



HALLUCINOGENS

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WHAT ARE HALLUCINOGENS?

The word hallucinogen refers to a wide variety of drugs that produce a change in the user's perception of the world. These drugs produce 'hallucinations' - false perceptions through the senses, so the user believes for example, that they can see, hear, smell, taste or touch things that do not exist.

Using hallucinogens to experience hallucinations is often called 'tripping'.

Hallucinogens may be either wholly synthetic products, made in laboratories by mixing different chemical substances, or substances that occur naturally in different parts of the world in trees, vines, seeds, fungi and leaves.

Historians have found evidence that hallucinogens have been used for thousands of years in many different cultures. These drugs were used in ancient cultures such as those of India, China, Greece, Rome, Assyria, Persia and Egypt in religious rituals as well as in medicine, sorcery and for magical applications. Hallucinogens were also used in Europe during the medieval period and the Renaissance - times of widespread witchcraft and demonology. The strange visions and bizarre behaviour that they caused were often seen as proof of contact with satanic forces. In addition, many Indian tribes of North and South America and the West Indies used hallucinogens for a range of ritual and medicinal purposes.

However, hallucinogens were not widely used in modern Western societies until the 1960s, when young people began to use the synthetic drug LSD (lysergic acid diethylamide) and the naturally occurring cannabis plant.

Some substances that may have a hallucinogenic effect include the following:

SYNTHETIC

LSD (lysergic acid diethylamide)

PCP (phencyclidine)

Ketamine

Ecstasy (MDMA - methylenedioxymethamphetamine)



NATURALLY OCCURRING

Magic mushrooms (psilocybin)

DMT (dimethyltryptamine)

Mescaline (peyote cactus)

Datura

Cannabis

Corkwood tree

WHAT IS THE APPEAL OF HALLUCINOGENS?

Hallucinogens appeal to the people who use them because they can change the way they feel and how they perceive the world around them. People may use these drugs to:

- W have fun and feel happy
- W be free of inhibitions
- W be accepted by a group of friends
- W feel sociable and enjoy people more
- W forget ordinary life and relieve boredom
- W forget problems and escape from worries
- W enjoy music and dancing more
- W experiment and feel the thrill
- W be rebellious
- W relax and chill out

However, it is important to remember that a substance that is sufficiently active to change a person's brain chemistry, so that their perception is altered, is bound to have a range of other effects in the short or long-term, and be associated with a certain amount of risk to one's physical and mental health.

WHAT ARE THE EFFECTS OF USING HALLUCINOGENS?

Some of the immediate and long-term effects of using hallucinogens can include:

IMMEDIATE EFFECTS

- W seeing things in a distorted way or seeing things that do not exist
- W intense sensory experiences - bright colours, sharper sounds
- W mixing of the senses - colours are heard, sounds are seen
- W distorted sense of time - minutes can seem like hours
- W distorted sense of space and body image
- W alterations in emotion
- W dilation of pupils
- W increase in heart rate and blood pressure
- W increase in body temperature and sweating
- W dizziness
- W drowsiness
- W nausea
- W tension and anxiety, leading to panic
- W paranoia
- W impaired coordination and tremors

LONG-TERM EFFECTS OF HALLUCINOGEN ABUSE

- W flashbacks - a spontaneous and unpredictable recurrence of a prior drug experience ('tripping') without taking the drug. Flashbacks may occur, days, weeks, or years after the drug was last taken. They can be triggered by the use of other drugs, stress, fatigue, physical exercise or stimulation of the senses



- W increased risk of developing severe mental disturbances in those who have a predisposition to the condition
- W impaired memory and concentration

COMMON SYNTHETIC HALLUCINOGENS

LSD (LYSERGIC ACID DIETHYLAMIDE)

STREET NAMES: Acid, trips, tabs, dots, microdots, tickets, blotters

LSD is the most commonly used hallucinogen in Australia and is a powerful, mind-altering drug.

Manufactured in illegal laboratories, LSD is a synthetic chemical derived from ergot, a fungus which grows on certain grains, primarily rye. It is usually sold on the street on small pieces of absorbent paper decorated with popular designs, like smiley faces or psychedelic graphics. It may also be sold on sugar cubes, small squares of gelatine or in capsule, tablet or liquid form.

LSD is taken orally, by either swallowing or putting it under the tongue. The effects of the drug usually start within 30 to 60 minutes and are at their peak in 3 to 5 hours. Usually the effects last for 6 to 9 hours, but they can last for up to 24 hours.

LSD is the most powerful of the known hallucinogens. Only a small amount is needed to produce changes in perception, mood and thought. Higher doses of the drug produce more intense effects. The LSD 'trip' is the desired effect of the drug, involving a radical change in consciousness and dramatic psychic effects. Perceptual changes can include visual, auditory and tactile hallucinations, which the user is usually aware are not real.

Any LSD 'trip' may produce both positive experiences, such as a sense of wonder and joy and of feeling 'high', as well as negative experiences, involving feelings of anxiety, fearfulness or even panic. A 'bad trip' is the most common adverse effect of the drug. Someone who is having a bad trip can feel a number of things, including great confusion, feeling overwhelmed by noises or crowds, a fear that they are losing their mind, frightening hallucinations and paranoia.

PCP (PHENCYCLIDINE)

STREET NAMES: Angel dust

PCP was originally designed to be used as an anaesthetic, but its use was abandoned because it caused confusion and delirium. PCP is now used only rarely on animals.

PCP can be sold in the form of powders, tablets and crystals. It is usually either swallowed, snorted or smoked. Although there are many reports of PCP use and associated problems in the US, the drug is rarely seen in Australia.

PCP has a wide range of effects on brain activity, and as a result, it is difficult for the user to predict what they will experience. Put simply, taking PCP can produce a state similar to getting drunk, taking amphetamine, and taking a hallucinogen simultaneously. It also has anaesthetic effects. Depending on how the drug is taken, the effects may start almost immediately or within about 30 minutes. A single dose usually lasts four to six hours, although the lingering effects can last for up to two days in some cases.

It is most often taken for the euphoric effects it produces, but at the same time it may also cause poor co-ordination, slurred speech and drowsiness. At higher doses it causes a dissociative state in which people seem very out of touch with their environment.

PCP has caused coma in some users whose muscles have gone into spasm. Extremely high doses have resulted in fits, heart attacks, coma, and dangerously high body temperature.

KETAMINE

STREET NAMES: K, Special K, vitamin K

Ketamine is chemically related to PCP, and like PCP it is an anaesthetic that also produces hallucinations, a reduced sensitivity to pain and amnesia. In Australia it is used in both human and veterinarian preparations.

These preparations are sold to veterinarians and medical authorities as a clear liquid, however on the street it is sold as a white powder or tablet. The powder is usually inhaled ('snorted') in small quantities called 'bumps', but it is swallowed or injected by some users. Some users may be unaware that they have taken the drug as it is increasingly used in

ecstasy pills to create an 'ecstasy-like' effect in those pills that do not actually contain 'true ecstasy', i.e. MDMA.

The effects of ketamine can begin within 30 seconds if it is injected or within 20-30 minutes if it is swallowed, and usually last for about 3 hours. Like PCP, Ketamine produces a wide spectrum of effects that are difficult to predict. The drug can cause the user's body to become numb and paralysed, and there is sense of being separated from the body. Some users experience delusions and mental confusion, and terrifying hallucinations can occur, which seem to go on forever.

It is believed that ketamine works by 'blocking' two parts of the brain - the senses and memory. When enough of the drug is used, the brain is forced into creating its own 'reality'. Entry into computer networks, meetings with aliens and 'near death' are some of the themes Special K users describe when asked about their experience.

The potential for ketamine users to do harm to themselves while anaesthetized is great and there are many stories of users burning or cutting themselves unknowingly while using the drug. However, the primary danger in taking Special K stems from the loss of judgement users experience which has particular implications for safe sex. The drug has also proven to be highly addictive.

ECSTASY (METHYLENEDIOXYMETHAMPHETAMINE - MDMA)

STREET NAMES: E, ecky, MDMA, X, XTC

Ecstasy, or MDMA, is a stimulant with hallucinogenic properties. Popular as a dance drug, it is described as an empathogen as it releases mood-altering chemicals, such as serotonin, in the brain, generating feelings of love, intimacy, friendliness, and euphoria. As it is also a hallucinogen, the world becomes surreal, highly coloured and distorted. However, in higher doses, ecstasy has also been associated with serious adverse effects, including death.

Ecstasy is produced through chemical synthesis in illegal laboratories. It is usually sold on the street as a pill or capsule, but can sometimes be bought in powder form. Ecstasy tablets come in many different sizes and colours, and often feature designs such as doves or hearts. Increasingly, pills have designs featuring established brands or product names such as 'Mitsubishi', 'Calvin Klein' or 'Rolls Royce' on them. These logos are no indication of the quality of the drug. The drug may be 'cut' with a range of substances to bulk out the tablet, although it is rare for any of

these to be more toxic than MDMA itself. Other drugs, such as ephedrine, amphetamine or ketamine may also be added to the mix, leading to unexpected side effects.

There have been cases where much more toxic drugs such as PMA have been found in an ecstasy pill. PMA (paramethoxyamphetamine) is an amphetamine-type drug with both stimulant and hallucinogenic properties. It has no medical use. Its effects are similar to those of MDA, although PMA is much more potent and far more toxic. PMA has been linked to a number of Australian deaths over the years. Six people died in South Australia between September 1995 and January 1996 after taking PMA, either alone or combined with MDMA. All indications are that the users believed they were taking MDMA alone and did not realise that PMA was present in the tablet they used.

The effects of ecstasy begin after about 30 minutes. They peak in an hour and last for 2 - 3 hours. The desired effects of the drug include euphoria, a great sense of pleasure, increased energy levels, emotional insight, enhanced self-esteem, increased sociability or closeness and communication with other people, and slightly altered visual perceptions. However, some users find the experience far from pleasurable. Blurred vision, nausea and vomiting, muscle stiffness, sweating, jaw clenching, teeth grinding, anxiety, panic attacks and depression are just some of the negative effects users have experienced when things have not gone to plan.

The deaths reported as a result of the use of ecstasy have mainly been associated with kidney or heart failure caused by a dangerously high body temperature. Ecstasy users who participate in all night dance sessions may not drink enough water to replace the fluids lost through sweat in the hot environment.

NATURALLY OCCURRING HALLUCINOGENS

MAGIC MUSHROOMS (PSILOCYBIN)

STREET NAMES: Mushies, rooms, blue meanies, golden tops, gold caps

Psilocybin is a hallucinogenic chemical found in some varieties of mushrooms. It belongs to the same chemical family as LSD, so its effects are quite similar.

The psilocybin mushroom is native to Mexico, but many other species of magic mushrooms grow in different places around the world. There are



believed to be between 15-20 species of magic mushrooms growing wild in Australia. However, it is very dangerous to pick and eat wild mushrooms as it is difficult to distinguish magic mushrooms from the poisonous look-alikes, and symptoms can take up to 40 hours to develop. Poisonous mushrooms can cause stomach pains, vomiting and diarrhoea, while some can lead to permanent liver damage, respiratory failure, unconsciousness and even death.

Both fresh and dried mushrooms are eaten raw or cooked, or they're boiled up into a mushroom tea. Dried mushrooms are usually smoked in a rolled cigarette or pipe. It usually takes at least 30 minutes for the hallucinations to begin, with peak effects occurring after about 3 hours. The whole experience can last for nine hours or more.

The desired mushroom 'trip' usually involves feelings of happiness and euphoria, spontaneous laughter, and visual and auditory hallucinations.

However, if too many mushrooms are taken, or the user is anxious or uncomfortable with their surroundings, they could end up experiencing a bad trip, involving feelings of paranoia, panic and terrifying hallucinations.

DMT (DIMETHYLTRYPTAMINE)

STREET NAMES: The Businessman's Trip, The Businessman's Lunch

DMT is an extremely powerful hallucinogenic drug found in certain plants. The chemical structure of the drug is very similar to that of psilocybin, the chemical found in magic mushrooms. In Australia, most supplies bought on the street are a synthetic equivalent.

DMT is a naturally occurring component of several plants found in the West Indies and South America. For centuries, South American Indians have used DMT in the form of snuff for its hallucinogenic effects. In Australia, DMT has also been found in the bark of a number of commonly occurring trees, as well as a number of other plants.

In its pure form, DMT is a white, strong smelling crystal. However, on the street it is normally a light brown powder. The powder or crystals are usually smoked through a glass or metal pipe. The powder can also be eaten. If the drug is prepared from the plant, it will generally be a greenish brown, thick sludgy liquid, which is difficult to swallow and then keep down.

Unlike other hallucinogens, the DMT 'trip' is quite brief. When taken, the effects of the drug are immediate, peaking within a short period of time and lasting for between 30 and 60 minutes. - hence the street term 'businessman's lunch', as the whole hallucinogenic episode occurs in the time it would take to have lunch! The drug usually produces a 'rush', both heart and blood pressure increase dramatically, and powerful visual hallucinations which can be terrifying, involving a mixture of feelings from euphoria to fear and insanity. A DMT 'trip' can feel like it is lasting for years. If DMT is smoked, the risk of experiencing a 'bad trip' is far greater than if the drug is eaten.

States of anxiety and panic tend to be more frequent with DMT than with most other common hallucinogens. This may be due to the rapid onset of the drug's effects, which does not give the user time to adjust. The user can never predict how they will be affected.

MESCALINE (PEYOTE CACTUS)

Mescaline is a naturally occurring hallucinogen derived from the Mexican peyote cactus and the San Pedro cactus found in Peru and Ecuador. Synthetic mescaline can also be produced in a laboratory.

Mescaline produces similar effects to those of LSD and magic mushrooms, including vivid visual hallucinations and a melding of the senses, so that, for example, music may appear to be 'seen'. Changes to the perception of time, space and body image are also produced.

In Australia, other drugs, such as LSD, are sometimes sold as mescaline due to the drug's reputation. In fact, mescaline is rarely found outside Mexico and the south western United States.

Mescaline is usually dried and refined into a powder, which varies in colour from white to brown. It is usually taken orally, in the form of a powder, tablet, capsule or liquid. Peyote buttons can be chewed, or they are sometimes ground and smoked with cannabis or tobacco. The effects of the drug normally last about two hours, and take between 10 and 12 hours to completely disappear.

As with the other hallucinogenic drugs, there is no way to predict how any user will react to the psychic effects produced by the drug on any 'trip'. These effects may range from joy and exhilaration to extreme anxiety and terror. It is not unusual for a user to experience different reactions to the drug during different 'trips'.

DATURA (ANGEL'S TRUMPET)

STREET NAMES: Thornapple, stinkweed

Datura is a naturally-occurring plant that has been used as a medicine and intoxicant for centuries. All parts of the plant are poisonous, so there are very limited pleasant effects from this drug. In recent times it has been most often used by young people who are unfamiliar with its effects.

Usually the effects of the drug begin within two hours of use, and may last up to 24 to 48 hours.

The psychological effects of Datura include confusion, euphoria and delirium. Accidental poisoning can occur with higher doses of the drug. In extreme cases, users can experience seizures, intense visual or auditory hallucinations, or cardiac arrest.

CANNABIS

STREET NAMES: Marijuana, grass, pot, dope, weed, smoko, joint, ganja, skunk, hash, hydro

Cannabis has been used in many cultures over thousands of years, mainly for medicinal purposes. In the early 19th century, many pharmacies sold cannabis as over-the-counter treatments for pain. In the mid- to late 19th century people began to use cannabis for pleasure. In fact, the drug was legal in the United States until the 1930s. Unlike many of the other natural hallucinogens mentioned, the cannabis plant can grow in many climates and is very easy to cultivate.

The most common form of cannabis is made from the dried leaves and flowers of the plant, and looks like coarsely chopped dried herbs. Cannabis is usually smoked.

Cannabis is primarily a depressant drug, but it can have hallucinogenic effects. When taken in low doses cannabis usually causes users to experience euphoria, lose their inhibitions, and feel relaxed and talkative. However, drowsiness and sedation often follow the initial stimulation and exhilaration. Cannabis can also have unpleasant effects. Users may feel sick, dizzy, faint and too spaced out to speak. Their judgement may be impaired and they can lose co-ordination.

When taken in higher doses (or even a lower dose of the stronger part of the plant, such as the flowering heads or the buds) unpleasant hallucinations may be experienced, particularly by those people who have not used before, or those who use more than they are used to. Some users may also experience anxiety, panic and paranoia. Cannabis remains in the body for up to one month.

CORKWOOD TREE (DUBOSIA MOYOPORIDES)

The Corkwood Tree is a tall shrub or small tree found in New South Wales and Queensland. It has a thick corky bark. Indigenous Australians used to make a hole in the tree's trunk, pour water into it, and then plug the hole. Overnight this would produce a strong liquor. Drinking this liquid apparently produced a 'stupor' in the Aborigines, causing them to experience hallucinations.

Natives of Central Australia used to smoke and chew the leaves of this tree for its stimulating effect, which would enable them to work at high pressure without food.

The drinking of corkwood liquor seemed to stop following the introduction of European spirits to Aborigines. The leaves of the tree are now harvested and exported to Europe for medicinal purposes, as the drug has a sedative, hypnotic (inducing sleep) and mydriatic (dilating of the pupil) qualities which increase the activity of the respiratory system. Homeopaths use the tincture and the alkaloid for paralysis and eye infections.

It is highly inadvisable for those unfamiliar with the Corkwood tree to try to obtain this drug, as many trees and plants look very similar. Taking liquid or chewing or smoking the leaves or bark of the wrong tree could mean that the user ingests something highly toxic.

FREQUENTLY ASKED QUESTIONS

1. WHAT IS A 'BAD TRIP'?

Some people experience many negative feelings when they use hallucinogens. This is known as a 'bad trip'. During a bad trip the effects of hallucinogens may become so intense, they overwhelm the user's ability to cope. Sometimes the user feels they are losing control and 'going crazy'. Examples of negative feelings that may be experienced on a bad trip include spiders crawling on the skin, ropes turning into snakes and believing one is deformed.

Anxiety and paranoia may sometimes occur, causing panic. A bad trip can seem like it will never end.

Because hallucinogens distort perceptions, users may find themselves in dangerous situations such as wandering across busy intersections or jumping off high areas. A person experiencing a bad trip could exhibit risky or violent behaviour, injuring themselves or others. If this happens, take the person to a place where they feel comfortable and reassure them until the effects wear off. This may take several hours. If the user becomes uncontrollable or hysterical, call for an ambulance immediately.

Taking hallucinogens when anxious, tired or feeling down will probably intensify these negative feelings.

2. WHY DO THE EFFECTS OF HALLUCINOGENS VARY FROM PERSON TO PERSON?

When taking any hallucinogenic drug, a person's mood, health, personality, expectations, and previous experience with hallucinogens or other drugs are all factors that will impact on how that person is affected.

Other factors include the amount of the drug that is used, what it is mixed with, and the way it is taken, as well as the environment that the person is in when they take the drug - whether the person is at home or a party, with friends or on their own.

Most hallucinogens can produce a wide range of vivid sensory distortions and cause great changes in mood and thought. Individual users will have subjective reactions to the particular effects produced by any hallucinogen, and those reactions can differ significantly. In fact, during any one 'trip' a user is likely to experience various psychic and emotional reactions. Any hallucinogen, taken in exactly the same dose by the same user, can also induce widely varying experiences from one 'trip' to the next.

3. ARE HALLUCINOGENS ADDICTIVE?

While some users may become psychologically dependent on hallucinogens, they will not become physically addicted to them.

Users can build up a tolerance to hallucinogens the more they use them, so that they progressively need to take more of the drug in

order to achieve the same effects, however this tolerance is rapidly lost several days after the drug is stopped.

4. ARE NATURALLY OCCURRING HALLUCINOGENS SAFER THAN SYNTHETIC ONES?

Drugs that can be found occurring in nature are no safer than those that are produced in a laboratory - in fact, many of them are even more dangerous. It should be remembered that synthetic drugs are often produced based on the chemical make up of naturally occurring elements. For instance, LSD is a synthetic chemical derived from ergot, a fungus which grows on certain grains. This synthetic chemical has the same structure as the hallucinogenic chemical found in some varieties of magic mushrooms. So it is actually irrelevant whether someone is using a synthetic or a naturally occurring drug, as long as they are aware of the particular effects of the drug they are taking.

The possible exception to this may be in the case of street drugs, which users should be aware could be mixed with unknown chemicals. These drugs could be more dangerous to the user than for example, if they were taking a quantity of fresh magic mushrooms, as they may not have any way of knowing exactly what is in the street drug they are taking, whereas they would know the makeup and possible effects of magic mushrooms that had not been tampered with in a laboratory.

5. WHAT IS THE BLUE STAR TATTOO?

In America in the 1980s, the media spread information from a police report that claimed that a new type of LSD-laced 'lick and stick' tattoo called 'Blue Star' was being sold or given away to school children. The media reports claimed that these tattoos were designed to be removed and ingested, and that the LSD could be absorbed through the skin by handling the tattoos. Apart from pictures of stars, these tattoos were said to also come with pictures of Superman, Mickey Mouse, clowns and so on.

However, these reports were not true, as LSD tattoos do not exist. This report originally arose due to some confusion over the form of LSD that is commonly packaged on small squares of absorbent paper that have been soaked in a solution containing LSD. These absorbent paper squares are often marked with popular graphics, like stars or cartoons. It is also unlikely that the casual handling of LSD paper would result in the drug being absorbed through the skin.

This booklet was written by Eileen Goldberg and Paul Dillon and produced by the National Drug and Alcohol Research Centre (NDARC). For a list of other booklets available and more information on the work of NDARC visit www.med.unsw.edu.au/ndarc

ISBN 0 7334 2266 7

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