

## ► Dancing With Angels

For all their reputed magic, mushrooms can be more of a mystery than some people imagine.

One reason is that mushrooms are often in high demand and low supply, which means that unscrupulous dealers of the get-rich-quick persuasion (is there any other kind?) have been rumored to treat supermarket mushrooms with LSD or PCP and pass them off as the Real Deal.

And even though some users might think it's safer to pick their own, things can get even trickier then.

The presence of poisonous lookalikes only compounds the risk. Experts say toxic mushrooms outnumber psilocybin varieties by a ratio of ten to one. And while a reliable guidebook can reduce the risks, only laboratory analysis can provide positive proof that a particular mushroom is edible—and safe.

And since two dozen mushroom species contain varying amounts of the drug, gauging a safe dose is a lot like estimating the number of angels that can dance on the head of a pin.

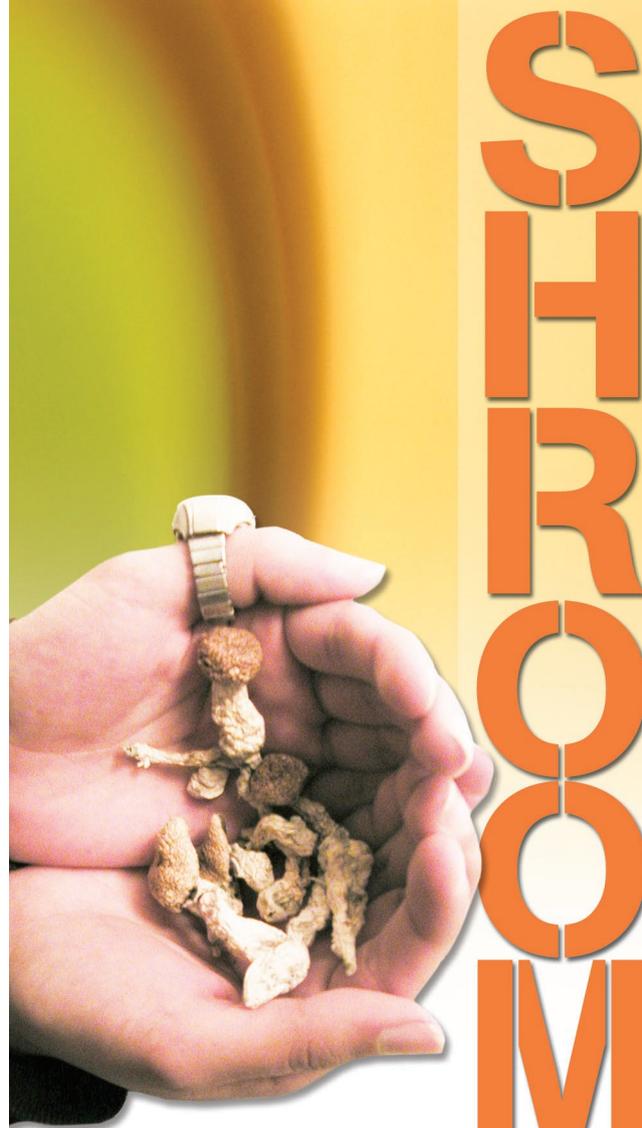
Theoretically, it *can* be done (assuming that angels *do* dance on pins), but chances are you won't know won't for sure, unless you get lucky with a guess. Or an angel tells you. ■

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## Demystifying the 'Magic Mushroom'

► A Do It Now Foundation Publication by Jennifer James

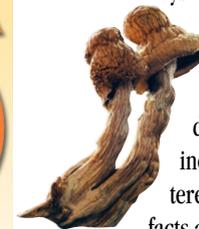
## ► Life Repeats Itself

They say that history repeats itself, then repeats itself again. It sure seems to, if drug trends are any indication. Take psilocybin, for example.

Prized for centuries by Central American Indians, psilocybin mushrooms (also known as “shrooms” and “magic mushrooms”) enjoyed brief bursts of popularity in the 1960's and '70s—and '80s and '90s.

But that was then, and this is now, right? End of the psilocybin saga? Well, no. *Not exactly.*

Because a recent survey showed that 15 percent of students at two California universities admitted using psilocybin, making it the most-used hallucinogen on campus.



And from points as far flung as Oregon, Wisconsin, New York and Arizona (and as distant as England and Wales), reports of increased psilocybin use reflect a renewed interest in the drug—and a new need to sort out facts and fiction about its actions and effects.

Because another thing that history shows is that people seem to like finding out about problems by banging their heads into them. And if the past really *is* prologue to the future, lots of people are due to start finding out about psilocybin that way any day now.

## ► Flesh of the Gods

Early Native American inhabitants of North America probably first found out about mushrooms the hard way—but, then again, centuries ago *everybody* found out about *everything* the hard way.

What they found in psilocybin was a natural drug that triggers a bewildering array of hallucinatory effects. It made such a big impression, in fact, that many believed the plant to be divinely-inspired, and incorporated the plant into religious rituals as long ago as 1,000 B.C.



The Aztecs also practiced sacramental use of mushrooms, which they called *teonanactl*, or “flesh of the gods.”

Non-Indians first became interested in the properties of psilocybin when reports of the closely-guarded mushroom ceremonies filtered out of Mexican backlands and into American universities. Still, it was 1936 before serious Western investigators even came within picture-taking distance of the legendary mushrooms.

Then, with the development of synthetic psilocybin in the mid-1950's, was sparked the first real interest in the drug as a tool in psychotherapy and the treatment of emotional disorders. And while few conclusive results emerged from early psilocybin research, the studies succeeded in superimposing the mantle of “science” onto psilocybin's ancient links with “magic.”

The combination proved irresistible to many at the time, and psilocybin remains a much-sought-after hallucinogen today. In the American West, Northwest, and South, where the mushrooms grow wild, many users take annual pilgrimages to growing areas. Supplies gathered can be dried and used—at full psychoactive potential—for months.

Adding to the renewed interest in—and availability of—psilocybin has been mail-order psilocybin kits, which combine legally-available mushroom spores with sophisticated cultivation gear.

Grow-your-own mushrooming is particularly prevalent in and around college campuses since the kits take up little physical space and fit easily into a dorm or apartment closet.

## ▶ Mushroom Mechanics

So what are psilocybin mushrooms? Lots of things—*literally*. Because despite what most people think, “psilocybin” isn't a single type of mushroom, at all.

In fact, “psilocybin” actually refers to a naturally-occurring hallucinogen (known in scientific circles as *phosphorylated 4-hydroxydimethyltryptamine*) that's found in more than two dozen *different* species of mushrooms.

The most common psilocybin-containing mushrooms fall in the genus *Psilocybe*, and all are different in size, shape, potency, and habitat.

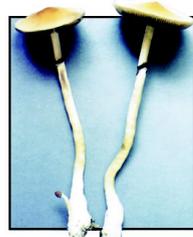
**C**ontrary to what many people think, psilocybin isn't a single type of mushroom. Instead, it's a naturally-occurring hallucinogen found in more than two dozen different species of mushrooms.



About 15 species grow in the northwestern United States alone, including *Psilocybe pelliculosa*, *Psilocybe synaescens*, and *Conocybe cyanopus*, to name a few. And there are a lot more where they came from.

And the confusion doesn't end there. Because even the term “psilocybin” isn't entirely accurate.

Although psilocybin is the main psychoactive ingredient found in the fungus, a smaller but more potent compound (called *psilocin*) also packs a good part of mushrooms' psychedelic punch.



*'Shroom with a view. Psilocybe cubensis, AKA psilocybin.*

Research shows that psilocybin is converted in the body to psilocin before triggering its mind-altering effects.

And while it's still uncertain exactly *how* mushrooms (or other hallucinogenic drugs, for that mat-

ter) exert their effects, researchers think the compounds disrupt the balance of brain chemicals that regulate sensory perceptions and the processing of new information.

And that's something that people who learn things the hard way learn about psilocybin right away.

## ▶ Body/Mind Actions

Like LSD, psilocybin triggers a kaleidoscopic cascade of effects. And also like LSD, estimating dose and strength is tricky since each type of mushroom varies in potency and duration of effects.

At moderate dosage levels, psilocybin raises body temperature, pulse rate, and blood pressure, and causes

enlargement of the pupils. Nausea and feelings of numbness are also common.

As physical effects plateau, LSD-like perceptual and cognitive changes kick in, resulting in massive alterations of thought and focus and mood.

Emotions and physical sensations typically seem more acute, even awe-inspiring, and sensory input may seem to “cross over” among senses, a condition known as *synesthesia*.

Like other hallucinogens, psilocybin tilts the balance of neurotransmitters that drive higher-order intellectual functions, making many activities—driving a car, for example—tricky *and* dangerous.

Psilocybin usually produces a milder hallucinogenic experience than LSD, which is a major reason for mushrooms' continuing popularity. Peak effects typically occur within two hours of ingestion and fade altogether within 3-8 hours.

Although tolerance to drug effects develops quickly, psilocybin does not produce physical dependence.

Similarly, symptoms of physical overdose are rare, since a lethal dose is estimated at more than 2,000 times the psychoactive dose.

Still, problems *do* occur.

And when they do, they usually take the form of sudden, acute anxiety reactions. Like other hallucinogens, psilocybin produces such vivid mental changes and rapid mood swings that users can easily feel overwhelmed by the flood of feelings and perceptions that psilocybin lets loose.

Still, while staring down panic may ultimately require little more than time and the support of a caring friend, it *can* be terrifying nonetheless.

