prohibits "any material containing any quantity" of illegal substances, the likelihood of prosecution is slim. On the other hand, extracting 5-MeO-DMT from any source is definitely illegal and will lead to prosecution if caught.

Regarding toads, the rules are clearer. In New Mexico, only state residents may collect them without a license. Both residents and non-residents of Arizona need a fishing license to collect a maximum of 10 *Bufo alvarius* toads. In California, meanwhile, it's a misdemeanor to collect toads and possession is against the law. Regardless of the legality, though, *Bufo alvarius* is a threatened species. Keeping toads in captivity—not to mention regular "milking"—is found to damage their health.

What's the safest way to take it?

There is no entirely safe way to take 5-MeO-DMT. That said, vaporizing is by far the most popular way and it also seems to be the safest. The onset of effects is shorter than with insufflated or sublingual use, however some people experience chest pains from the smoke. Others experience no effects whatsoever and prefer intravenous or intramuscular injections. These induce rapid, intense effects even at low doses. Swallowing the drug isn't recommended due to safety concerns and it's often ineffective anyway.

Can I microdose with 5-MeO-DMT?

As people's reactions vary immensely, it's hard to give a reliable microdose range. Some have felt [profound effects](#) on less than a threshold dose, while others experience [only mild effects](#) from a moderate dose.

Can I develop a tolerance?

Yes, tolerance develops almost immediately and takes two hours to return to baseline. But there is no cross-tolerance with other psychedelics.

Can I mix it with other drugs?

It shouldn't be mixed with MAOIs or RIMAs, including some antidepressants, due to the risk of serotonin syndrome and death. Releasing agents and reuptake inhibitors, for serotonin and dopamine especially, can be dangerous in combination. For this reason, mixing 5-MeO-DMT with other psychoactive drugs or alcohol is generally discouraged.

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