

ROAD RULES ■

Flashing back to the here-and-now, it might seem strange that LSD is still around and so widely used today. But it shouldn't be that surprising, because LSD and drugs like it have been tickets to ride on the Grand Tour of human consciousness for eons.

They've guided the visions of shamans and seers and helped shape philosophies and cosmologies across the world and throughout history.

That's one reason LSD still fascinates us — and still attracts willing new test subjects — today. Because it promises — in a single, paradigm-busting session inside a user's own head — a journey filled with awe and mystery to people whose lives have been bleached white with conformism and consumerism and almost every other kind of -ism, except self-determinism and love.

Not much wrong with *that*—or there wouldn't be if the awe from acid didn't so often turn awful. When that happens, the only real mystery is why we ever feel the need to get away from the only place we belong.

Perhaps the best final word on LSD today is simply this: It takes users to places that aren't on maps, where self-examination is unavoidable and passengers double as both navigator *and* pilot, with each accountable for the trip.

And if you're not aware of the risks of the ride and comfortable with the rules of the road, you really don't have any business going there at all. ■



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FLASHBACKS ■

If Albert Hofmann ever dreamed of achieving fame or notice beyond the respect of his peers in the research community, it didn't show.

In fact, Hofmann was just another 9-to-5 organic chemist in the research lab of Sandoz Pharmaceuticals in Basel, Switzerland until April 16, 1943.

That's when he happened onto a most momentous discovery—or, more precisely, when a momentous discovery happened into *him*.

While testing a compound he'd discovered five years before, a member of an ergot alkaloid chain named *d-lysergic acid diethylamide*, traces of the chemical soaked into his body through his fingertips.

What followed was the world's first LSD trip.

Eight or ten hours after that, after Hofmann negotiated the mind-bending complexities of a bicycle ride home from work and drifted back into good old *consensual* reality for the first time, the Psychedelic Revolution was born.

And it was—and continues to be—a real revolution. It's changed the way writers write and philosophers philosophize and pop music pops.

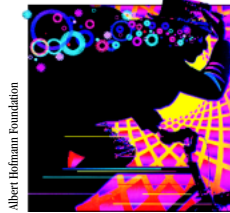
It's altered physics and fashion, art and spirituality, and reshaped the lives of people who never took it by morphing the mental maps and social consciousness of those who did.

It's been hailed as a chemical bullet into a white-light zone of pure understanding and blasted as a blueprint for personal disaster.

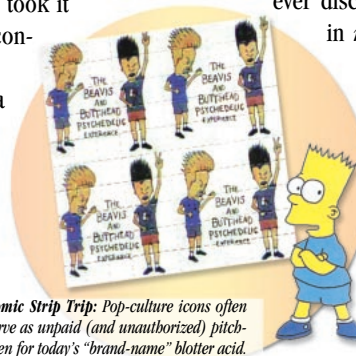
Who's right? Well, that depends—as Dr. Hofmann probably could have told you 60 years ago—on how you look at it.

And lots of people *have* looked at it. In a 2006 survey, 3.3 percent of U.S. high school seniors admitted trying it, and an estimated 22.4 million Americans say they've experimented with it, at one time or another.

That's why we put together this pamphlet.



Accidental tourist: Swiss chemist Albert Hofmann discovered LSD's effects during a 1943 bicycle ride.



Comic Strip Trip: Pop-culture icons often serve as unpaid (and unauthorized) pitchmen for today's "brand-name" blotter acid.

LSD is one of the most powerful drugs ever discovered. Psychoactive effects kick in at doses as low as 30 one-millionths of a gram. (Roughly the weight of the ink in the period at the end of this sentence.)

Because LSD remains the cheap-thrill of choice for many in today's alternative culture and since the drug is as potent—and potentially risky—as ever, a progress report on Hofmann's chemical baby is clearly due.

Because even after 60-plus years on the job—and in our collective consciousness—LSD is as mysterious today as it ever was. And for people who don't know what they're getting into when they get into acid, it can be a lot more than that.

A LITTLE DAB'LL DO YA ■ DOSES AND FORMS

Since they got used to the onslaught of imagery and perceptual distortion that LSD evokes (if anybody ever *really* gets "used to it"), Hofmann and early researchers were still **amazed** by LSD's potency.

That's because LSD is one of the most potent drugs ever discovered—so powerful that it's measured in *micrograms* (or *millionths* of a gram), instead of the more common, thousandths-of-a-gram unit known as *milligrams*.

In fact, LSD (or "acid," as it's commonly known) is so strong that an effective dose (about 30 mcg) is virtually invisible.

For underground chemists who've churned out the drug since 1966 (when possession was banned in the U.S.), measuring precise doses of the colorless, odorless, tasteless drug *can* be a lot like guessing the weight of a person they've never met over a telephone.

The solution turned up in the solution itself: diluting liquid LSD, then dripping it onto an absorbent medium.

And since almost anything will do, LSD has made the scene in a variety of formats over the years. Sugar cubes were an early favorite, but they had drawbacks—crumbling in pockets, for example, or being stirred into coffee. Tablets, capsules, mini-tablets, and gelatin chips (“windowpane”) followed, but today, the most common form is “blotter”—LSD-soaked paper.

Blotter has become so popular in recent years that it’s gone Hollywood, sporting imprints of such cultural icons as Bart Simpson and Beavis & Butt-head.

Dosage has stabilized, too, with acid’s renewed pop-culture appeal. Today’s acid averages 20-80 mcg, contrasted to 150-250 mcg doses common in the ’60s.

INNER ACTIONS ■ LSD & THE BRAIN

No matter *how* it gets there, once it’s inside the body, LSD sets out on an incredible microscopic trip of its own, interacting with the deepest biological circuits and engines of human consciousness.

The drug itself is quickly absorbed and almost as quickly eliminated from the body.

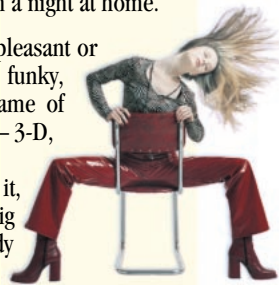
► Set and Setting: Expectations and Environment

Since LSD radically alters normal mental and emotional processes, issues of “set” and “setting” can be critical in determining the outcome of a trip.

- **Set** refers to a user’s **mind-set**, including experience, expectations, and emotional state.
- **Setting** centers on physical surroundings. A chaotic environment (say, a rave or a dance club) can trigger a *way* different trip than a night at home.

That’s why using LSD in an unpleasant or unfamiliar setting (or during a funky, temporarily-toxic, stressed-out frame of mind) is like asking for trouble — 3-D, stereo, *Sensurround™* trouble.

And if you’re not expecting it, that type of trouble that can be Big Trouble — bigger than anybody *ever* wants to handle. ■



After two hours, less than 10 percent of the drug is still active; the rest is broken into inactive by-products by the liver.

Even though only a small portion of each dose stays biologically active (and even less—only 0.01 percent—ever crosses into the brain), that tiny amount is *plenty*.

How acid produces its effects is still only partly understood. But among its other effects, acid alters the action and supply of *serotonin*, a neurotransmitter that the brain uses to make sense of all the scents and sights and sounds that filter into us from the world out there.

The result is a lowered threshold for sensory stimulation, and a temporary overload of central nervous system circuitry.

And when CNS circuits overload, sensory signals flood in and normal thought processes float (or fly) out the window.



Mind melt: LSD alters the function of neurotransmitters that process thought and perceptions.

CH-CH-CH-CHANGES ■ BODY/MIND EFFECTS

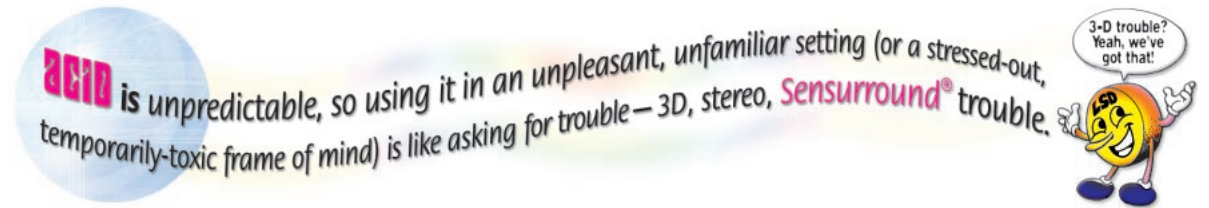
While most of the specifics of LSD’s actions on the brain are still a mystery, its effects on perception and thought are anything *but*. They’ve been the subject of serious scrutiny since Albert Hofmann started babbling about them in 1943.

A “normal” acid trip (if anything about LSD can be called “normal”) starts 30 to 90 minutes after ingestion and lasts six to nine hours.

Initial effects are mostly physical: dilated pupils, muscular weakness, rapid reflexes, decreased appetite and increased blood pressure and body temperature.

Later effects zero in on thought and sensory processes. As the drug scrambles neurochemistry, visual, auditory, and tactile sensations can collide in a form of sensory crossover (in which sounds can appear as colors or smells as touch) called *synesthesia*.

During a trip’s “peak,” perceptions and thoughts can take on the plastic surreality of dream states.



Other common effects include distractibility, rapid mood swings, depersonalization, and distortions in body image.

HELTER SKELTER ■ FLASHBACKS & BAD TRIPS

Scare stories about LSD are legendary. Still, the drug rarely causes serious *physical* problems.

Users may suffer a “crash” period, though, which can lurk in the background of everyday consciousness for a few days after the LSD wears off.

Users also typically become much less sensitive to LSD’s effects for several days after use—a condition known as tolerance.

Studies show that LSD doesn’t cause cancer, brain damage, or chromosome breakage. And despite its potency, it’s virtually impossible to overdose on it.

That doesn’t mean it’s *good* for you, though.

LSD can (and does) cause severe psychological discomfort—even trauma. In fact, one bad trip can quickly outrank *dozens* of hearts-and-flowers trips.

► Acid Test: Pushing Past Panic

For many users, staring down a full-blown LSD panic is one of the most mind-numbing times they’ll ever spend with themselves. That’s why bad trips have inspired such fear and loathing over the years—and so many approaches for pulling the plug on panic. If you ever need them, here are a few that work:

- **Stay calm.** If you’re scared, the tripper will know it—and feel even more panicky.
- **Be supportive.** Define reality. Remind the person that they’re experiencing drug effects that *will* pass.
- **Use distractions.** LSD users *are* distractible, so draw their attention to something more pleasant.
- **Change the setting.** Sometimes, simple changes in setting — like dimming lights or turning down blaring death-metal music — is all it takes to calm an anxious, prospective acid casualty.

Reassurance from a friend can make a big difference—all the difference, in fact, between a passing thought (Okay, a “passing thought” dressed up like one of the bad kid’s tormented dolls in “Toy Story”) and a full-tilt bad trip with lasting psychological scars.

Just being calm (and patient) could earn you a place as a friend, indeed, to a friend in need. ■



When bummers occur, they tend to take two main forms—panic attacks and psychotic reactions:

■ **Panic.** The most common adverse reaction to LSD, panic usually centers on a fear of dying or going crazy.

■ **Psychotic Reactions.** Serious breaks with reality, psychotic episodes can include hallucinations, delusional beliefs, and bizarre or self-destructive behavior.

LSD-fueled psychotic episodes are like bad trips that don’t end when the drug wears off. Such reactions may be linked to the “unmasking” of pre-existing problems and may require professional intervention.

Another occasional effect of LSD are flashbacks: the reemergence of effects—usually panic—days or weeks later. Since LSD is not retained in the body, flashbacks are probably psychological rather than physical in origin. Triggers can include stress, drug use, or cues associated with a past trip.

Although acid flashbacks—like other anxiety reactions—usually subside within about 90 minutes, they can seem both endless *and* unendurable, since they tend to center on unpleasant aspects of bad trips.