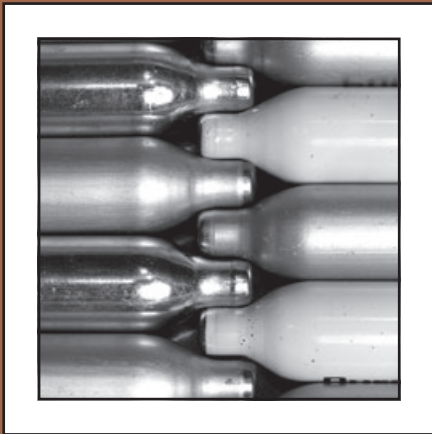


# Erowid Extracts

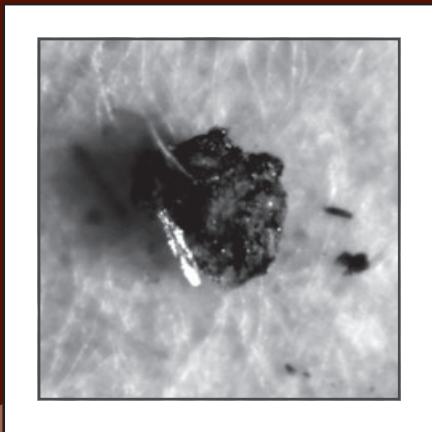
DOCUMENTING THE COMPLEX RELATIONSHIP BETWEEN HUMANS AND PSYCHOACTIVES

November 2009

Number 17



*"[...] happiness lies,  
first of all, in health."  
—George William Curtis*



N<sub>2</sub>O Charger Contaminants • Sampling Carbogen • Hofmann & Stolaroff Letters  
"2C-B-Fly" Deaths • Visionary Art Book Reviews • 5-MeO-DMT vs. "DMT"

Much of the information in your vaults is rare and hard to find. If you weren't working hard to preserve this information, it could be lost forever. Some of us use it out of intellectual curiosity and some of us are serious researchers in neuropharmacology and related disciplines. Obviously, many others who use the Erowid resource are just people who feel they have a right to control their own consciousness. Whether that's always a safe thing to do or not depends on a lot of factors, but we have to accept that altering one's consciousness is an ancient human activity that continues to the present and will persist into the future. Outlawing it does not work, and indeed it is counterproductive. If we are to reduce the risk of these activities—and only a fool thinks there are no risks in charting unknown waters—the best course is to provide full information. That's what Erowid does. Given the risks and benefits of neuropharmacology and the large amounts of misinformation that is available on the Internet, there has never been a time when Erowid is more needed. When you are criticized for "promoting illegal drug use," you should counter that your organization's goal is to provide information about something that is already being done in the modest hope that we can learn something useful from the activity and at the same time help reduce the risks that arise from ignorance.

— G.T.  
*Erowid Member*

I wish I had more to give. This is the first monetary donation of my life... I'm proud to contribute to this organization. Knowledge is power.

— V.H.  
*Erowid Member*

I just want to let you know how much I appreciate Erowid. It is a site I refer a great many people to and it has helped inform and strengthen my own efforts to decriminalize and educate others to the realities of mind-expanding experiences. Thank you again for all the work you do.

— L.N.  
*Email to Erowid*

Those red star microdots Erowid saw last year at Boom Festival, containing LSD but being sold as mescaline [mentioned in *Erowid Extracts* Number 15] are *still* being sold at various festivals in Europe as mescaline; they were last seen at the OZORA Festival in Hungary, mid-August 2009. So thanks for the early warning; being able to not only explain the obvious, that they can't be mescaline, but also what they *actually are* has helped me help others :-)

— H.G.  
*Erowid Member*

Continue with the hard work of educating people on the harmful as well as the beneficial effects of drugs. No one likes taking something they don't understand!

— M.S.  
*Email to Erowid*

The future needs to be a brighter one for drugs of all kinds. Research. Responsibility. Knowledge. No more bullshit political agendas and misinformation campaigns. There are better ways to deal with problems than the ways currently employed, and there are better ways to perceive drugs than currently perceived!

— N.W.  
*Email to Erowid*

Erowid is absolute necessary in this world at this time.

— M.P.  
*Erowid Member*

I have been a frequent visitor of your site for about a decade, as my curiosity for mind-altering substances is unrelenting. I would just like to thank you all for what you have done for me and what you are doing for humanity and America. I have saved two of my friends from killing themselves with bad information and can credit no one but you guys for providing accurate information on the effects, dangers, and experiences of psychoactive chemicals.

— A.  
*Email to Erowid*

I've been using your site for over five years. Reliable information and easy navigation makes this one of my favorite sites on the net.

— T.R.  
*Erowid Member*

Your site has done wonders for me and my community throughout my life. Without Erowid.org, drugs would be as dangerous as the government says they are. Thank you; you've inspired me to educate and assist others as much as humanly possible. I've wanted to donate for years, but I have never been financially able. Now, that I have found myself with a little extra money, I feel I should help out the one place that has helped me out so much over so many years. Hopefully, in the future I will find myself in the financial position to help even more. You guys rock, keep up the good work. Peace and Love.

— K.M.  
*Erowid Member*

Thanks for access to all this amazing information. I've averted many crises and found many good ideas throughout the years. Keep up the good work!

— N.H.  
*Erowid Member*

Thanks very much for the work that you do. I am a 57-year-old mom of 21- and 23-year-old daughters, and appreciate your open-minded dedication to expanding consciousness and safety.

— H.S.  
*Erowid Member*

Send correspondence to:  
**[extracts@erowid.org](mailto:extracts@erowid.org)**

Please include your name, title, and city/state/country of origin to be published with your letter. Letters may be edited for length and clarity.

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EROWID CENTER is a non-profit educational organization working to provide free, reliable, and accurate information about psychoactive plants, chemicals, practices, and technologies.

The information on the site is a compilation of the experiences, words, and efforts of thousands of individuals including educators, researchers, doctors and other health professionals, therapists, chemists, parents, lawyers, and others who choose to use psychoactives. Erowid acts as a publisher of new information and as a library archiving documents published elsewhere. The collection spans the spectrum from solid peer-reviewed research to creative writing and fiction.

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Number 17, November 2009

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Know Your Body  
Know Your Mind  
Know Your Substance  
Know Your Source

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# Recent News & Updates

## Changes to Mexican Drug Law

On August 21, 2009, Mexico decriminalized possession of personal-use amounts of several psychoactive drugs, including opium (2 g), heroin (50 mg), cannabis (5 g), cocaine (500 mg), and LSD (0.015 mg). For MDA, MDMA, and methamphetamine, the maximum limits are 40 mg of powder, granules, or crystal, or 200 mg of tablets or capsules. The new law also exempts peyote and psychoactive mushrooms “where the quantity and circumstances of the case can be assumed to be used in ceremonies and customs of indigenous people and communities, and recognized by their own authorities”.

Some of the quantities allowed for “personal use” fall into a reasonable range: about 5 cannabis joints, 5–10 lines of cocaine, 1–10 doses of heroin, and 2–8 doses of methamphetamine. However, other limits, such as the 15 micrograms of LSD or 40 mg of MDMA powder, are bizarrely low, as these are less than a single dose.

Although mainstream media articles have focused on Mexico’s decriminalization of these small amounts, most of the law’s text is devoted to establishing a science-based national program to prevent and treat drug dependence, and to developing free health programs and rehabilitation centers that combat addiction.

The new law also allows city and state police to become involved in preventing the possession, trade, or supply of narcotic/psychoactive drugs when such activities are conducted in public places. In the past, arresting dealers had been left to the federal authorities. Now, the federal police are required only when there is evidence of organized crime, or for substances where a personal use maximum has not been stated in the law, or where the quantity of drug(s) in question is equal to or greater than 1,000 times the maximum personal use amount. Additional changes relate to the length of punishments for offenses. ●

## Argentine & Latin American Law

The Supreme Court of Argentina unanimously ruled on August 25, 2009 that their constitution protects personal cannabis consumption from criminal prosecution. Article 19 of the Argentine Constitution states, “The private actions of men which in no way offend public order or morality, nor injure a third party, are reserved for God only and are exempted from the authority of judges. No inhabitant of the Nation shall be obliged to perform what the law does not demand nor deprived of what it does not prohibit.”

The decision overturned the cases of five young men arrested in 2006 for possession of one to three hand-rolled cannabis cigarettes each. However, the court warned that their ruling “cannot be considered legal permission to consume indiscriminately”.<sup>1</sup> They specified that the constitution protects cannabis use only by adults and only if their use is in private. The ruling was specific to cannabis and it is unclear what effect it will have on personal, private use of other illegal substances.

Latin America may be changing the way it addresses the war on drugs. In February 2009, the Latin American Commission on Drugs and Democracy, founded by former presidents of Brazil, Colombia, and Mexico, released the report “Drugs and Democracy: Toward a Paradigm Shift”, which emphasizes treating drug use as a matter of public health.

In addition to the recent changes in Mexico and Argentina, Colombia decriminalized the possession of small amounts of recreational drugs in 2004. Brazil now sentences drug users to treatment, education, or community service instead of jail time. And Brazil, Ecuador, and Chile are all said to be considering further decriminalization. ●

1. Agence France-Press. “Argentina Legalizes Personal Marijuana Possession”. Aug 25, 2009.

## Deaths from False 2C-B-Fly

Mislabeled or tainted 2C-B-fly (an uncommon psychoactive chemical recently available online) contributed to several hospitalizations and at least two deaths in early October 2009.

One confirmed death occurred in Denmark, another in San Jose, California. Both followed the use of material sold as 2C-B-fly, acquired from the research chemical reseller Haupt-RC, and likely manufactured in China. Both deaths and some hospitalizations were reportedly caused by a batch identified as “b1” on the label. Analysis of a sample via GC/MS strongly indicated the material was bromo-dragonfly, a drug ten times more potent.

The man who died in Denmark was 22-year-old Dannie Hansen, the owner of Haupt-RC. He is said to have consumed 18 mg of the material on Friday, October 2, and likely passed away that evening.

In California, 18-year-old Brian Sullivan died on Saturday, October 3, a few hours after ingesting 9 mg of the chemical. Sullivan had pre-existing health problems that may have made him more susceptible to a serious adverse reaction. Sullivan’s family reported that he began having what appeared to be seizures about three-and-a-half hours after ingestion and died approximately a half-hour later. His brother John and John’s girlfriend Lindsey were present and ingested the same material: John 10 mg and Lindsey 4 mg. Both experienced extremely intense effects, were hospitalized overnight, and discharged the next day.

These deaths, along with some in Europe associated with other recreational psychoactive research chemicals, highlight the risks and dangers of the grey and black markets. We appreciate the cooperation of families, friends, and online forums in spreading the word about these tragedies to help avert other deaths and injuries. ●

*Erowid.org/2cb\_fly/death*

# Prior Exposure to MDMA May Block High-Dose Neurotoxicity

*“Practically any stimulus capable of causing injury to a tissue or organ can, when applied close to (but below) the threshold of damage, activate endogenous protective mechanisms—thus potentially lessening the impact of subsequent, more severe stimuli.” — Dirnagl et al. 2003<sup>1</sup>*

One of the more interesting neurotoxicity research findings over the last 25 years is that exposure to a low dose of a neurotoxin can provide protection against more severe damage from a later dose of the same substance. For methamphetamine, this was first documented in 1985,<sup>2</sup> and in 2006, researchers found that “chronic, intermittent exposure” to MDMA in rats blocked severe damage to the serotonin system from a later high “binge” dose (Piper et al. 2006).<sup>3</sup> A second research group recently published confirmation that pre-treatment with MDMA provides protection against a later neurotoxic dose (Bhide et al. 2009).<sup>4</sup>

The MDMA regimens used for both the pre-treatment and neurotoxic doses differed between the two studies. Piper et al. pre-treated adolescent rats with two 10 mg/kg subcutaneous (s.c.) injections of MDMA, four hours apart, every five days for a total of seven injections. Bhide et al. pre-treated adult rats with a single 10 mg/kg dose injected i.p. (into the abdominal cavity) every day for four days. Bhide et al. also administered a single 10 mg/kg pre-treatment dose to a different set of rats.

Piper et al. waited seven days after the last pre-treatment dose and then administered a neurotoxic regimen of MDMA, 10 mg/kg s.c. every hour for four hours to both pre-treated rats and untreated controls. Bhide et al. waited one day after the final pre-treatment and used a similar neurotoxic regimen, administering four 10 mg/kg doses separated by two hours instead of one. Both waited about a week after the neurotoxic doses before sacrificing the animals to autopsy their brains.

The neurotoxic dose regimens resulted in sharp declines in serotonin

activity in the rat brains, with as much as an 80% reduction in serotonin reuptake transporter (SERT) binding in some areas. In each study, control rats administered the pre-treatment without a following neurotoxic dose showed modest reductions in SERT binding compared to rats given only saline. However, pre-treatment also completely prevented the severe reductions caused by the later neurotoxic dose regimen in rats that received both. The rats that received a single pre-treatment from Bhide et al. were less protected than those that received the four pre-treatment doses.

These two studies leave open the question of how high a pre-treatment dose needs to be in order to effectively block later neurotoxicity. Since the pre-treatment doses were high enough to be on the edge of neurotoxicity themselves and resulted in slightly reduced serotonin system activity, it may be that prophylactic effects arise only when initial doses are high enough to cause at least a small amount of damage.

Duration of the prophylactic effect is also unknown. Piper et al.’s research shows that the protection lasted at least a week. However, Bhide et al. reported that they did not find pre-treatment protective if they waited four days to administer the neurotoxic dose regimen rather than one day, and they report that “the neuroprotective effect of MDMA preconditioning was relatively transient in nature.” The age of the rats or the exact pre-treatment regimen might be factors, but this will have to be studied further to resolve these issues.

The prophylactic mechanisms have not been established, but possibilities include up-regulation of endogenous antioxidant systems in the brain in response to the earlier dose, or neurons reacting less strongly to MDMA after being exposed in the recent past. The protection does not result simply from reduced MDMA effects in general, as physiological responses such as increases in body temperature were not reduced by pre-treatment.

Research into this phenomenon is still in its infancy, but suggests that starting

with a lower dose of MDMA might be beneficial, not only to assess individual reaction, but also to possibly train the body and brain to better handle a higher dose later. It may also help explain why those who have used MDMA twice per weekend for months or years at a time do not have as many cognitive deficits as has been predicted from previous rat research: perhaps the body and brain adapt. ●

## Background Summary

- MDMA causes damage to serotonin neurons at high doses.
- High doses used by humans overlap with levels shown to be neurotoxic in rats and non-human primates.
- Risk of neurotoxicity likely increases with re-dosing and stacking multiple doses.
- Risk of serotonergic damage could be highly individual.
- MDMA neurotoxicity in humans probably results in mild, but detectable, reductions in some types of verbal memory and possibly in an increase in depressive symptoms in some people.
- Research continues to refine the boundaries of MDMA neurotoxicity in humans in terms of dosage and types of problems that result from damage.

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# Impulse



by the Teafærie

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*“It is my belief that the desire to alter consciousness periodically is an innate, normal drive analogous to hunger or the sexual drive. ... [T]he need for periods of nonordinary consciousness begins to be expressed at ages far too young for it to have much to do with social conditioning. ... Three- and four-year-olds, for example, commonly whirl themselves into vertiginous stupors. They hyperventilate and have other children squeeze them around the chest until they faint. They also choke each other to produce loss of consciousness.”*

— Andrew Weil, MD, *The Natural Mind* (1972)

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I’m not particularly interested in drugs. I mean, drugs are cool and all, and I’m told their actions are really fascinating from a biochemical standpoint. Their history certainly is colorful and illuminating; and sure, the social issues surrounding drugs and drug policy are important and thought-provoking. When it comes right down to it, though, psychoactive drugs are just a means to an end for me. If a machine came along that safely and reliably produced a programmable range of similar effects, I’d be an instant convert.

What I’m really interested in is exploring my own mind. I once played a first-person style video game for months before I discovered that there was another setting that allowed me to view the map and action from above. I started kicking ass immediately and I couldn’t believe how long I’d managed to somehow get by without ever discovering this important and useful feature. Similarly, I like to tweak my own settings now and then,

just to try to figure out what the heck my mind is and to discover what’s possible to do with it. It’s perfectly natural to want to play with ourselves, and the mind is our most entertaining toy. Or at least it’s a contender.

In my case, the impulse to alter consciousness seems to be hardwired. I can’t remember not being aware of it, and my memory goes way back. As a child I made myself dizzy a lot. I rolled myself up in an electric blanket and gave myself fever dreams and played those slumber party pass-out games that end up killing a few kids every year.<sup>1</sup> I remember being given NyQuil when I was sick in grade school, and slipping back into the bathroom to sneak a second dose so that I could pretend that I had been drugged by the commies and was putting up a brave, desperate struggle against the inevitable oblivion, determined to resist the spell under which I would be persuaded to spill the big beans. I loved to be tickled, spun, and turned upside down.

The same drive that had me smoking catnip and banana peels in junior high compelled me to ride roller coasters and run cross country. The nutmeg on the spice rack and the datura growing wild in my neighbor’s backyard held the same appeal for me as watching horror movies and riding my dirt bike down a flight of stairs. It’s not that I wanted to be frightened as such, and I certainly didn’t want to get

hurt. I just wanted to get high, to feel that exquisite sense of being alive that comes with a sudden and novel shift in chemistry and perspective.

What is it that motivates otherwise sane people to jump out of perfectly good airplanes? The same thing that impels folks to ski off of cliffs, race fast cars, and

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**The same drive that had me smoking catnip and banana peels in junior high compelled me to ride roller coasters and run cross country.**

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run with the bulls. It’s the rush, dude! Ask them. They’ll tell you. Yoga, breathwork, tantric practices, flow arts, meditation, lucid dreaming, chanting, dance, fear, pain, exercise—all that good stuff will totally get you off if you do it right.

Yeah, yeah, I know: in the “spiritual” disciplines this is not supposed to be the point, and pursuing a practice for the sensation or gratification (to say nothing of hypothetical super powers) is derided as just a tunnel back into the trap. When I’ve asked why they make the effort, though, most ascetic practitioners have claimed that their practice fills them with a profound sense of peace and harmony. Isn’t that an altered state, too?

One could argue that we seek love largely for the rush. That’s partly why so many relationships break up as soon as the candy coating gets licked off. We talk about it in terms of how it



makes us *feel*. We say, “I love so-and-so because s/he makes me feel all giddy, like I’m floating on air!” Part of what’s happening there is, of course, a chemical reaction. We’re starting to get a fix on the hormones, pheromones, and neurotransmitters involved, and some progress has been made towards chemically reproducing those states or their near relatives. For sure many of us pursue sex just to get off, and we often construct elaborate scenarios to intensify the effect. Reproduction might be the impetus at the genetic level, but at the decision-making level we do it because it feels good. It brings up aspects of our psyches that are normally dormant and allows us to experience our own nature from an alternative point of view.

On the other side of the scale, some people kill for the thrill. The clarity that can arise in moments of mortal danger, the sudden onslaught of fight-or-flight chemicals, and the vertiginous sense of combined freedom and alienation that accompanies a breach of collective values is said to be a heady combination. Some people are hooked on hurting themselves. Others pick fights with their loved ones because they’re unconsciously addicted to the anger high, or the stuff that gets released into their system when they cry.

A case can be made that damned near *everything* we do is undertaken in order to alter and enhance our consciousness. Why do we like to travel and engage in novel experiences? Why do we dance or sing or play music? Why do we work to

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**A case can be made that damned near *everything* we do is undertaken in order to alter and enhance our consciousness.**

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help the disadvantaged? We do it because of the way it makes us *feel*. When we engage in behaviors that are rewarded by our neural programming, we feel (variously) clear, focused, calm, proud, loving, excited, empathically connected, turned on, and in sync with the universe. We now know that most of these feelings have a chemical origin—or anyway we know that chemistry plays a part in their

expression. The innate desire to tune in to these altered states is one of the driving forces behind human evolution. From nursing a baby to building a rocket ship, we act in order to change how we feel, and in so doing we change the world around us.

Those who play at the edge of what’s possible, who pursue novelty, are the ones who push the envelope of consciousness evolution. Nature selects for the drive to defy boundaries and

to look at things from different angles as surely as it selects for a safe and conservative approach, because, although the cautious route is often the best bet, the potential pay-off of a groundbreaking win can be so damned compelling. We know this impulse has been successful because it persists in human hearts to this day, tempered (perhaps) with a healthy dose of ingrained prudence.



It makes me happy when I see little kids rolling down a hill or hanging by their knees at the park. It fills me with hope for the future, because today’s kids are going to have to learn to adapt to change more quickly than any generation that has come before. There will be a world that’s ever in motion, and I imagine that neophiles will have a distinct advantage. For my nephew’s third birthday I got him a Sit’n Spin, which is one of those toys designed to make the rider dizzy. He was very pleased, as I knew he would be. On the underside, in black Sharpie pen, I inscribed a quote attributed to Timothy Leary: “Anything that disorients you is good.” ●

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# Sampling Carbogen

A group trial with CO<sub>2</sub>/O<sub>2</sub> gas

by Veradeckt

*In 2007 an article appeared in Erowid Extracts describing contemporary experimentation with carbogen. Carbogen is a gaseous mixture of carbon dioxide (CO<sub>2</sub>) and oxygen (O<sub>2</sub>) that, when inhaled, induces an alteration in consciousness and mild to strong physical sensations. It is most often administered via a mask attached to a regulator connected to a high-pressure cylinder (“tank”).*

*The ratio of 30% CO<sub>2</sub> and 70% O<sub>2</sub> is known as “Meduna’s mixture” and has been used in psychiatric research since the 1940s. It enjoyed a brief period of popularity as a training tool used to test a person’s readiness to experience LSD.*

*Although carbogen—sometimes described in the medical literature as a “panicogen”—is perhaps best known for inducing anxiety, sensations of suffocation, and unconsciousness, this extremely simple gas can cause surprisingly complex psychoactive effects when inhaled for even a few breaths. Some reports of positive, or even glowing, experiences indicate carbogen may be more properly described as a unique psychedelic. This report describes another chapter in carbogen research.*

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**The final stage of the experience was described as re-entering regular consciousness; some people enjoyed the “disoriented, loopy” reintegration, while others felt that this was the least fun portion of the encounter.**

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## Setting

A small invitation-only gathering was held that featured carbogen, where guests had the option of trying the gas in a supervised setting. Sessions were conducted in a separate bedroom, with music, soft lighting, and a large sectional

sofa that permitted semi-private sessions for individuals, while others at the gathering socialized in the rest of the loft. Nineteen people signed up to have breathing sessions, in the same style of administration as described in “Carbogen Redux: Contemporary Exploration of a Ubiquitous Inhalant”, by B. James (Erowid Extracts #12, June 2007). With little precedent for how to design such a gathering, the physical set-up was a bit socially awkward. However, due to the size of the group, this arrangement—rather than having everyone gathered together during administrations—seemed a good choice.

## Set

Before inviting anyone, the hosts discussed intentions for the tone of the gathering and the effect of suggestibility. Should wording be geared toward the festive, the drug-geeky, or the spiritual? They decided on a neutral, inquisitive, open-to-interpretation description of the event. Some participants arrived already informed about carbogen’s history and eager to sample it; others had very little information about it, but were generally curious to try something new. Participants were excited and nervous, or in pleasant spirits. As reports started flowing back to the larger group from those who had already had their sessions, people with anxieties relaxed somewhat. Nevertheless, according to the primary sitter, the average participant had some trepidation going into the experience, both because of its novelty and because of the unusual method of administration.

## A Mask Over Nose and Mouth

The administration protocol followed the preferences of the person supplying the tank of carbogen. The participant was lying down, with someone seated beside and somewhat above them, holding the mask carefully to their face. The mask was kept in place until the agreed-upon number of breaths had been taken or the participant signaled to stop. This sitter-assisted method of administration may intrude somewhat into the subjective experience, but alternatives have not been documented. One person observed that it would be interesting to experiment with supervised self-administration; agreements about number of breaths could be made with a sitter, or a person could be allotted several minutes with the apparatus, and take one or two breaths, or take more, or go to the edge and come back.

The main sitter felt that having someone hold a mask to the participant’s face is a strong element of the subjective experience. There’s something very intimate about having another person controlling the air you take into your body with a mask; it’s much more intimate than having a nurse give you an injection, for example.

## Dosage

The number of breaths taken ranged from 5 to 36; however, as depth of inhalation varies between individuals, dose information cannot be exact. Several participants later in the evening were light-heartedly trying to out-do those who had gone before them, by taking more breaths. Others experimented with sets of breaths—for example, achieving 25 breaths by inhaling 5 breaths, then taking a break to narrate what had happened, then inhaling another 5 breaths, and so on.



## Effects

As reported previously, and true for this gathering, when carbogen is presented as a powerful but intrinsically neutral or positive experience, it appears to be less likely to produce a negative reaction. Most folks said that the experience had at least some pleasant aspects. A few people felt quite energized after breathing the carbogen—perhaps due to inhaling the higher-than-normal level of oxygen that the mixture provides.

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## Two adverse events occurred during this set of carbogen administrations, one was serious and one was not.

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One person said that it was “somewhat like nitrous oxide, but slower”. People tended to note a short period where they felt the mental effects coming on, and then described a portion of the experience where they felt as if they lost consciousness or—at the least—they could not remember what the experience was like during that period. The final stage of the experience was described as re-entering regular consciousness; some people enjoyed the “disoriented, loopy” reintegration, while others felt that this was the least fun portion of the encounter. Two or three of the participants compared carbogen to 5-MeO-DMT, and several described an effect not uncommon to nitrous oxide of accessing a big truth or important forgotten realm, but not being able to remember details once the effects had worn off.

One person, who had come to the event for socializing and intended to sit-out the carbogen, changed his mind after hearing people’s experiences. He had reservations about breathing a gas that could precipitate the sensation of suffocation, since he had been hospitalized for acute bronchitis as a teen and had nearly died. However, his carbogen session did not revisit the breathing trauma, and went off without complications.

There were two people (not counting those who experienced adverse effects)

who, unbidden, said, “I’m not interested in doing this again.” They did not have strongly negative experiences, they just found it unremarkable and not worth exploring further. They both had high expectations, which were not met. One of these people may have had high expectations of sensual rapture, after observing another person’s ecstatic experience.

Overall, the typical response was neutral to positive, and people reported that they would do it again. Two people had ecstatic experiences and said they would love to repeat the experience.

With one notable exception, no one reported feeling that any part of the experience was terribly difficult. The serious adverse event that did occur was primarily an atypical—and ostensibly dangerous—physical response that required an intervention by a sitter. This serious event gave participants pause, but subsequent breathers had neutral or pleasant experiences.

## Adverse Events

Two adverse events occurred during this set of carbogen administrations, one was serious and one was not. The less serious event involved a participant who had previously suffered from atrial fibrillation (AF) that resolved after surgical intervention; he experienced a reoccurrence of AF after breathing carbogen. He was concerned but not fearful, and the symptoms resolved themselves within a few hours. He recommended that future sitters ask people beforehand if they have a history of atrial fibrillation, as it might be contraindicated for carbogen administration.

The second, more serious, adverse event involved a participant who exhibited “seizure-like” flailing and briefly stopped breathing. That participant’s experience is covered in detail on page 8.

## Notes for Future Gatherings

While careful documentation of the sessions was not a primary goal of the gathering’s hosts, data-sheets were provided and dutifully filled out by people administering the gas or, in some cases, by the breathers themselves.

In hindsight, the hosts concluded it was a bit of fence-sitting to have had this be neither a ceremony nor an explicit data-gathering event. The power of suggestibility, the short-acting and profound nature of the carbogen high, and the potential for ecstatic experience (without the dependability of pleasure as with nitrous oxide) demanded that a future event be treated with ceremony and greater intention. Such an event would either a) be geared toward data-collection, with a more extensive survey conducive to analysis, or, b) be geared toward supporting transcendent experiences, by having fewer participants, creating a ceremonial setting, having everyone at the gathering attentive for each session, and honing intention (medicine circle style). In any case, the presence of a physician or at least someone recently trained in CPR, in light of the one dangerously atypical response, seems to be important for the comfort of our particular group. ●



Carbogen Apparatus, Photo by Erowid

# Near Death?

## A Carbogen Experience Gone Awry

by Fork

The mood before I inhaled the carbogen was lighthearted. A friend was dispensing the gas, another joined me to watch, and the person who had brought the tank was an acquaintance whom I had met several times. The atmosphere was jovial, with humorous quips going around the room about how a couple of psychonauts before me were each *supposed* to be the 13th person to take the gas, but that they had died during their sessions, and hence experience reports could not be filled out, so now I would be considered “number 13”. (Of course, no one had really died.) Before the gas was turned on, I was asked to take a breath with the mask held to my face, so that I could sense what it felt like when the hose was correctly sealed/suctioned on, without any leaks. As the hose had very little air in it, it was difficult to breathe in, which resulted in a brief panicky feeling of not being able to get any air—but this did allow me to understand how the mask was supposed to properly fit.

The regulator to the carbogen tank was then turned on, and I counted along for the first eight breaths. Unlike what others had reported, I didn’t get a sense from those first breaths that it was hard to breathe. I had closed my eyes at the start of the experience, and after the initial 8 breaths

**At some point, I found it increasingly hard to breathe. I felt as though I was not getting enough air, and my breathing became more rapid.**

I noticed superimposed onto the dark field behind my eyelids a collection of pink dots, each about the size of a quarter. They first appeared in the center of my vision, slowly multiplied, brightened, and began to spiral clockwise.

A warm relaxation similar to what I get from nitrous oxide began to wash over me. I stopped counting my breaths, but I did not get a sense that I lost consciousness at any point during the experience. I remembered who I was, that I was having a carbogen trip, and that I should pay attention to the phenomenology of the experience in order to bring back a description of it. Visually, the only thing that was happening with eyes closed were these streaking pinkish lines of light, swirling and pulsing in a clockwise direction.

At some point, I found it increasingly hard to breathe. I felt as though I was not getting enough air, and my breathing became more rapid. My heart rate increased, and the labored breathing became quite painful. It reminded me of when I was a kid and I would run as fast as I could for as long as I could until I finally fell to the ground, legs burning, heart pounding, lungs gasping.

However, as a kid when the running stopped, eventually I started to feel better, with my heartbeat and breathing perceptibly slowing down in stages. *In this situation, there was no relief.*

Then, I noticed that the mask was being removed. With eyes open, material reality appeared as a smeared pinwheel of color. It was as if the external world was a pie cut into six pieces, spinning clockwise, and five of the slices were comprised of swirling blobs

of colorful shapes, but the sixth piece was a window into what solid reality looked like.

There was a strong tension between the blurred, disembodied realm of indistinct



Carbogen Cylinder Valve, Photo by Erowid

color and the formed material world of discrete objects. It took a massive, even a *painful* amount of focused energy to keep the material world filled with unique, distinct, individual forms. Within the reality slice, I could tell that the others in the room had become concerned about my well-being. I saw their faces peering down at me, and it felt as if they were trying to get my attention—trying to pull me back into their realm. It was clear they were very upset, and it seemed like they were fighting with me to pull me out of the non-material place where I was stuck.

The transition back into their realm was extremely unpleasant. Imagine what it might feel like if you were a two-dimensional being forced into a three-dimensional form: whisper-thin flattened taffy being stretched and plumped back

into a clay golem. Suddenly, a new face appeared, looking down at me. I recognized it as belonging to a physician whom I had met earlier that night. For a couple spins of the pie-cycle, he was present; then he was gone. His face lacked the sense of concern that I saw on the other faces.

The struggle between existing as a disembodied consciousness and an embodied form seemed almost beyond endurance. In some ways I felt as if I imagine a drowning man might feel, after being pulled from a lake and brought back to life. My heart was pounding. I was gasping for air. I felt like crap, awash with the panicky feeling that no matter how hard I breathed, I wasn't pulling in enough oxygen.

Gradually, the slices of pie featuring solid, non-smearred reality began to increase. Two out of six, three out of six, then more rapidly four and five out of six. Several minutes passed before I began to feel as though I was getting enough oxygen and my heartbeat was slowing down. A few more minutes passed before I could *really* register the looks of extreme worry around me. Based on the faces of those in the room, I could tell that what I went through had not been a typical reaction. Eventually, I got closer and closer to a baseline state of consciousness. What had happened to get my friends so worked up?

At no point during the experience did I notice losing consciousness. Also,

**According to those in the room, I did stop breathing around my 27th or 28th breath of carbogen. [...] One of the sitters forced my mouth open and began mouth-to-mouth resuscitation.**

at no point did I believe that I had stopped breathing. Indeed, in my mind, I had been gasping for air. However, according to those in the room, I did stop breathing around my 27th or 28th breath of carbogen. Concerned about my condition, the friend administering the gas removed the mask around what

would have been breath 30. I had been thrashing about in a manner described to me as being somewhat "seizure-like", banging my arm into the wall next to the couch. When the mask came off, my lips were pressed together and turning blue from lack of oxygen. One of the sitters forced my mouth open and began mouth-to-mouth resuscitation. Another left to get the physician from the adjacent room; but in the short time before he arrived, I had begun to breathe again.

After I was breathing normally, I felt super-bad about having worried my friends so much, and I also felt grateful that they had gotten me breathing again. Similarly, they felt somewhat bad about having made jokes related to other people dying before I began the carbogen session. Along with the fact that my trip could literally be described, in some manner, as a "near-death experience", the feeling of struggle between a disembodied two-dimensional realm and the material world also *felt* quite a bit like I might imagine re-entry from a near-death experience would feel.

Back at the party, I also regretted that my trip had put a damper on the enthusiasm of some who had not yet had their turn with the tank. One of the sitters had to take a break to process his part in my experience, and at least a couple of people decided against breathing carbogen—choosing to head home instead.

My wife was livid with me for participating in an activity that appeared to have had the unexpected risk of death. (She had no interest in taking carbogen herself, and just came along to visit with friends and spend time with me.) "How would I explain to our child that you died in some stupid drug experiment?" she demanded.

My lungs still ached from the experience and there was a horrible stabbing pain in them when I coughed. (This diminished over a couple of days.) About 30–60 minutes after the experience, I also became aware that my tongue hurt.

A few hours later, when I looked in the mirror, I noticed what looked like a large bloody cold sore. I may have bitten my tongue when I was banging around, or perhaps carbogen's alteration of the acid/alkaline levels of my blood contributed to my getting a cold sore. (I don't normally get them, and one other participant later reported having gotten a cold sore.)

**My wife was livid with me for participating in an activity that appeared to have had the unexpected risk of death.**

A few months after my carbogen experience, I attended another event at which the physician who had checked in on me was also present. In conversation, I discovered that the work he does is with people who have been brought into an emergency room in critical condition: his patients will often not be leaving the hospital alive.

He wanted to hear about my carbogen experience, and asked whether I remembered him coming in to check on me. I described the experience to him as I have told it above. He let me know that, despite his apparent lack of concern, he actually *had been* very worried about me. He left me with the impression that it might be valid to consider my trip as a "near-death experience". He said that his "unconcerned" mannerism was an approach that he purposefully took in order to calm down the people sitting with me, who were stressed out about what was happening.

Although I am mildly tempted to revisit carbogen at a much lower dose-range (say 8 breaths), that intellectual curiosity has been overridden by my sense of leaving things well enough alone. Even though the trip was not pleasant, it was educational. It provided a memorable first-hand experience of how things can unexpectedly go wrong. It reinforced the importance of having one or more sitters present, particularly when taking a new drug, and I felt lucky that one of the party guests was an MD. Finally, it inspired me to enroll in a CPR class, which I recently completed. ●

# PSYCHOPTIC REVERIES

## Book Recommendations for Lovers of Visionary Art

by Jon Hanna

The umbrella term “Visionary Art” is generally applied to works that have been inspired by an artist’s inner vision. Frequently, such visions are mystical or spiritual in nature, depicting worlds or experiences that differ dramatically from material reality. Although a widely recognized subcategory is “Psychedelic Art”, art that has been inspired by psychoactive substances, visionary artists may also have been inspired by transpersonal experiences, the effects of mental illness, or nonordinary states of consciousness having nothing to do with drugs. For the following reviews, I have reached beyond the works of well-known contemporary psychedelic artists and widened my scope into the larger, fuzzier realm of Visionary Art, focusing on three obscure gems.



### Madness & Art: The Life and Works of Adolf Wölfli

by Walter Morgenthaler (1921/1992)

Adolf Wölfli (1864–1930) produced his prose, poetry, musical compositions, and drawings while living as a patient at the Waldau Sanitarium, near Bern, Switzerland. Walter Morgenthaler, Wölfli’s physician, produced a unique look at Wölfli in *Madness & Art*; it is one of the first books to focus on the art of a mentally ill person, treating him as an artist of merit, rather than viewing his work solely as a symptom of disease. Published in German in 1921, the book was translated into English by Aaron H. Esman, MD in 1992. In his introduction,

Esman notes, “Above all, Wölfli and his work constitute a magnificent testimonial to the human spirit. Born and reared under the most adverse circumstances, abused and abandoned in his childhood, deprived of basic nurturance and only minimally educated, victim of a crippling mental disorder and interned for most of his adult life, he nonetheless produced a massive body of work that has fascinated artists, collectors, and scholars for three generations.”

After several episodes of pedophilic behavior and a stint in prison, the court ordered 29-year-old Wölfli sent to Waldau for examination, where it was determined that he was mentally ill. Eventually diagnosed as schizophrenic, he spent the rest of his life at the institution. He suffered from intermittent hallucinations, and his violent outbursts often landed him in solitary confinement.

Most of Wölfli’s work relates to inner “voyages” that he experienced until age eight. Wölfli’s prose—what he considered to be an “autobiography” describing these trips—had filled 17 notebooks at the time Morgenthaler wrote his monograph.

Wölfli’s drawings first attracted me to this book—they are colorful, geometric, and highly symbolic. Without doing

preparatory sketching, Wölfli filled his pages from the outside inward, as though each image was perfectly formed in his head and he was simply copying it down. One remarkable display of his gift came to light when a forgotten 1904 drawing of a sun was discovered more than a decade later in a cabinet. Compared to a second drawing of a sun, done in 1919, both images contained exactly the same number of rings, bells and stars surrounding the sun, and were identically decorated with cross-hatched polyhedrons. According to Morgenthaler, Wölfli didn’t have “the slightest conscious idea of the first picture!”

Morgenthaler does a wonderful job of describing the symbology of the

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**Without doing preparatory sketching, Wölfli filled his pages from the outside inward, as though each image was perfectly formed in his head and he was simply copying it down.**

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pieces without being overly psychoanalytical, occasionally speculating while maintaining a fairly conservative approach. The only things that might improve this book would be the inclusion of more art plates and a larger format, which would allow greater appreciation of the myriad small details in Wölfli’s visionary works.



**Improved Paintings**  
by Mati Klarwein (2000)

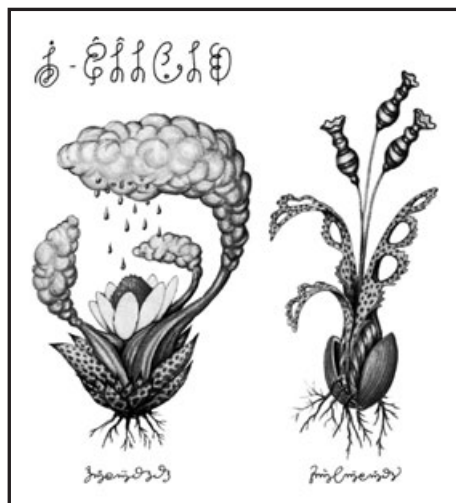
Characterized simultaneously as a Fantastic Realist, a Surrealist, and a Psychedelic artist, Mati Klarwein's art is difficult to pigeonhole. In 2001, about a year before he died, Klarwein sent me a copy of *Improved Paintings*. The works featured in this book, in their first incarnation, were purchased by Klarwein from thrift stores and flea markets, with the self-imposed restriction that none could be more expensive than a virgin canvas of equal size.

Adeptly parroting the original artists' styles, Klarwein acted as artistic savior to unwanted art, adding to the reclaimed canvases and breathing new life into them with his own unique twists. Due to his flawless technique, and because there are no "before" shots present, the viewer is placed in a joyfully ambiguous position of not being able to distinguish between "old" or "new" portions of each piece.

Peppered throughout are short commentaries from art critics, along with bits of prose and poetry that give the book a bit of a "Bob Dobbs" feel. (Indeed, there is one painting featuring the head of Bob, and the Church of the Subgenius is mentioned in Klarwein's acknowledgments.)

While the diversity of starting materials means that a wide range of styles is represented, there is still a very "Klarwein" vibe to each. Not all, nor even most, of the works could be

considered beautiful, although a few are truly stunning. Considering the task that Klarwein set for himself over the 22 years that he spent on "improving" paintings, even those pieces I'd have no interest in hanging on my wall strike me as successful experiments. I always enjoy revisiting this book when I pull it down from the shelf.



**Codex Seraphinianus**  
by Luigi Serafini (1981, etc.)

Not only is the *Codex Seraphinianus* my favorite book of Visionary Art, it is my favorite book, period. I recall first seeing a copy when I was 16. Despite being enthralled, I could not wrap my youthful mind around the \$75 price tag. Out-of-print by the mid-1990s, a friend and I ended up finding a used copy of the 1983 American edition at Moe's for around \$300. Since there was only one copy available, we decided to share it and split the cost. The book has gone in and out of print over the years, with some editions containing pages that are missing in others.

The most recent version, a 2006 Italian edition published by Rizzoli, has more pages than previous reprints, as well as a new preface. And a 2009 addition to this version is the booklet *Decodex*, attached to the inside back cover in a pasted-in clear plastic sleeve. Primarily in Italian, *Decodex* features essays and a few photos about the *Codex* and its creator,

the Italian architect, designer, and artist Luigi Serafini.

The layout is somewhat worse in this version, with the pages enlarged and the gutter bound too tightly; also, some *Codex* fans feel that the print quality is a bit worse. And, while I appreciate seeing images added to this edition, their poorly chosen placement at the beginning of the book spoils the fantastic logical progression of other editions. Nevertheless, the 2006 edition is otherwise well constructed, beautiful, and more affordably priced.

So what's all the fuss about? The *Codex* appears to have time-travelled from some future human world or parallel dimension. It is written in an impenetrable "language", which may well be imaginary and untranslatable. Still, the more one looks at it, the more it seems to have a logical structure; the numbering system, for example, seems internally coherent. The script looks like the sort of writing that can "magically" appear in tree bark while on 2C-B. Most readers quickly abandon attempts at deciphering the text, picking up the flavor of the book from its extremely colorful and surreal illustrations. Much of this art seems straight out of the DMT realm. Flipping the pages, I recall a phrase I've often heard on the playa at Burning Man: "What am I looking at?"

The book is a natural history of a people and land both strangely similar to and disturbingly different from our own world. It moves from single-celled plant life into more complex and absurd botanicals, eventually showing their assorted uses. The viewer is taken from lower to higher forms of the animal

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**The *Codex* appears to have time-travelled from some future human world or parallel dimension.**

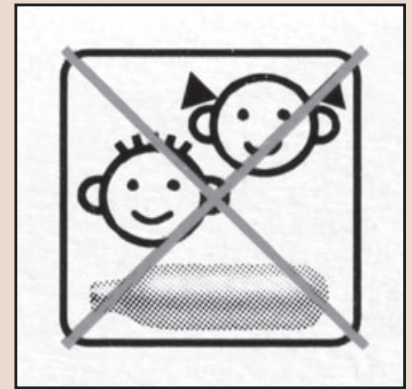
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kingdom, then through mineralogy, chemistry, and increasingly complicated technologies. Finally, what appears to be a look into the cultural anthropology, or sociology, of various geographical regions of this realm is presented. More than any other book that I own, the *Codex Seraphinianus* is the one I most enjoy introducing friends to. ●

# N<sub>2</sub>Oily

## Nitrous Oxide Chargers—Residue and Usage Surveys

by Fire & Earth Erowid



In 2000, we attended an event where some guests were inhaling nitrous oxide gas out of an iSi whipped cream maker (WCM) using an unknown brand of nitrous oxide chargers. During a lull in activity, we picked up the WCM and screwed off the top, to find that the inside was coated in a layer of oily black residue. It appeared that the chargers contained oil and/or other contamination that was propelled into the WCM along with the gas. The thought of people inhaling gas containing so much grime was disturbing. We added a contaminant warning on Erowid.org and later published a photo of a finger dirtied from swiping the inside of a canister. Though we certainly weren't the first to notice the issue, these were some of the earliest published documents about the grime that comes out of nitrous oxide chargers. Ever since, we've wondered what the contaminant consists of, how

much there is, and whether there's a way for users to remove it from the gas.

In 2008, a new filter product called NitroKit was released that claims to remove "any possibility of taste or impurity" due to contaminants present in chargers.<sup>1</sup> We decided it was time to revisit the question of contaminants that might affect recreational users of N<sub>2</sub>O.

In September and October of 2009 we conducted a series of micro-surveys on Erowid.org about the recreational use of nitrous oxide, and ran some informal experiments to investigate the black residue from chargers. The question of contaminants in the gas stream is relevant to Erowid visitors because 66% of respondents to our surveys had tried N<sub>2</sub>O at least once, and almost 50% of those who had tried it in the form of whipped cream chargers reported using an average of more than six chargers per occasion of nitrous oxide use.

Though our experiments should be replicated more formally to verify and quantify the results, it was very clear that an oily residue containing tiny black flakes and shards of metal was present in the nitrous oxide stream that would be inhaled from a WCM. While the NitroKit filter helped reduce the amount of residue by a small amount,

it was not a dramatic reduction. However, a simple piece of cloth over the output seems to be an effective method for filtering out most of this residue.

### Purpose of Experiments

The experiments were designed to confirm the presence of oily residue in multiple brands of nitrous oxide chargers; to determine whether the residue is present in the stream of gas dispensed from a whipped cream maker; to test whether the use of the NitroKit filter is an effective method of reducing the residue in the output stream; and to attempt to quantify the amount of residue in chargers.

### Materials

All tests used the same iSi brand half-pint whipped cream maker.

In the first two tests, we used an equal number of two brands of nitrous oxide chargers, Pure Whip and EZ-Whip, in order to ensure we would find some residue. Pure Whip's white-painted chargers are manufactured in Hungary. EZ-Whip's silver chargers are manufactured in the Czech Republic. For the third test, we used exclusively iSi brand purplish-metallic chargers, manufactured in Austria, reputed to be cleaner than others.

The NitroKit is a two-inch-long extension that attaches between the charger and the WCM on the input side. It contains a small black filter that, according to the manufacturer, is made with activated charcoal. We purchased one NitroKit filter kit with extra filters from the manufacturer, but were sent two additional kits when the manufacturer learned we were writing a review.



Nitrous Oxide Test Materials



Output Filter on WCM

Our output filter was constructed of clean squares of new, white cotton “flour sack” material, folded so that each filter had four layers.

## Methods

Three main tests were conducted. Each test used an output filter attached to the nozzle of the WCM using a rubber band. The WCM was held upright during testing, with the output nozzle above the main chamber.

Test A attempted to document and quantify the amount of residue dispensed after running 144 chargers through the WCM (72 Pure Whip and 72 EZ-Whip). Test B was identical to the first, but added the NitroKit pre-filter between the nitrous oxide charger and the WCM. Test C used 144 iSi brand chargers and, as with test A, did not use the NitroKit pre-filter.

During each test, the cotton output filter was examined after 6, 12, 24, 48, 96, and 144 chargers. The cotton output filter was weighed before and after each test. Then, after each test, a clean paper towel was weighed and used to thoroughly wipe out the inside of the WCM. The paper towel was then weighed again.

The output filters and paper towels

were examined using a 10–30x Bausch and Lomb industrial microscope, and photographs were taken of all materials and stages of the process. Weighing was conducted using an Acculab V1-mg, recently calibrated, with 1 mg readability and +/- 3 mg repeatability.

Because cracking a N<sub>2</sub>O charger induces rapid cooling, quickly running more than four to eight chargers in a row caused the valve mechanisms to freeze up and the WCM to become uncomfortably cold to the touch. In order to better match ordinary practice, a maximum of eight chargers were cracked in a short period, then the WCM was allowed to warm up before more chargers were opened.

## Results

The primary findings from this experiment were:

- 1) A dark-colored residue is present in the gaseous output from a whipped cream maker used to dispense nitrous oxide, both with and without the use of a NitroKit input filter. That residue is made up of a yellowish or grey oil, a large number of black particles of unknown material ranging in size from dust to 2 mm across, and shiny metallic fragments ranging in size from dust to 3 mm long.
- 2) Residue from as few as six chargers was visible to the naked eye (but somewhat hard to see) as a yellow or grey stain on the output filter. Magnification was generally necessary to see metal fragments from a small number of chargers. After twelve or more chargers, black flakes and metal fragments became visible to the naked eye in bright light, both inside the WCM and on the output filter.

3) Residue was present in all three brands tested: EZ-Whip, Pure Whip, and iSi. Amounts of residue were similar across all three brands, though the residue from the iSi chargers was grayer in color than the EZ-Whip and Pure Whip brand residue, which was more yellowish-brown.

4) The NitroKit input filter reduced the total amount of residue present in the output gas, but only by a small amount. Two observers estimated that there was approximately 10–20% less residue with the NitroKit filter than without.

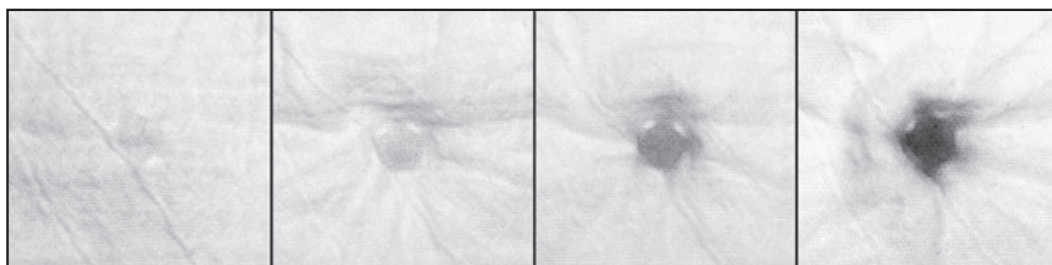
5) A single layer of cotton filter on the output nozzle caught around 95% of the residue and three layers caught virtually all residue. Even under magnification, no residue was visible on the fourth layer of the output filter.

## Mass of Residue

Weighing the paper towel that was used to collect residue from the WCM after 144 chargers resulted in 120 mg of residue after test A (without an input filter), 110 mg of residue after test B (with the input filter), and 120 mg of residue after test C (iSi brand). Unfortunately, the experimental design and environmental changes led to inconsistent results when measuring the small quantities of residue left on both the NitroKit input filter and the output filter cloth. We were unable to get accurate and consistent readings of the weight of the deposits on these filters.

## NitroKit Comments

The NitroKit consists of a small replaceable filter disk plus three plastic components, two which hold the filter between them, and one which appears identical to the standard charger holder/cap



Test C: Output Filter after 24, 48, 96, and 144 iSi Chargers

that comes with a WCM. The component's plastic seemed slightly too weak for the application, and a crack formed in the cap during our tests. Another NitroKit user has reported that his cap cracked and broke after about 600 chargers. The manufacturer said they were working on a redesign, perhaps making components out of metal.

One minor annoyance is that, when loosening the charger holder each time a new charger is inserted, the lower two parts of the NitroKit can unscrew, leading to some gas leakage. This could have been more of an issue for us than for the average user, since we were replacing chargers repeatedly and very quickly.

The input side of the filter disk quickly develops an indentation where the gas hits it and the downstream side bows out slightly. Some metal flakes were caught by the NitroKit filter and were visible on the side of the filter towards the charger, making it important to keep it in the same orientation if it is removed and reinserted.

Though the NitroKit.com website suggests that the black flakes that accumulate in the WCM are "carbon powder",<sup>2</sup> they provide no citation for that claim. NitroKit describes its filters as "activated carbon", which is a material designed to capture extremely small particles. However, the impurities in nitrous oxide chargers appear to be significantly larger and more abundant than the filter can handle.

### More Questions

This experiment is just a beginning and raises additional questions. First, the composition of the residue should be identified. Second, since it is popular to inhale nitrous oxide using a cracker and balloon, a similar experiment should be run with that setup. We also hope to test whether output residue levels are different when using a larger capacity WCM or a compatible soda siphon.

Other practical methods might reduce the amount of residue in the output stream, such as placing a loose cloth inside the WCM, though this could propel cloth fibers into the output. A long, flexible tube on the WCM output nozzle might capture more of the residue and/or lower gas velocity enough to reduce the amount of inhaled particles.

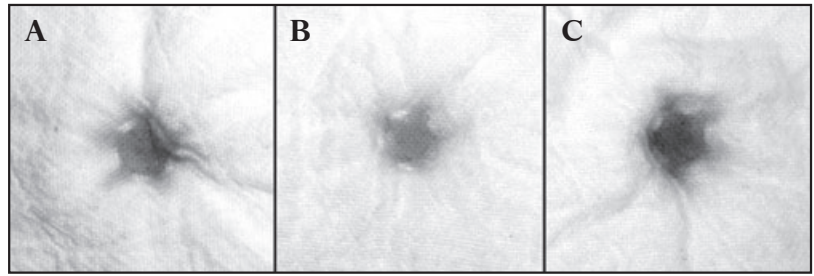
The most practical product would filter the gas as it is dispensed from the whipped cream maker, but this might be considered illegal paraphernalia in some

jurisdictions, since it would be useful for inhaling N<sub>2</sub>O but not for making whipped cream. A more effective filter system could be designed that sits between the cartridge and the WCM (and therefore would not be specific to inhalation use). This might include a more tortuous path, a much thicker/longer filter, or a pre-expansion chamber to reduce contamination in both whipped cream and lungs.

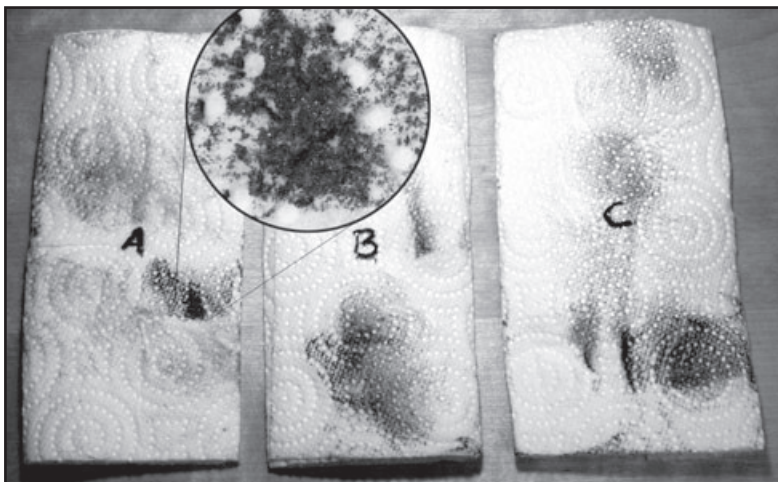
Perhaps our most interesting conclusion is that a simple piece of cotton cloth, such as a t-shirt or kitchen towel, placed over the output nozzle at the time of inhalation, is an easy and effective method of filtering out nearly all of the residue discharged from whipped cream chargers.

### References

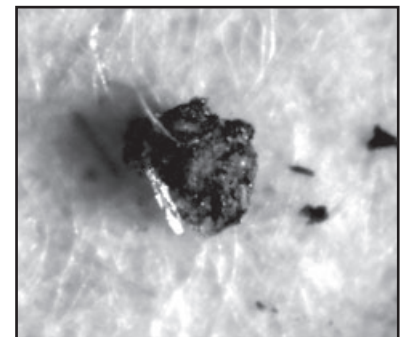
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2. NitroKit.com. "NitroKit Wholesale Information". Accessed Oct 10, 2009. [Nitrokit.com/info.html](http://Nitrokit.com/info.html)



Comparison of Test A,B, and C Output Filters after 144 Chargers



Paper Towels Used for Wiping WCM after Each Test



Black Speck with Metallic Sliver, Magnified 40x



# N<sub>2</sub>O USE SURVEYS

In a series of micro-surveys conducted in September and October 2009, we asked Erowid.org visitors about their recreational use of nitrous oxide. Surveys were three to four questions long, and were situated just below the website's header across all sections of the site. A total of approximately 52,000 responses to five surveys were received over a period of three weeks.

About two-thirds of survey respondents had tried inhaling nitrous oxide recreationally and about four out of five of those had used whipped cream chargers as their source at least once. Presumably the rest used nitrous either from pre-filled whipped cream cans or from a refillable cylinder ("tank") of gas. Around half of those who had used a charger reported most often opening it with a whipped cream maker (WCM), and half reported most often using a "cracker" (a small device designed to open a charger and release the gas into a balloon or bag).

Additional data showed that more than half of those who had ever used nitrous oxide had not used it in the past year. On the other end of the spectrum, around 7% reported having used nitrous oxide more than twice in the last month.

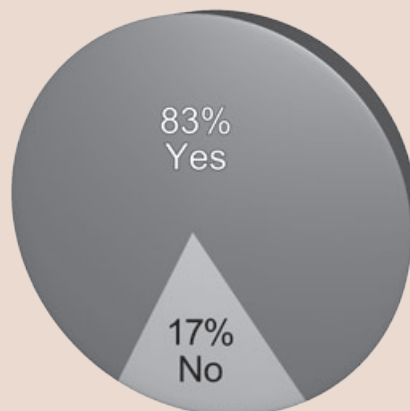
The following results leave out respondents who stated that they didn't know the answer to a question or preferred not to answer.

## Prevalence of Use

Of 11,320 respondents to one survey, 66.3% reported having inhaled nitrous oxide recreationally and 33.7% said they had not. Of those who had tried N<sub>2</sub>O, 48.5% had tried it 1–10 times, 26.5% had used it 11–50 times, 10.7% had used it 51–100 times, 6.0% had used it 101–250 times, and 8.3% reported having used it on more than 250 occasions.

## Use of N<sub>2</sub>O Chargers

83.0% of those who had tried nitrous oxide had used chargers as a source. Of those who had used chargers, 47.0% most often opened them with a "cracker" and dispensed the N<sub>2</sub>O into a balloon. 34.4% most often opened the charger into a WCM from which they directly inhaled



Have You Used Chargers as N<sub>2</sub>O Source? (Among Those Having Tried Nitrous Oxide)

the gas, 11.2% most often used a WCM with a balloon, 1.7% most often used a cracker with a bag instead of a balloon, 0.7% usually used a WCM and bag, and 0.5% most often used another unspecified method.

## Number of Chargers Used

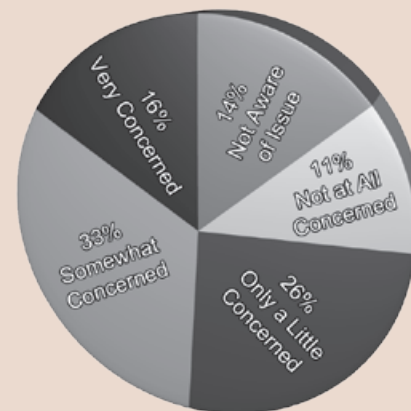
Of those who had used chargers, 54.5% said they used an average of 1–6 chargers in a day of use. 14.3% reported an average of 7–12 chargers, 14.8% an average of 13–24, 10.9% an average of 25–48, and 6.0% reported an average of more than 48 chargers used in a day of nitrous oxide use.

## Most Chargers Used

In one survey with 3,207 respondents who had used chargers, 32.8% reported that the maximum number they had used in a day of use was 1–6 chargers. 15.1% reported using a maximum of 7–12 chargers, 15.9% reported using a maximum of 13–24, 15.0% had used a maximum of 25–48, 9.9% had used a maximum of 49–96, and 5.6% reported having used more than 96 chargers in a single day.

## Recent Days of Use in Last Year

Of those who had ever used nitrous oxide recreationally, 29.2% had used it in the last month; 73.0% of respondents had used N<sub>2</sub>O in the last year, with 23.5% saying they had used it only 1–2 times in the last year and, on the opposite end, 0.5% saying they had used it on more than 200 occasions in the last year.



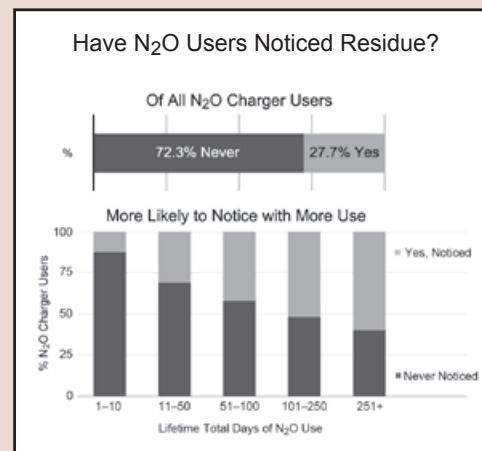
Level of Concern About Impurities, Grime, or Contaminants Among Charger Users

## Are Users Aware of Residue?

Among those who had used N<sub>2</sub>O chargers, 27.4% report that they had noticed "dirt, grime, or residue" in balloons or whipped cream makers used with nitrous chargers, while 72.6% had never noticed such residue. Those who reported having used nitrous more times were more likely to report having noticed the residue. Of those who had noticed the residue, 48.3% were "somewhat" or "very" concerned.

## Does "Grime" Affect Purchasing?

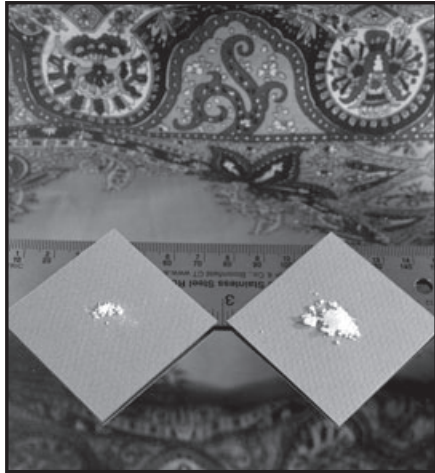
Of those who had used chargers and had noticed residue, 36.6% said that they "almost always" or "always" considered the grime when selecting a brand of chargers to purchase. 42.8% who had noticed the residue had "never considered" or had "not usually considered" the grime when making a brand selection. 6.6% had never personally purchased chargers and 12.7% reported that they'd never had a choice of brands. ●



# 5-MeO-DMT is Not “DMT”

Differentiation is Wise

by the Erowid crew



Visual Difference Between  
5 mg and 50 mg, Photo by Erowid

## 5-MeO-DMT Headed for Schedule I

On August 21, 2009 the Drug Enforcement Administration (DEA) published a notice in the *Federal Register* proposing to place 5-methoxy-*N,N*-dimethyltryptamine (5-MeO-DMT) and its salts into Schedule I in the United States. This will almost certainly lead to 5-MeO-DMT becoming illegal to buy, sell, or possess without a license.

5-MeO-DMT has been in use since at least the 1970s in the United States, although, according to the DEA's justification of the scheduling proposal, only 23 federal cases related to the substance were filed in the ten-year period of 1999 through 2008. A separate analysis, based on forensic laboratory data, registered 23 federal, state, and local cases between 2004 and the present.

The proposal does not mention plant or animal sources of the chemical, and its effect on the legality of pet toads or plant species is unclear. It remains to be seen whether this legal control will reduce availability of 5-MeO-DMT or whether it could draw attention to this relatively unpopular substance, and potentially increase use.

5-MeO-DMT and DMT may have similar names, but they are two different chemicals that should not be confused. 5-MeO-DMT is not a form of DMT. “DMT” is the common name for the chemical *N,N*-DMT (*N,N*-dimethyltryptamine). 5-MeO-DMT is a related chemical (5-methoxy-*N,N*-dimethyltryptamine) that is active at much lower doses and has quite distinct effects. News stories and online discussions sometimes refer to 5-MeO-DMT as “DMT”, but the use of this shorthand can cause serious problems and should not be used.

5-MeO-DMT is known for its presence in the secretions of the *Bufo alvarius* toad, but also occurs in dozens of plants (notably among *Anadenanthera*, *Phalaris*, and *Virola* species) and at least one *Amanita* mushroom. In plants, it is often present in combination with *N,N*-DMT and other related chemicals.

DMT, the better-known and arguably more sought-after of the two chemicals, was immortalized through Terence McKenna's “self-transforming machine elves” and produces more colorful visuals than 5-MeO-DMT. While enjoyed by some for its sensual elements, 5-MeO-DMT has a reputation for being extremely intense.

The practice of shortening 5-MeO-DMT to “DMT” is dangerous, since some users report powerful effects from as little as 5 mg of vaporized 5-MeO-DMT, whereas four to six times as much is required for strong effects with *N,N*-DMT. At higher doses, 5-MeO-DMT can exert a strong cardiac response, induce semi-conscious convulsing, or produce shocking mental effects, sometimes with lasting

impact. Indeed, an entire book—*Darkness Shining Wild*, by Robert A. Masters—has been published dealing with an extended mental crisis brought on by an overdose of 5-MeO-DMT.

The error of confusing 5-MeO-DMT with DMT is all too common, and even appeared in the original cover art and catalog text for a book that is focused entirely on 5-MeO-DMT! Designed by the publisher, the cover initially included “DMT” in the title. After receiving emails from both the book's author and an Erowid representative, the publisher corrected the errors before going to print.

Erowid has received reports of several cases where people were offered

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**Erowid has received reports of several cases where people were offered “DMT” but were given 5-MeO-DMT instead, much to their ontological dismay.**

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“DMT” but were given 5-MeO-DMT instead, much to their ontological dismay. This can also result from an error in attention. Many people have read about the fantastic McKenna-esque effects of smoked DMT; if offered 5-MeO-DMT, they may be primed to hear only the familiar “DMT” portion.

Because of this potential confusion, drug geeks should avoid using “DMT” as shorthand for 5-MeO-DMT, and should also stress that 5-MeO-DMT and *N,N*-DMT are different substances when either comes up as a topic for discussion. A person acquiring either substance should make absolutely sure that the vendor can clearly identify which of the two they are selling. Those who find themselves in the situation of providing either 5-MeO-DMT or *N,N*-DMT to another person should be absolutely certain that the recipient is clear on the difference. ●

# 5-MeO-DMT and *N,N*-DMT Experience Report Excerpts

## Whiteout by BW

My experience with 5-MeO-DMT was early in my psychonautic efforts. I knew about the concept of molar equivalents from psilocybin and psilocin, so I assumed that 5-MeO-DMT and DMT had similar dosages. As I only had perhaps 25 mg, or indeed about the size of 3–5 paper match heads, I stupidly did not weigh it! I assumed, based on DMT doses, that any effects would be subtle. Man, was I surprised!

I recall two coherent thoughts before the universe filled my mind: “Now you’ve done it!” and “This is IT!”

After a few seconds, I experienced a merging into some kind of White Light. As white light is the sum of all colors, it felt like this White Light was the sum of experiences currently being felt by all entities in the universe: a merging into the All One Being, shortly followed by the loss of all knowledge of separation between my “self” and everything else.

Though others have described their overwhelmingly powerful 5-MeO-DMT experiences as “Clear White Light”, I would not describe this particular White Light as “Clear”; it was more like snow or a white dust storm, with limited visibility, and intensity instead of clarity.

The experience of high-dose 5-MeO-DMT is so intense and brief, it can be hard to bring much back; kind of like touring Paris strapped to the belly of an F-15. However, even a few seconds of the feeling of being completely merged with the source of the universe can be very impressive, and can permanently change one’s theology and understanding of the cosmos.

After this experience, I had a weird week. Years later, I sometimes joked that I “broke my brain”, as I wasn’t able to work or come to terms with my daily routines for more than a week afterwards. It is difficult to describe. I could only explain it by saying the bricks of my psyche were still in the correct places, but the mortar had entirely disappeared, the whole structure moving more fluidly, held together only by inertia and magic. ●

## Galactic Movements by LucidStudies

5-MeO-DMT has been a useful alternative to DMT, and a great partner substance to explore. Where breaking through can be a battle with DMT, 5-MeO-DMT offers me fairly guaranteed profound results. I feel that it is an easier psychedelic to use, but probably with less overall depth.

Finding myself home alone with a couple hours to myself, I locate my tryptamine vaporizing kit. First, a very small sample of light-yellow 5-MeO-DMT freebase is selected to warm up with. Estimated dose is 5 mg (not scale-measured).

The powder is lit, liquefies, and the initial burn-off smoke is allowed to clear out. Flame is returned and the 5-MeO-DMT puddle transforms into a light wisp of smoke that I suck into my lungs. There is mild pulse elevation and a warm, sensual body rush. I exhale and enjoy the solitary feeling of euphoria. There are negligible visuals, but great appreciation of music. After a few minutes it is already fading fast.

Now I pick out a solid, crystallized chunk, about 20 mg. I load it into my pipe; the smoke is held for 6–8 seconds, the rush can be felt even before exhaling. I set the pipe down and settle into a feeling of bliss. There is light visual movement all around, things shining and shifting about, just barely. I feel the propellant body rush, like being stretched out or pushed through a tunnel... and I decide that the feeling is euphoria. And so it is.

In this critical moment of every 5-MeO-DMT trip, set and setting come into play. The feeling in the body that it produces is neutral, but very powerful. Every time, my mind asks, “What is this feeling?” There are two possible answers: “danger” or “euphoria”. The correct answer is euphoria, but there is only a split-second to choose it. And if my surroundings were too uncomfortable, the right choice might become impossible to make. I made the right decision this time. I turned my music off to allow a perfect moment of peace, quiet, and euphoria. ●

## Meeting Me on MeO by Shadihs

I was with good friends whom I trusted and loved. I initially tried a minute dose of *N,N*-DMT, which gave me an overwhelming sense of comfort, grounding, and feeling at home in my own body and being. It was so extraordinary that I turned to one friend and stated, “It makes me ME!” An hour or so later, sitting with three of my good friends, one of them handed me a pipe with a white substance on the screen.

I asked if it was DMT and my friend said, “Yep”. What I wasn’t aware of was that this wasn’t the same *N,N*- I had tried previously, but 5-MeO instead. Anticipating the beautiful sensation of the *N,N*-, I placed the pipe to my lips and inhaled. The taste was different from before and the feeling was quite the opposite. I’ve heard *N,N*-DMT and 5-MeO-DMT described as “the lush” and “the push” respectively. I was experiencing a definite push. Pressure built around me and it almost felt like resistance to this push would cause great discomfort, so I began letting go and relaxed into a slouch.

My friend said, “Good, you’re going with it”, and placed his leg upon mine. The friend to my right placed her leg upon his. Where our legs touched I felt our energies combine; they kept on combining until we became one conscious being. What happened next was partially a memory and partially an experience. I was standing in a golden lit garden with beautiful waterfalls and plants. I was holding the hand of a tall, glowing white entity that, when asked, said it was “me”. “Why do I have to go back to earth?” I asked. “It would get boring otherwise,” it replied.

I opened my eyes and realized that there was movement in the physical world; where I was holding the hand of the entity in my vision, I was now in a three-way handshake with my two friends. One had a tear rolling down her face and she looked away from me. I asked my other friend what he experienced and he said, “Absolute nothingness. Like Hell.” ●

# Myron Stolaroff and Albert Hofmann PERSPECTIVES ON PSYCHEDELICS

Dear Myron,

27 February, 1996

Late news, and in addition bad news. During more than a week I have tried to find a formulation of the foreword I promised you for your book *The Secret Chief*. But finally I had to give it up.

The difference in the concept of what psychedelics are and how they should be used in order to produce optimal effects on the human psyche and consciousness between that which is described in your book, and my belief in this regard, is too big to become united in a foreword, which should help to promote this book.

When I received your manuscript I read the introduction dealing with the personality of *The Secret Chief* and the general goal and subject of the book[, which] made me believe that I would be able and that it would be a pleasure for me to write a foreword for this book.

But after having read the whole book in detail, I encountered several important points on which we are not in agreement.

The general disagreement: I believe that the ingestion of sacramental drugs should be restricted to a few well-prepared sessions in critical and decisive phases of our life. This fundamental prerequisite condition cannot be fulfilled if Jacob sends his people "within a year or so" (p. 61) through a whole spectrum of substances; and what a spectrum of substances: LSD, psilocybin, peyote, MDMA, MDA, ibogaine, harmaline, 2C-B.


And I can not agree when he says: "Mostly there is much more likenesses between them all than there is differences. They all turn you on, they all bring you back to your center." (p. 61)

Jacob must have had a view fundamentally different from mine about the character and meaning of the mystical state produced by true entheogens, like LSD, psilocybin, mescaline, if he puts them in the same pot [with] ibogaine, MDMA, etc. In addition, the two groups are quite different regarding toxicity.

When in the 3 case histories [it] is told how many (up to 80) trips they have taken and with a number of different substances, a pattern of use of psychedelics is shown, which I cannot approve. Such a kind of consumption of psychedelics should not be propagated.

These essential differences in the concept of a beneficial use of psychedelics made it impossible to me, to my deepest regret, to provide the promised foreword. I am very sorry.

With warm regards,



One of the joys of working with The Stolaroff Collection has been reading letters retained in Myron's archives. Through such communications, we can gain unique insights into the opinions of psychedelic pioneers.

The following letters come from a correspondence between Myron Stolaroff and Albert Hofmann, the discoverer of LSD. In a missive dated December 20, 1995, Myron entreats Albert to write a

foreword for his book *The Secret Chief*. Responding on January 19, 1996, Albert cordially accepts the invitation.

Later, after reading the manuscript, Albert regretfully informs Myron that he won't be able to write the foreword, as his own philosophical approach toward psychedelics conflicts too strongly with that of "Jacob" (Leo Zeff), the book's central character. A final letter from Myron, justifying the approach that Jacob

embraced, asks Albert to reconsider his decision. Although further response from Albert is missing from Myron's archives, the fact that Albert ultimately *did* pen a foreword for the book suggests that Myron's letter was persuasive.

I hope *Erowid Extracts* readers will find the eloquently expressed, contrasting opinions of these two heavyweight champions of the entheogenic experience to be as interesting as I did. ○

Dear Dr. Hofmann,

March 12, 1996

I have just received your letter of 27 February. Needless to say, I am quite disappointed in your decision to not write a foreword for my new book. However, I am even more concerned about the difference in viewpoint that seems to exist between us. To this end, I hope to communicate in more detail to see if we can reach a better understanding.

I believe I understand your position concerning the importance of the mystical aspect of psychedelic experience, and your concerns about the frequency of use.

I agree with you that ideally, experiences should be limited, and preferably utilized at decisive phases in one's life. However, from my own experience of several decades of investigation and with perhaps over 100 different subjects, I have come to realize that we as individuals are all different, are in different stages of development, and require a wide availability of varying procedures for optimum development.

Mature, competent people, like yourself, Sasha Shulgin, Andrew Weil, Christian Rätsch, and perhaps Ram Dass, to name a few with whom I am familiar, when once exposed to the meaningful levels of existence, can immediately begin to live on a different plane. For such people, the kind of participation with entheogens that you describe is quite adequate, and in fact ideal.

Not so for countless, countless others. Many, many people are plagued with heavy loads of burdensome psychical material—deep pains, betrayals, loss of self-esteem, isolation from their True Selves. For such persons, even with outstanding revelations, it is extremely difficult, if not impossible, to make adequate changes in their life. They need a great deal more help. It is for such as these that I hope my book *Thanatos to Eros* will be helpful.

Healthy-minded persons have a difficult time understanding such people, and how crippled they are. I once discovered that mental health was simply the state that when one once perceived that something needed doing, one simply goes and does it. This is the way the competent people in our world function. Not so for neurotics. They stew and mull over everything, constantly weigh the effort involved in action, and what others will think. The competent simply cannot understand the ghosts with which we neurotics deal. And how very, very difficult it is to get free of such Shadow material, and to actually change.

A psychologist friend of mine, an extremely competent therapist and the founder of an important new school, the Pacific Graduate School of Psychology, once explained to Jean and me that every client [who] comes to see him knows the answer to his/her problems. They simply cannot muster the energy and determination to carry out the changes. The role of the therapist is to develop trust enough to furnish support and encouragement for the client to develop sufficient strength and resolution to make the necessary changes. If the therapist tries to go too fast, the client is threatened and the trust is broken. The therapist then has to start all over again to develop sufficient trust to be of help.

For persons like this, who are heavily burdened, Jacob and his methods were a Godsend. They needed frequent interventions and ongoing experiences to finally break through their dilemmas and become

[continued...]

healthy, active persons. Like you, I was at first greatly dismayed by the number of experiences they had undergone. I liked to think that our model in the days of our own Foundation, where we administered a single, overwhelming dose, that could not be repeated in less than six months, was all that was necessary. But I found out myself in later years that this was not enough to make obvious changes, or to make the deeper, more profound changes required if one wished to become truly liberated as described by the Buddha.

One would think that once one had a clear vision, that hard work alone would be sufficient, and only an occasional reinforcement with a fresh sacramental experience would be necessary. In my own case, I applied the practice of Tibetan Buddhist meditation, and found it most fruitful and helpful. So much so, that on numerous occasions I felt it no longer necessary to resort to a psychedelic experience. Yet I frequently found that my progress through meditation alone seemed exasperatingly gradual, and returning to psychedelics would allow me to break through a deep, powerful barrier, resulting in a quantum jump in my ability to change and function on a much superior level.

So please understand that there are many, many persons who need a great deal of help in subduing and freeing themselves from their demons. For these persons, more frequent experiences can be most helpful. Also, a variety of substances can also be quite helpful. In my own personal research, I often found that a new substance would be particularly effective in exposing an entrenched and well-guarded area of the ego.

While I would cherish for everyone the highest kind of mystical experience, there are times when a particular substance can have the ability to free up a specific area of the unconscious that can be most helpful, leading to freedom, understanding, and improvement in communication and relationships that add much value to life. The human psyche is vast and complex, and as overwhelming as the mystical experience can be, it is often quite necessary to deal with more mundane areas of the psyche where we may be frozen.

Let us not forget that Oscar Janiger, in the early days of LSD research, administered LSD to the elite of Hollywood—producers, directors, famous actors and actresses. Many had outstanding, transpersonal experiences. A few special ones, like the famous actor Cary Grant and the great nutritioness Adelle Davis (who wrote a remarkable book on her LSD experiences under an assumed name, *Exploring Inner Space*), were quite outspoken about the benefits they received. But most of the others quietly forgot their experiences, and after a few months it was simply a memory like a good dream. It did nothing to change their values or their behavior, and was soon entirely forgotten. On the other hand, the members of the Native American Church use peyote to good advantage on a regular basis, with the establishment of excellent values and behavior among their people. The same can be said of the frequent use of ayahuasca by government-recognized churches in Brazil.

While I agree that our central commitment must be to spiritual development, let us not overlook other possibilities of these remarkable materials to help people in many other ways, in various stages of development and in encountering a variety of problems.

In our nation, founded upon the principle of personal freedom, it is now illegal to possess substances [that] can be powerful learning devices and lead to spiritual and personal growth. What conscientious therapist dedicated to helping his clients can abide by such laws? I assure you that there are hundreds of therapists in this country who are quietly using psychedelic substances in their practice, with very positive results—certainly a great deal better than simple therapy alone. But where can they get information outside of their own experience? One doesn't dare publish their results; there can be no public exchange of information. Therefore I feel it very important that Jacob's valuable experience be made available.

I hope you will reconsider your decision regarding the foreword to *The Secret Chief*. If you are still uncomfortable about associating your name with this endeavor, I hope that at least you can understand the need and rationale for having such approaches and such information available.

My most sincere and respectful regards,

A handwritten signature in cursive script, reading "Myron Stieroff". The signature is written in black ink on a white background.

## Psychoactives 101:

**GHB Concentration and Dosage**

Drug geeks encounter many misunderstandings about psychoactive drugs. Some of these may initially seem trivial yet can easily lead to unpleasant or dangerous situations. One such cause of confusion is the use of volume to describe dosages of GHB.

**Volume vs. Mass**

If a person doesn't know their preferred dose of GHB as measured in grams of pure powder (mass), but instead knows only their liquid dose measured in milliliters, capfuls, or

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**Because street GHB in liquid form does not come in a standard concentration, volume is not an accurate description of dose.**

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teaspoons (volume), then they don't actually know how much GHB they take. Because street GHB in liquid form does not come in a standard concentration, volume is not an accurate description of dose.

**“Liquid GHB”**

GHB is a hygroscopic powder at room temperature; unless kept very dry, it will attract water out of the air and become goo or a thick liquid. Most underground chemists prefer to create a product that is a solution of GHB in water, both because the synthesis is simpler and because it avoids the problem of keeping the material dry. This is often referred to as “liquid GHB”.

The more GHB there is in a given amount of water, the higher the concentration, and the thicker the solution. At around 0.7–1.0 gram of GHB per milliliter of water (g/ml), the solution becomes quite viscous, and may even begin to crystallize. Yet at low concentrations, the solution is

visually indistinguishable from water.

Some people mix their own solutions and therefore know the concentration of their material; most people buy from a supplier who may or may not know the concentration.

**Concentration is Key**

It is critical that those working with GHB know that concentrations of different batches can be quite different, resulting in very different volumes that contain a given dose. Because of this, users should treat all new batches of liquid GHB

as if they are of unknown strength.

They should either find out what the concentration of the material is (how many grams per milliliter) so that

they can calculate their own milliliter dose based on their preferred dose in grams, or they should ask what a low starting dose is for the material in milliliters and be very conservative about how much they take until they are familiar with the material.

**Overdose Risks**

Overdosing is a real risk with GHB as well as with related substances such as GBL and 1,4-butanediol. Symptoms can range from rapidly falling into an unrousable sleep, to dizziness, nausea, and/or vomiting, which is potentially fatal in an unconscious person. Momentary lapses in breathing are also possible at excessive doses and are increasingly likely if other CNS depressants have been consumed or if the user suffers from sleep apnea.

Even those experienced with GHB can make dangerous errors due to incorrect assumptions about the concentration of materials from different sources. ●

*Ryan: “I usually take 8 ml of GHB.”*

*Amy: “Yeah? My normal dose is 8 ml, too.”*

By stating their dosages precisely, it seems like these two people are communicating clearly. But does Amy prefer the same dose of GHB as Ryan? There's no way to know. Describing dosage in milliliters, a volumetric measurement, doesn't tell us how much GHB they are taking.

Ryan and Amy can only accurately compare their doses if they know the exact concentrations of GHB in their materials, which are unlikely to be the same unless they came from the same batch from the same source.

Ryan's material could be 0.5 g/ml, so his 8 ml of liquid would contain 4 grams of GHB, which is a high recreational dose. Amy's material could be 0.25 g/ml (half the concentration of Ryan's), which would mean that her 8 ml of liquid contains only 2 grams of GHB, a more common dose.

If Amy used Ryan's GHB instead of her own, her normal 8 ml dose would contain twice as much GHB as she is used to, possibly leading to an overdose. A safer method would be for Amy to take what Ryan considers to be a low dose of his material, regardless of what her normal milliliter dose is, so that she can test her response. If the starting dose turns out to be lower than she would like, additional material could be ingested after two hours.



Two Equal Doses of GHB,  
Photo by Erowid

# The Distillation

## Erowid Center at 2009 Events

All photos by the Erowid crew.

*The Distillation includes updates, statistics, and information that we hope will offer insight into the ongoing site additions, traffic, and projects currently underway at Erowid.*

### Summary

General Content Pages	14,946
Archived Site Pages	4,663
Experience Reports	19,374
References	7,239
Ask Erowid	565
The Erowid Review	228
Content Images	5,182
Visionary Art	1,969
Total	54,166

Erowid Files on Server	141,904
Erowid Disk Footprint	41.6 GB

Current Members	1,315
Daily Visitors	60,607



Erowid Booth & Crew  
Symbiosis Gathering 2009

### Content Details

General Content Pages	14,946
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Number of Substances Vaults	320
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Most Popular Substance Vaults (with change)
Cannabis (↑); LSD (↑); Mushrooms (↑); MDMA (↓); DMT (↑); Cocaine (↔); Salvia divinorum (↓); Oxycodone (↑); Morning Glory (↓); DXM (↔); Methamphetamine (↔); Ketamine (↔); Heroin (↔); 2C-B (↑); Datura (↑); Amanitas (↓); Opiates (↓); Cacti (↔); Amphetamine (↔); Hydrocodone (↑)

Most Accessed Documents
2C-B-Fly Deaths; Drug Testing Basics; Mushroom Effects; LSD Effects; Cannabis Effects; MDMA Effects; Cannabis Drug Testing; MDMA FAQ; Mushroom Basics; LSD Basics; DMT Effects; Cocaine Effects; DXM Effects



Historic, Elegant, and Reverberant Setting  
Horizons 2009





Camping with Art in the Sierra Nevada  
Symbiosis Gathering 2009



Erowid Banner on Table  
Symbiosis Gathering 2009



Earth and Fire Ask for a Show of Hands  
Horizons 2009

## Experience Reports

Published Reports	19,374
Published in Last 6 Mo.	788
Fully Triaged Reports	26,558
Partially Triaged Reports	1,680
Un-triaged Reports	13,107
Viewed Each Day	105,596
Submitted Each Day	19
Substances Included	499
Active Triagers/Reviewers	22

## Outreach Serves Visitors and Erowid

In August, Erowid presented to a group of physicians at Providence Tarzana Medical Center near Los Angeles, as part of the hospital's continuing medical education service. Then, in September, Erowid Center had booths at two events: the fourth Symbiosis Gathering, held near Yosemite National Park in California, and the Horizons: Perspectives on Psychedelics conference in New York.

Symbiosis is a five-day transformational art, music, and culture festival that emphasizes environmental consciousness and sustainable living. Erowid Center made its first appearance at this year's Symbiosis, which attracted over 4,500 attendees. Erowid was well received, with a stream of people stopping by to ask questions, browse the Erowid site, and share their thoughts and praises. The crowd was mostly younger adults, many of whom were already familiar with Erowid.

In contrast, Horizons: Perspectives on Psychedelics, which drew about 150 people, was an urban event held at a historic church near the New York University campus in Greenwich Village. In its third year, Horizons featured lectures on "the role of psychedelics in medicine, culture, history, spirituality, and art". The Erowid Center table served to expose the East Coast community to more of Erowid's work, and garnered a surprisingly large number of new members. The crowd was older on average than at Symbiosis and had fewer pressing questions, but held a similarly positive appreciation for Erowid.

At the beginning of October, Erowid was represented at the Women's Visionary Congress held at Black Oak Ranch in Northern California, which attracted around 60 attendees. Three Erowid crew members were present, and a short talk was given about the website on the event's final day.

These sorts of events permit the Erowid crew to meet people who have valuable ideas, information, and questions that inform how we grow.

# Image Vaults

Published Images	7,151	New in Last 6 Mo.	61
Image Vaults	290	Submitted Each Day	3.4
Viewed Per Day	37,562	Awaiting Processing	9,964

Barack Obama LSD Blotter, Photo by 357



*Psilocybe cubensis*, Photo by Fuji

## New Wave of Research Chemicals

In addition to “Spice” and related stealth cannabinoid products that we described in the June 2009 issue of *Erowid Extracts*, a multitude of slickly packaged “legal high” products are being sold around the world that contain research chemicals.

Some of these products contain chemicals new to recreational markets, while others are just caffeine. Along with being sold openly as party pills and illegal drug stand-ins, they’re described as potpourri, incense, bath salts, plant food, plant growth inhibitors, dewormers, and room deodorizers, among other obscure code names. Following the example of Spice, the packaging, marketing, and ingredients lists make it nearly impossible to know for sure if a product contains just herbs and mild chemicals, or if it contains a powerful psychoactive chemical that has never been tested in humans.

Earth and Fire included discussions of this new wave of products in their recent talks at Providence Tarzana Medical Center and the Horizons conference. Reports of compulsive re-dosing, lasting neurological problems, a series of hospitalizations, and a couple of deaths in Europe in 2009 have forced this dark grey market into the public eye and brought increasing law enforcement scrutiny.

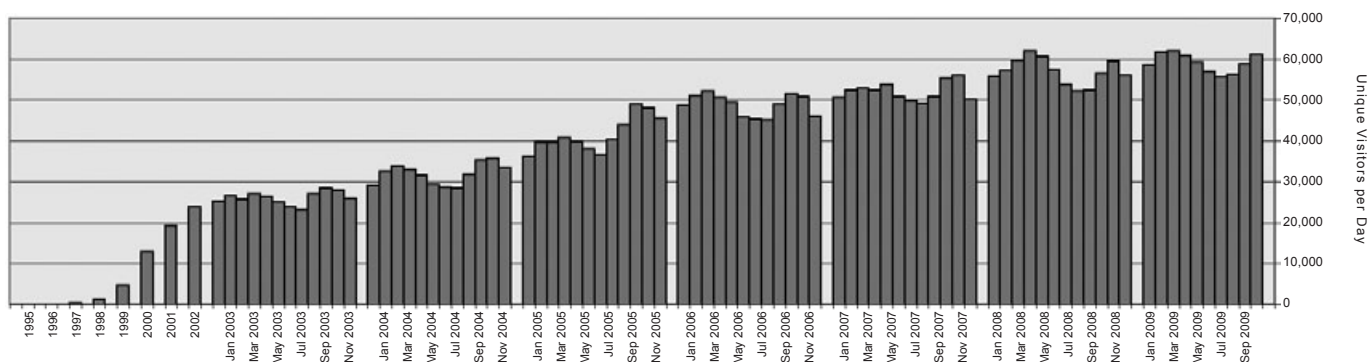
## The Erowid Review

Published Reviews	228
Published in Last 6 Mo.	14
Viewed Each Day	1,287



MDMA Tablets – “Curves”, Photo by Anonymous

Daily Erowid Visitors (1995–2009)



### Monthly Announcements Get a New Look

More than ten years ago, in 1998, Erowid began sending out email announcements updating subscribers about new content, recent activities, and current projects. Over the years this has been a way for supporters to keep up with what the Erowid crew is working on.

In early 2009 we launched a more advanced web-based version of these announcements. While still offering the option of our simple no-HTML emails, the new image-laden online version continues to be developed as a more colorful and user-friendly alternative. Adding a link to the re-named *Erowid Monthly* from Erowid’s splash page has increased its readership by 20 times, and subscriptions have also risen.

The *Erowid Monthly* is designed as a one-stop shop for the latest additions to the site, including new articles, vaults, and images, EcstasyData results, book reviews, and fun factlets. It also features crew updates and our picks for classic content from the site that readers shouldn’t miss. Visit [Erowid.org/monthly](http://Erowid.org/monthly) to see the current issue or [Erowid.org/announce](http://Erowid.org/announce) to subscribe.

### EcstasyData Summary

<b>2009</b>	Daily Visitors	4,254	Daily Page Hits	30,123
	Results Posted	99	Daily File Hits	356,247
<b>BY YEAR</b>	Results Posted		Testing Results (1999–2008)	
	2009	99	Total Results Posted	1,776
	2008	45	MDMA Only (35%)	614
	2007	68	MDMA + something (20%)	365
	2006	46	No MDMA (45%)	797
	2005	136	– Nothing	101
1996–2004	1382	– Unidentified	73	



### Membership

Current Members	1,315
Recently Expired Members (0–6 mo.)	267
Older Expired Members (6+ mo.)	4,106
Members in the United States	940 (71%)
Members in Other Countries	375 (29%)
Countries with Members	40
Countries with 1–3 Members	
Greece (3); Israel (3); Russia (3); Taiwan (3); Austria (2); Japan (2); Portugal (2); Albania (1); Bulgaria (1); China (1); Czech Rep. (1); Egypt (1); Estonia (1); Hungary (1); Iceland (1); Latvia (1); Luxembourg (1); Macedonia (1); Senegal (1); Slovak Rep. (1)	

### Erowid Traffic Statistics

<b>DAILY</b>	Visitors	60,607	File Hits	3,498,027
	Transfer	23.65 GB	Page Hits	396,735
<b>BY MONTH</b>		Avg Daily File Hits	Avg Daily Page Hits	Avg Daily Visitors
	Oct 2009	3,500,638	397,537	61,137
	Sep 2009	3,530,713	384,611	58,889
	Aug 2009	3,467,759	369,758	56,220
	Jul 2009	3,475,841	371,893	55,611
	Jun 2009	3,563,280	370,117	56,962
<b>BY YEAR</b>	2008	3,812,410	418,918	57,012
	2007	3,559,761	439,501	51,979
	2006	3,025,185	409,796	48,755
	2004	1,799,694	405,528	31,241
	2002	1,206,855	283,541	23,042
	2000	462,000	126,000	12,000
1998	31,200	8,500	1,000	

# VERBATIM

**“A library is thought in cold storage.”**

—Herbert Samuel (1870–1963)

**“You can know the name of [a] bird in all the languages of the world, but when you’re finished, you’ll know absolutely nothing whatever about the bird. [...] So let’s look at the bird and see what it’s doing—that’s what counts. [...] I learned very early the difference between knowing the name of something and really knowing something about the world.”**

—Richard Feynman (1918–1988)

**“The Ten Commandments contain 279 words, the American Declaration of Independence 300. The European Union’s regulation for caramel candies contains 25,911 words.”**

—Bodo H. Hauser (1946–2004)

**“Seek simplicity and distrust it.”**

—Alfred N. Whitehead (1861–1947)

**“Trust, but verify.”**

—Ronald Reagan (1911–2004)

**“I would never die for my beliefs because I might be wrong.”**

—Bertrand Russell (1872–1970)

**“Death is better, a milder fate than tyranny.”**

—Aeschylus (525–456 BCE)

**“Nearly all men can stand adversity, but if you want to test a man’s character, give him power.”**

—Abraham Lincoln (1809–1865)

**“Ultimately, the only power to which man should aspire is that which he exercises over himself.”**

—Elie Wiesel (1928–)

**“Success is the ability to go from failure to failure without losing your enthusiasm.”**

—Winston Churchill (1874–1965)

**“For if there is a sin against life, it consists perhaps not so much in despairing of life as in hoping for another life and in eluding the implacable grandeur of this life.”**

—Albert Camus (1913–1960)

**IN TABERNA  
QUANDO SUMUS  
NON CURAMUS  
QUID SIT HUMUS.**

[ When we are in the  
tavern, we do not think  
how we will go to dust. ]

– 13th century drinking song  
from *Carmina Burana*

**“A goal without a plan is just a wish.”**

—Antoine de Saint Exupéry (1900–1944)

**“We dream of traveling through the universe—is the universe not in us? We do not know the depths of our spirit—inward goes the mysterious path.”**

—Georg von Hardenbergen (1772–1801)

**“When you travel, remember that a foreign country is not designed to make you comfortable. It is designed to make its own people comfortable.”**

—Clifton Fadiman (1904–1999)

**“The wine urges me on, the bewitching wine, which sets even a wise man to singing and to laughing gently and rouses him up to dance and brings forth words which were better unspoken.”**

—Homer (800–700 BCE)

**“Always do sober what you said you’d do drunk. That will teach you to keep your mouth shut.”**

—Ernest Hemingway (1899–1961)

**“The search for happiness is one of the chief sources of unhappiness.”**

—Eric Hoffer (1902–1983)

**“To be alert and never unclear is to wear chains and an iron yoke.”**

—Wumen Hui-k’ai (1183–1260)

**“Progress is impossible without change, and those who cannot change their minds cannot change anything.”**

—George Bernard Shaw (1856–1950)

**“If you wish success in life, make perseverance your bosom friend, experience your wise counselor, caution your elder brother, and hope your guardian genius.”**

—Joseph Addison (1672–1719)

**“Hope is the thing with feathers  
That perches in the soul,  
And sings the tune  
Without the words,  
And never stops at all [...]”**

—Emily Dickinson (1830–1886)

**“O for the gentleness of old  
Romance, the simple planning of a  
minstrel’s song!”**

—John Keats (1795–1821)