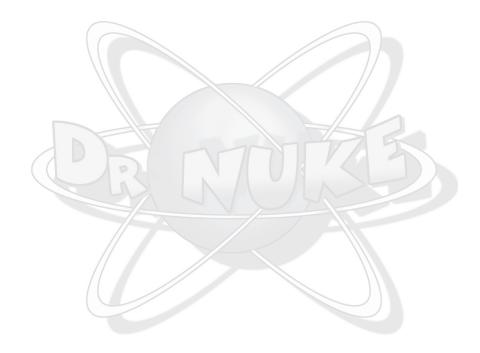


This Publication was first printed in 2004. The legal status of some of the drugs has now changed. Cannabis is class B, Psilocybe mushrooms are class A in any condition. Ketamine is now a class C drug.



This book is aimed at those people who are considering or who are already experimenting with mind-bending drugs. It is neither pro or anti drugs, it simply accepts the reality of drug use and aims to provide accurate information for those people who choose to use.

Written by **Dr Russell Newcombe**Design, illustrations and editing **Michael Linnell**©Lifeline 2004

Published by **Lifeline Publications**, 39-41 Thomas Street, Manchester M4 1NA. ISBN 0-9520082-2-X



Dr Nuke first came to notoriety in the 1960's with his pioneering drug testing work with beagles. The limitations of these experiments lay in the beagles' inability to provide subjective feedback (commonly known as talking). It was alleged that random samples of students were then kidnapped, locked in the beagles' cages and forced to use a variety of mind expanding drugs. These allegations only came to light after the subsequent riot when the students refused to leave their cages at the end of the experiment. Shunned by the scientific community, Dr Nuke set up his secret underground drug lab, where he continues with his search for the ultimate pleasure chemicals.

CONTENTS

2-3	Introduction	23	Brain damage
		24	Deaths and serious illness & injury
4-6	What is a mind-bending drug?	25	The death toll
4	Why call them mind-benders?	26-27	The law
5	Drug types	26	Legal status
5	Classification of mind-benders	26	Other drug laws
6	Psychedelic & Deliriant drugs	27	The Misuse of Drugs Act
7-17	The effects of	28-45	Pyschedelic drugs
	mind-bending drugs	29-31	LSD
7	Drug, set and setting	32-33	DMT
7	Drug strength and quality	34-35	Psilocin (magic mushrooms)
8-9	Effects on the body	36-37	Headshop Shrooms
10	Effects on the mind -	38-39	Mescaline
	what does a trip feel like?	40-41	DOM
11	Effects on emotions	42-44	MDMA (ecstasy)
11-13	Effects on perception: distortions and hallucinations	45	Cannabis
14-15	Types of hallucinations	47-59	Deliriant drugs
16	Effects on thinking and	48-49	Amanita muscaria
	consciousness		(fly agaric mushrooms)
16	The ego	50-53	Ketamine
17	Maps and models	54	GHB
17	Horses for courses	55-56	Solvents
		57	Alkyl nitrites (poppers)
18-21	Bad trips	58-59	Nitrous oxide (laughing gas)
19	Dealing with a bad trip		(0 00)
19-21	Dealing with bad trips	60-62	Other mind-bending drugs
	in other people	61	Natural chemicals
		62	Medicines
22-25	Harmful outcomes -	62	Designer drugs
	side effects & after effects		3 3
22	Dependence	63	Mixing mind-benders
22	Flashbacks		5
22	Drug psychosis and mental illness	64-69	Safer tripping:
	31 /		rules for reducing risks





Hello again my drug fancying chums. My field research this year took me to.....well, a field; but not to study the grass (that will be covered in my forthcoming masterpiece 'Potology 2'). No, this particular field was where tribes from all over the country had gathered for 'Dreamfields': - a festival of phantastica'. Wandering across the campfires of the tent city, I noticed a huge variety of mind-bending drugs being gobbled, smoked and sniffed:

LSD, ecstasy, magic mushrooms, mescaline, STP, DMT, ketamine, GHB, nitrous oxide, solvents, herbal highs, poppers.

I even observed a young woman chasing a toad down a hole.

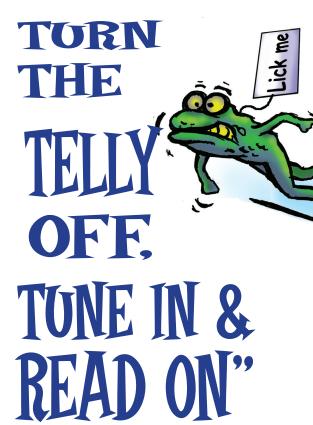
Throughout history many cultures have used mind-bending drugs in religious ceremonies and other rituals (some still do). Sometimes, just the *shaman* (witchdoctor) took the drugs to make contact with the ancestors and spirit world, often to find answers to practical problems like where to hunt or to mark one of the main milestones of an individual's progress through life - birth, adulthood, marriage and death. These rituals placed controls on the use of mind-bending drugs – not just the frequency and amount of use, but how to interpret the effects or messages from spirits.

As Alice discovered in Wonderland, once you have taken a mind-bending drug, the world - including yourself - may never seem the same again. Before you ever take one (or before you take one again) you should ask your brain some questions:

Why the devil do I want to bend my mind? What am I going to bend it with? What does a bent mind feel like? What problems can mind-bending drugs lead to? What can be done to reduce harmful consequences?

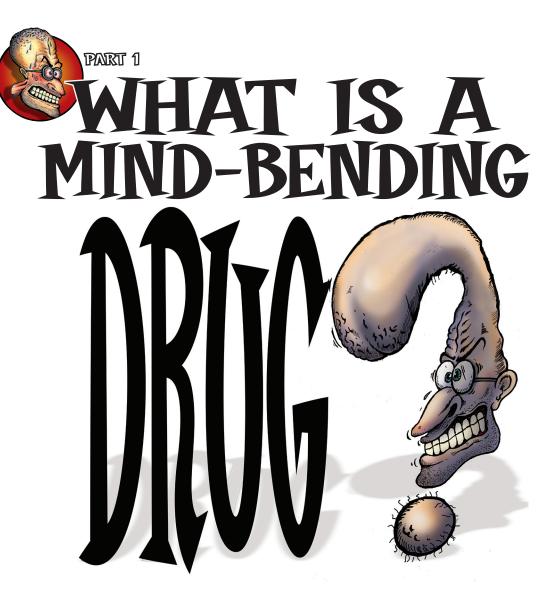
Using up-to-date information from the various 'ologies' and sciences – Tripology aims to provide some of the answers to these questions. So let's begin:

"SET THE CONTROLS FOR THE HEART OF THE SUN :-





[&]quot;I even observed a young woman chasing a toad down a hole".



WHY CALL THEM MIND-BENDERS?

Earlier names for mind-bending drugs include *phantastica* (because they induce fantasies) and *psychotomimetics* (because their effects were thought to mimic psychosis or madness). *Mind-bending, mind-altering, mind-expanding, hallucinogenic, psychedelic* are all names currently used to describe the thousands of drugs in this category. I have referred to them as mind-bending drugs in this booklet simply because I like the expression and it's my book and I'll call them what I damn well like.

Hallucinogenic is sometimes used to describe all mind-bending drugs but will only be used in this booklet to describe the effects of a drug which significantly alter your thoughts and perceptions, often making you hallucinate. Trip will be used to describe the experience you have under the influence of such drugs. Psychonaut will be used to describe an experienced, frequent or enthusiastic user of mind-bending drugs. Other terms will be explained as we go along.

DRUG TYPES

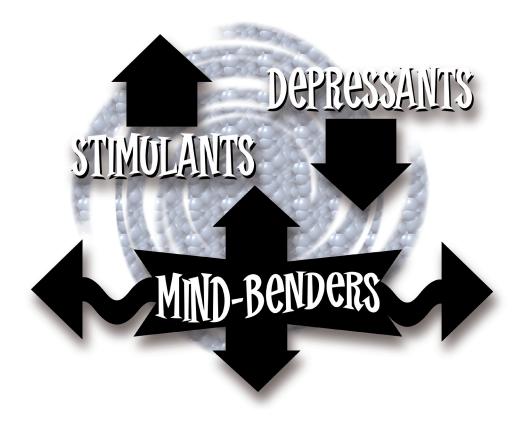
Egghead boffins like myself like nothing better than classifying drugs in a whole range of exciting 'scientifitastic' ways. With some drugs this is easy, for instance: amphetamine and cocaine are **stimulants** (or uppers) because they speed up the mind and body; alcohol and heroin are **depressants** (or downers) because they slow down the mind and body.

But there is a third group of drugs whose effects are not simply stimulant or depressant – namely, the **mind-benders**. These drugs may also take you up or down, but may take you 'sideways', as they are better known for producing *hallucinations* and other *weird* effects. Some stimulants and depressants may have mind-bending effects with very high doses, or in interaction with other drugs – but true mind-bending drugs have these effects in standard single doses.

CLASSIFICATION

There are many ways to further categorise mind-bending drugs: by their source (where they come from), by their legal status and by classification in terms of both chemical group and psychological effects. I will only use two general categories to describe mind-bending drugs throughout this book.

Psychedelic: a term first used to describe mind-bending drugs in the 1950's. It literally means mind-manifesting or 'consciousness expanding' and Deliriant: this term was derived from delerium to describe drugs which produce a disordered, cloudy, excited state of mind - more like an explosion than an expansion of consciousness. Though there are exceptions, the effects of psychedelics are generally regarded as of 'higher quality' and far safer than the deliriants – whereas deliriants are more often described as confusing, chaotic, disorienting and/or plain baffling.



PSYCHEDELIC & DELIRIANT DRUGS

Psychedelic drugs have few physical effects on the body and these tend to be minor. They have more stimulant effects (e.g. alertness, sharper thinking). Most psychedelics are fairly 'safe' - meaning that poisoning and death are quite rare. High doses of psychedelics are more likely to cause agitation and manic behaviour. They are generally regarded as non-habit forming - in fact, most psychedelics cease to have any effect if they are taken on a regular basis (without massive increases in dose).

Physical effects are more common and stronger with deliriant drugs including lack of bodily coordination, changes in pulse rate, blood pressure, etc. They tend to have more sedative effects (e.g. drowsiness, slowed down thinking).

Most deliriants are pretty toxic (poisonous), and have a much higher fatality rate than psychedelics.

Overdosing on deliriant drugs tends to cause unconsciousness. Though psychedelics can bring about shared hallucinations, they are far more common among deliriant users meaning that most/all people in the group experience the same or similar hallucinations or 'trips'. Though both types of drugs produce altered states of awareness, deliriants usually produce clouded rather than clear consciousness - for example, you may not remember how you got into the state you are in. Some deliriants can lead to dependence (craving and regular/daily use) - especially solvents and ketamine.

Psychedelic and deliriant drugs can each be divided into three main groups (see below). In Parts 7 and 8, we examine a dozen mind-bending drugs in more detail - with each of the six main groups of mind-benders being represented by one or more examples.



There are three types of psychedelic drugs

Cannabis Indole drugs Methoxyamphetamines

Cannabinoids MDA - type drugs LSD type drugs DOM - type drugs (e.g.THC/CBN) **DMT** type drugs **HOT** (hydroxytryptamine) TMA - type drugs (e.g. mescaline) - type drugs (e.g. psilocin)



There are three types of deliriant drugs

Anti-cholinergeics Anaesthetics Solvents

Tropane (e.g. muscarine) Isoxazole

(e.g. muscimole)

gas/liquid - type (e.g. NO2/GHB) **ACH** (arylcyclohexamines)

- type drugs (e.g. PCP/

ketamine)

hydrocarbons (e.g. toluene) **CFCs** (chlorofluorocarbons and other elements/ compounds)



DRUG, SET & SETTING

The effects of mind-bending drugs depend on a number of things: **The drug**:- the particular chemical(s) contained in the drug; how much of it you take; how often you use it; the method of use (swallowed, smoked, injected etc). **Set** (or mind set):- this includes your previous experience of drugs and what you expect to happen; your mood at the time and your personality. **Setting**: - this includes your physical location; social situation; society/culture.

For instance, a high dose of LSD (drug), taken by an inexperienced, nervous user (set), in an unfamiliar place with strangers (setting), is far more likely to have a 'bad trip' than a smaller dose taken by an experienced user in familiar surroundings with friends. Culture and society also have an influence – for instance, LSD trips were more likely to produce feelings of 'love and peace' during the 60's, when these things were all associated in the hippie sub-culture. Also, paranoid feelings may be partly caused by the user's awareness of the illegal or taboo status of the drug.

DRUG +
SET +
SETTING =
EFFECT

DRUG STRENGTH & OUALITY

The strength and quality of each drug depends on variations in chemistry and how they are made. For example *mescaline sulphate* is a salt formed by a reaction with sulphuric acid. If made with hydrochloric acid we get *mescaline hydrochloride* – which is 25% stronger. The strength of a particular batch of drugs is also affected by exposure to light, heat, air, and moisture over time. This could reduce potency by half or more (for some drugs, like *LSD*, in a matter of days or weeks).

To compare the strength of different mindbending drugs, scientists divide the **ED50** of mescaline by the ED50 of the drug (ED50 is the effective dose for 50% of people) – to arrive at a unit of measurement called a 'mescaline unit' or MU for short. Thus, a drug with a MU of 10 is ten times as potent as mescaline at the same dose. For instance, LSD has a MU of over 3,000: psilocin (found in magic mushrooms) has a MU of around 30; DMT has a MU of about 4. Of course, users do not take these drugs in equal doses, but in amounts that produce the desired level of effects - so a typical dose of **DMT** may be experienced as much 'stronger' than a typical dose of psilocin, but this is only because you take more of it to get the desired effect.

EFFECTS ON THE BODY

The physical effects of mind-bending drugs vary with each type of drug, though some effects are fairly common – particularly with larger doses and during the peak phase of a trip. The main distinction is between **psychedelics**, whose physical effects are generally more like those of stimulant drugs (e.g. speed and cocaine), and **deliriants**, whose physical effects are typically more similar to those of sedative drugs (e.g. tranquillisers, alcohol).

MUSCLES – muscular tension is common with **psychedelics**, particularly in the face, which can lead to jaw clenching, teeth grinding, lip-chewing, and dry mouth. Jitteriness, trembling, twitching, and shaking are also common effects. **Deliriants** are more likely to cause muscular relaxation and lack of coordination, revealed by clumsy movements, wobbly walking or inability to stand.

BREATHING – yawns often signal the onset of effects. The rate of breathing usually increases though may become erratic – with 'bad trips' leading to panting and *hyper-ventilation* (panicky fast breathing). Large doses of some deliriants like **GHB** can cause respiratory depression (slow, shallow

Sex – some men find it hard to get (or keep) an erection while tripping, while many experience 'dick-shrink' (a self explanatory term); many women find that regular use of some drugs (e.g., ecstasy) affects the regularity or nature of their **periods**.

HUNGER-

breathing).

appetite is generally reduced or eliminated (except with cannabis), though effects on thirst vary. Nausea and vomiting are among the commonest effects of mind-bending drugs. Ravenous hunger may follow a trip.

EYes – effects of *psychedelics* on the eyes include dilated (enlarged) pupils, widened lids, shiny eye-whites, and rapid/jerky eye movements; whereas *deliriants* are more likely to produce narrowing or shutting of eyelids, blurred vision or 'staring' eye-gaze.

THE BRAIN – mind-bending drugs produce their effects by interfering with the brain's neurotransmitters (chemicals which transmit signals between brain cells, and which underlie our thoughts and feelings). The effects of mind-benders on neurotransmitters are complex. Psychedelic drugs typically boost levels of serotonin (also called 5HT) – a master chemical controlling other neurotransmitters, and affecting

neurotransmitters, and affecting various mental functions including mood, memory, awareness and appetite. LSD-type drugs generally affect serotonin only (boosting 5HT-2 and blocking 5HT-1); whereas ecstasy-type drugs also boost 5HT-2, but additionally boost neurotransmitters affected by stimulant drugs i.e. dopamine and noradrenaline (leading to increased energy and alertness). Deliriants

affect a variety of neurotransmitters. **GHB** and **nitrous oxide** interfere
with GABA – (involved in movement and
memory) so like alcohol and sedatives
have sedating as well as mind-bending
effects. **PCP** and **ketamine** have
numerous effects, including blocking
another neurotransmitter - glutamate –
which is involved in our basic awareness of
the nature of reality – resulting in bizarre
hallucinatory experiences.

HORMONAL/IMMUNE SYSTEMS -

like speed, many mind-benders cause the release of *adrenaline*, which makes you feel 'ready for action' (the 'fight or flight' syndrome). Many drugs also temporarily reduce the effectiveness of the body's immune system, resulting in a greater chance of infections and illness (e.g. colds).

HEART – common effects of **psychedelics** include increased pulse rate (from 70/80 to 90/120), higher blood pressure, and higher body temperature (but often colder, number extremities, e.g. hands) – usually leading to reddened skin or sweating, sometimes to chills and shivering. Some **deliriants** slow down the heart/pulse (e.g. GHB), and lower blood pressure.

EFFECTS ON THE MIND

WHAT DOES A TRIP FEEL LIKE?



Various metaphors have been used to explain the effects of a trip. The simplest idea is that a trip is like a waking dream, a fantasy, or vivid flight of imagination. Psychiatrists view the trip as like a temporary self-induced form of insanity - describing the effects as 'psychotomimetic' or a 'model psychosis'. Then, there is the idea that tripping is due to having 'crossed wires' in the brain, like jumbled lines in a telephone exchange. Some writers (e.g. Aldous Huxley) have viewed mind-bending drugs as removing the filters and controls on normal thought and awareness, opening the 'doors of perception' to bombardment from external reality and the unconscious mind. Others

view the effects of such drugs as closing down ordinary adult thinking, so that the user views the world like a child or an alien with no knowledge of it. All of these ideas about tripping give a feel for some aspects of the experience.

The mental effects of mind-bending drugs are now described in more detail under three main headings: effects on emotions, on perception, and on thinking and awareness. Each stage of effects is covered (onset, main, and residual). This general overview of effects is more relevant to longer-acting mind-benders (e.g. LSD) than shorter-acting ones (e.g. laughing gas).

EFFECTS ON EMOTIONS

The 'trip' has three phases. The **onset** of effects (as the trip 'comes on'): the **peak phase** (when the effects reach their strongest level) and the **residual phase** (when you 'come down' from the drug).

Onset phase: At the start of a trip many people have an emotional experience in which recent bad feelings and repressed memories spill into the conscious mind from the unconscious. This may be the mind's way of clearing away 'mental baggage' before plunging the person into the main part of the trip. During this phase, feelings of guilt, shame and regret are common. Some people become quiet and moody, others distract themselves with conversation or other things, while the most 'screwed up' people may talk or cry about dead loved ones, ex-partners, failed plans, etc.

Peak phase: In the main part of the trip most people experience powerful feelings - particularly intense joy or happiness (euphoria). But any other emotions experienced during a trip may also be intensified - which can turn sadness into despair, surprise into amazement, fear into panic, etc. Experienced trippers psychonauts - take care to assess whether their feelings on a trip are appropriate to the situation and under control, or whether they are over-reacting to events. Sexual and aggressive urges from the unconscious mind can also be affected - some users find that psychedelics help them overcome hang-ups or to become more sexually adventurous; while many users report increased feelings of both love and/or sexual arousal. Users of ecstasy-type drugs are significantly less aggressive and more empathetic (in touch with others' feelings) than non-users - and are renowned for their warm, friendly behaviour.

Residual phase: Lastly, **emotional effects** are also apparent at the end of

a trip as normal consciousness returns. Many people report mixed feelings and sentiments - joy and sadness, hope and despair, confusion and understanding - as well as feeling differently about themselves, friends/lovers and other things they may have been taking for granted. Many people find psychedelic trips 'cathartic' — meaning that they help you face problems, clear out 'emotional baggage', and revitalise the mind. On reflecting on the trip, most people feel amazed and philosophical (or sometimes just confused), though memories for such strange experiences quickly fade.

EFFECTS ON PERCEPTION: DISTORTIONS & HALLUCINATIONS

Most people associate tripping with *visual hallucinations* - but not all mind-bending drugs cause hallucinations, their frequency varies from trip to trip, and some people have them more than others. There are two main types of drug effect on *perception* (how your mind and senses interpret the world around you): *hallucinations* (major changes) and *distortions* (minor changes).

Distortions (sometimes called illusions): are more subtle, specific changes in perception which do not warrant the label of hallucination — including intensified colours, distortions in size/distance, sounds seeming louder/quieter, etc (standard doses of ecstasy and cannabis tend to cause perceptual distortions rather than full hallucinations).

Hallucinations: involve general changes in the overall content and meaning of a perception – for instance, seeing a piece of litter blowing in the wind as a scurrying rat; or hearing a whistle as a scream. The

main distinctions are between **true** hallucinations and **pseudo-hallucinations**; and between **partial** and **total** hallucinations. A **true** hallucination is when the person believes it to be **real** rather than a drug effect; whereas when the person knows their perception is drug-related, this is called a **pseudo-hallucination**.

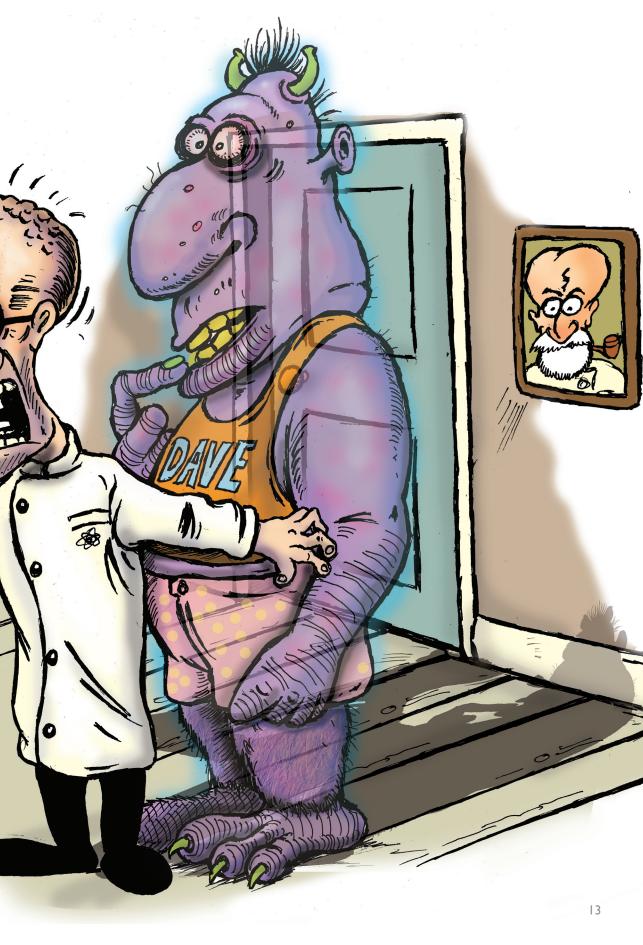
A *partial hallucination* involves perceiving something partly differently, but with the hallucination being linked to the original object/scene – for example,

YOUR BACON
SANDWICH BEGINS TO
LOOK LIKE A MOUTH
WITH A TONGUE
AND THEN STARTS
TALKING TO YOU FOR
A SHORT PERIOD.

A **total hallucination** involves perceiving something that is not there at all – for example, in an empty room you see

DAVE THE CAVE TROLL'





TYPES OF HALLUSIAN TASTE/SM

VISUAL HALLUCINATIONS

These include: seeing the world like the picture on a TV with bad reception (heightened or brighter colours or geometric patterns, flashes of light or colour dripping off or trailing off). Seeing multiples of an object, typically growing numbers (how many heads has my dog got?). Seeing peripheral vision movements (shadows or movement you get a glimpse of in the 'corner of your eye'). Seeing video-like effects: freezing/fast-slow motion (but never rewind!). Experiencing distortions in size/distance (the Moon looking so close and small you could pick it up). Seeing the world as a two-dimensional image (like a flat picture). Seeing swirling psychedelic patterns when you close your eyes.

AUDITORY HALLUCINATIONS/ DISTORTIONS

Hearing sounds that are not there at all (e.g. voices giving you messages). Hearing a sound as another sound (e.g. hissing kettle as a scream). Heightened sound perception (e.g. hearing each separate note, sound and instrument on a record).

TACTILE-KINAESTHETIC HALLUCINATIONS

Touch becomes more sensitive or pleasurable. Bits of your body ache or hurt. Temperature appears to change (e.g. it feels warm when it is cold). Heavy things appear light or vice versa. Things can seem strange to touch or handle. Your skin can start to feel itchy or in extreme cases as though things are crawling under your skin.

INS AND DISTORTION TASTE/SMELL HALLUCINATIONS Food/drink tasting or smelling bland/strong/strange. A constant strange taste in mouth or odd smell in nose. SYNAESTHESIA Seeing sounds, smelling textures, tasting colours (this strange mental state has to be experienced to be appreciated). Reading through these may help you understand why people on LSD may stare at a loaf of bread for several minutes, while giggling or talking gibberish. Mind-benders also vary a lot in how they affect sound perception. In particular, music can sound overwhelmingly beautiful on ecstasy and LSD, while being fairly uninteresting or even irritating on **ketamine.** Hallucinations that people sometimes seek when tripping include looking at someone else's face or their own face in the mirror for a long time (they may 'see' the face morph into various other faces), or closing their eyes and listening to music (they may get their own sound-sensitive visual display). Some groups of trippers also like to play tricks on each other, to see if their friends can distinguish between reality and hallucinations - for instance, watching the television when it is turned off; moving the furniture around the room while they are out (if you are tripping on your own and this happens, you're in big trouble).

EFFECTS ON THINKING & CONSCIOUSNESS

Though euphoria and hallucinations are the effects usually associated with mindbending drugs, a cornerstone of the experience is *altered consciousness* and *thought*. Though difficult to describe, these effects involve major changes in our awareness of, and our thinking about, ourselves and reality (heavy!).

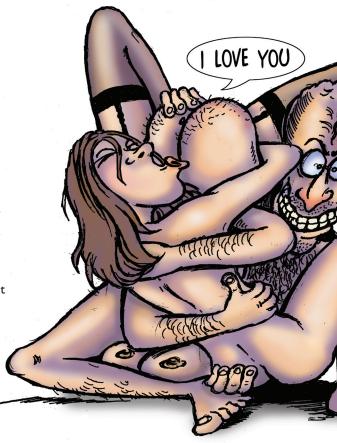
Basic understandings of reality and the world, usually taken for granted, are deeply affected - resulting in bizarre experiences, including distortions in space and time (e.g. that time is slowing down/speeding up). Many people also have a strong feeling that reality has been revealed as multi-dimensional - going far beyond the four dimensions of time and space (like WOW man!). Others believe that tripping takes you to alternative realities and allows communication with alien entities (watch out for that anal probe!). Others find that even explanations of this kind do not capture the nature of the experience, and prefer to call it ineffable - meaning that it cannot be described.

Mind-benders also have a capacity for producing strange delusions (false beliefs) and abstract, deep thinking - including philosophical, supernatural, spiritual, religious, mystical and magical ideas. Some people have major revelations and transcendental experiences on LSD - from discovering the meaning of life (the answer is 42), finding God (is he missing?), and psychic rebirth; to gaining life-changing personal 'insights' about their own or others' behaviour. But many find that their clear conclusions on LSD seem like nonsense the next day - while others develop their ideas into artistic or literary efforts (e.g. paintings, songs, books ending in -ology etc). Some people

are so affected by psychedelic experiences, that they change their whole life afterwards. This attitude was demonstrated by **Timothy Leary,** who took LSD in the 60's and soon encouraged the world to follow him with the mantra: "turn on, tune in, and drop out".

THE EGO

We generally think of our 'self' as a whole — when our 'self' is actually made up of many different components and features. For instance, we are conscious of some parts of our 'self' (the ego), while other parts we are hardly aware of (except in dreams). Also, when with close friends we act or appear in a different way than we do with strangers. A common experience while tripping is that your mind has split into two or more parts, with one part 'doing' or 'being', and the other part(s) 'watching' or 'judging' the



first part. More bizarre experiences include not knowing where your physical or mental self ends, and where other people's bodies or minds begin. For example, someone tripping with their lover in bed may find it hard to work out whose limbs belong to who, or whether they had thought or uttered the words 'I love you' – or heard the other person saying them. Trying to work out who you are during the peak phase of a trip can be like spinning round in a hall of mirrors.

MAPS AND MODELS

Various psychonauts have tried to produce maps or 'models' of "psychedelic space". The **Shulgins** (man-and-wife American scientists) have written two books, which describe and compare the specific effects of two different groups of mind-bending drugs: ecstasy-type and LSD-type i.e. PIHKAL ('Phenethylamines I Have Known And Loved') and TIHKAL (Tryptamines I Have Known And Loved'). Several other psychonauts have gone beyond detailing specific effects to develop broader maps of 'psychedelic space', or general models of the levels of altered consciousness. After taking lots of mind-bending drugs, floating in isolation tanks, and talking to dolphins in the 60's and 70's, John C. Lilly developed a multi-dimensional model of hallucinogenic experience - with the highest level involving travelling to alternative realities and communicating with 'machine elves' (see: The Centre of the Cyclone or the film 'Altered States' based on his life). Timothy Leary and his colleague Brian Barrett developed their own 8-level model of psychedelic space in the 60's, ranging from normal awareness to peak transcendental states

(see: **The Psychedelic Experience**). This has been

developed by other psychonauts - most recently R.A.Wilson has revamped Leary's 'eight-circuit' model of consciousness in his books **Prometheus Rising** and Cosmic Trigger. Like Terence McKenna in Food of the Gods, these authors consider consciousness in terms of the three evolutionary levels of the human brain: reptile (biological), mammal (social), and primate (intellectual). Fischer's Cartography of Inner Space identifies five levels of consciousness based on the individual's level of mental activity in relation to external stimuli (the world). That is, normal consciousness can 'drop' down through tranquil (zazen) to hypoaroused (samadhi), or rise up through aroused (sensitive) and hyperaroused (schizoid) to ecstatic (mystical rapture).

HORSES FOR COURSES

One final important rider is necessary: namely, that tripping is an active experience, not a passive one. In short, it's not like going to the cinema, paying for your ticket, and watching a specified movie. Everyone's trip will be different, with set and setting being crucial factors. A useful metaphor to help you understand this point is to view tripping as like getting on a horse and going into a strange landscape. You can let the horse take you where it wants, hauling you up hills and back down into valleys, galloping for miles and then stopping and grazing - or even running round and round in circles. Alternatively, you can grab hold of the reins, and direct the horse into those parts of the landscape that interest you most - riding at your own speed, and in your own style. The more disciplined your mind is, the more you prepare for the trip, and the more experienced a tripper you become - the more likely it will be that you can control your trip - rather than it controlling you.



"I've had 200 trips and every one's been a bummer but I ain't giving up yet" Cartoon character 'Dopin Dan' by Ted Richards



A 'Bad trip' is an umbrella term for frightening or confusing feelings while tripping. Some bad trips are caused by scary hallucinations (e.g. seeing monsters), while others are based on an outpouring of 'repressed emotion' (bad feelings you have squashed to the back of your mind in the past because you could not deal with them). But perhaps one of the main triggers of bad trips is 'ego dissolution' - the loss of personal identity and the everyday sense of self. Ego disintegration is an unexpected experience which some people find terrifying, like losing your soul. Bad trips are fairly rare, and although they can happen to experienced psychonauts they are more likely when someone is: taking a first trip; anxious about taking drugs; in an unusual place, feeling moody/upset or when something unexpected occurs. Last but not least, a bad trip is very likely when someone has been 'spiked' (been given drugs without knowing) - they may well assume that they have gone mad.

DEALING WITH A BAD TRIP

What causes a bad trip to spiral out of control into a full-blown psychotic episode?-

uncontrolled anxiety and fear.

Allowing yourself to become panicky when tripping is like trying to escape from a Chinese finger puzzle by pulling – the more you pull the tighter it gets. When hit by panic, you should tell yourself that you are in control, even though your head may have some bad feelings in it right now, like most feelings they will naturally subside if you don't focus on or worry about them. Some people on a bad trip find that going over

these things in their mind, or thinking of pleasant things/events, is enough to contain or stop panicky feelings – though other people need more than self-assurance.

DEALING WITH BAD TRIPS IN OTHERS

Taking a mind-bender when alone

is not advisable as it means that there are no friends to reassure you if it goes a bit pear-shaped. Having said that if your friend is tripping they may not be in the best position to help. When taking a 'new' drug (for the first time), it's better if one friend remains straight — called 'ground control' or your 'guide'.

If you stumble across a stranger having a bad trip (in a club or at a festival), it is best to locate their friends – strangers can seem very intimidating on a bad trip and spending the night trying to calm down someone you've just met is not most people's idea of fun.

If friends start to have a bad trip,

take them to a quiet place, preferably a room in a house that they know, and reassure them that they are not in danger and that they will be fine in a while. It is best to turn off any TV, radio or musicplayers. If they insist on seemingly strange but harmless actions - such as hiding under a table or sitting on the seventh step of the staircase - go along with it, as long as they are not doing anything dangerous and it makes them feel safer/better. On the other hand, some people find that walking is the best way of unloading nervous energy. This is fairly safe in the countryside, but far less safe in towns/cities. If, for whatever reason, you do end up walking around with someone having a bad trip, be sure to keep a close eye on them (as you would with a child), particularly when crossing the road or interacting with other people.

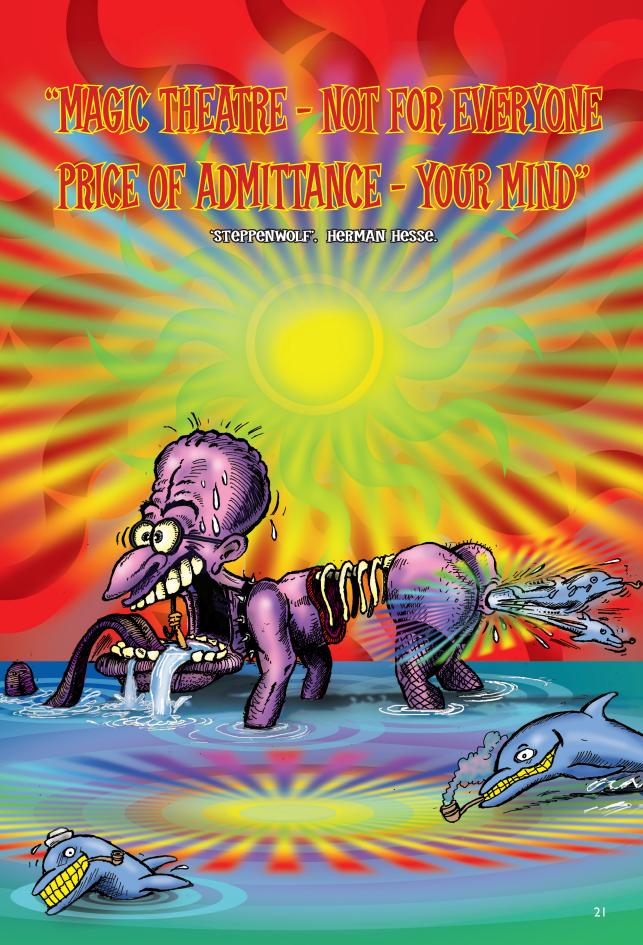
Having got them into a quiet room or other suitable place, keep talking to them and asking simple questions about ordinary or non-threatening things, repeating the question until they answer - it's best to distract them from their own internal thoughts and feelings. You may have to reassure them several times they are not dying, that they are still the same person, that they are not in hell, etc. If they seem very disoriented or confused, get them to focus on what you are saying, and remind them that they are under the effects of a drug, which will wear off soon. If they seem confused about who you are, or who they are, ask or tell them your/their name, and talk about things familiar to you both. People on bad trips can become paranoid very quickly - so try to stay in the same room as them, avoid leaving their sight unless you have to, and don't talk privately to other people in the room. Whatever you do, don't insist that they do anything, or try to make them do anything without their consent. Usually, they will calm down and recover within an hour or two - and be extremely embarrassed afterwards that they caused so much trouble for everyone.

Do not give them any other drugs or food (including cannabis, alcohol and caffeine drinks). If they smoke cigarettes, it's OK for them to smoke if they can do so safely (keep an eye on them in case they forget that they have a cigarette and drop it on the chair/floor). If they are thirsty, they should be given water to drink (ask them to sip it). There is a belief among some drug users that taking lots of **vitamin** C or orange juice will bring you off a bad trip - this is a myth. Another belief is that the only way of coming off a bad trip is to take a major tranquilliser such as chlorpromazine (known as 'liquid cosh', and used to sedate schizophrenics and manics in mental hospitals). Though this 'works', it is not always necessary - for instance, a small dose of a minor tranquilliser such as diazepam (i.e. a single 5 mg Valium tablet) is enough to

bring many people out of a bad trip on many drugs – including LSD and ketamine - though medicating a bad tripper should be left to doctors.

If the bad tripper shows signs of becoming more agitated and panic-stricken - for instance: panting (hyperventilating), pacing, shaking, crying - try to get them to breathe in and out of a paper bag. It's important that you let them do this - if you do it, they become confused about what you are doing ("you're trying to kill me!"), and if they do it, it gives them something to focus on. This will stop them hyperventilating, and help them to calm down. If the person cannot be calmed down, and they are behaving in a way which may be dangerous to themselves or others (e.g. repeatedly saying they are going to jump from a window), they should be taken to a hospital. They may be given sedation, and released when they are feeling better (if you are over 18 years old, it is very unlikely that the police will be contacted by the hospital). But you should remember that having strange doctors prod you with instruments and ask you questions while in the ravages of a bad trip may make the whole thing worse.

It is also useful to discuss the bad trip with friends as soon as possible afterwards, because memories of such weird experiences tend to fade quickly. The bad tripper should try to recall what exactly happened, and why they felt so scared/confused - unless this starts to make them feel quite bad again. It is best to avoid taking any mind-bending drugs until they are more sure that they can do so without becoming panicky. Any bad trippers who ended up in hospital with a diagnosis of 'drug psychosis', or who have family members or close relatives with mental illnesses, should seriously consider leaving these drugs well alone - because they are likely to have more bad trips, and could end up developing a serious mental disorder.



HARMFUL OUTCOMES: SIDE EFFECTS AND AFTER EFFECTS

Dependence

Mind bending drugs are generally not physically addictive, meaning that regular users do not experience a withdrawal syndrome when they stop using (as alcoholics and heroin addicts do). Similarly, most mind-benders do not lead to psychological dependence - partly because tolerance kicks in quickly with many of them (i.e. larger and larger doses are needed to carry on using on a daily basis). However, regular use of some mind-benders does lead to craving (a strong desire to keep on using). The main examples are anaesthetics (notably ketamine) and the solvents, both of which lead some of their users into bad habits, such as using the drug daily or neardaily despite health and other problems. Also, ecstasy can also become a bad habit for some users, though use-patterns tend to be based on large doses over two or three days each week rather than more daily patterns (i.e. regular weekend use at dance clubs/parties).

Conversely, mind-bending drugs have also been used to treat dependence on other drugs, notably alcoholism and heroin addiction. **LSD** treatment has been explored by various projects, though evidence of effectiveness is lacking. **Nitrous oxide** has also been used to treat opiate withdrawals (it affects similar brain receptors), and **MDMA** is used in marital therapy. One of the more recent examples of this idea involves **ibogaine**

(an LSD-type drug), which some experts claim can terminate heroin addiction with minimal withdrawals in a matter of days or weeks.

FLASHBACKS

The medical name for 'flashbacks' is 'post-hallucinogen perceptual disorder' - PHPD for short. PHPDs are episodes in which someone who has previously tripped, suddenly starts 're-living' the trip particularly hallucinations or altered states of consciousness. They usually occur within weeks or months of a trip, but can occur years later. They can be triggered by similar experiences (e.g. smoking cannabis) or may arise without apparent cause. Some people find flashbacks very scary - particularly reexperiencing bad trips - while others see them as a free mini-trip. Though they occur without warning, they are usually fairly short (seconds to a few minutes). Also, research suggests that fewer than 10% of hallucinogen users ever experience serious flashbacks.

DRUG PSYCHOSIS AND MENTAL ILLNESS

Someone experiencing a 'bad trip' usually returns to normal after the drug has 'worn off'. However, in exceptional cases the person does not 'recover'. Alternatively, someone who has not had a 'bad trip' may start acting strangely in the days that follow the trip. When strange behaviour continues

or begins after a trip (good or bad), this is known as a 'drug psychosis'. Three specific drug psychoses involving mindbenders have been identified (cannabis, LSD, and ecstasy). The majority of such cases involve people previously diagnosed as mentally ill or who have a family history of mental disorder, though a minority of cases are based on frequent or heavy use or even first use by 'normal' people (particularly with LSD). People with a drugrelated psychosis experience disturbed, confused thinking and delusions ('They' are out to get me; I am the King of Spain), feel excitable or flat, and experience hallucinations of all types. The symptoms are often similar to paranoid schizophrenia - except that they usually clear up after a few weeks or months, as long as the person stops taking the drugs.

Tripping can also lead to other mental disorders apart from 'drug psychosis'. Some people who take a trip feel anxious for weeks or months afterwards - if so, they may benefit from counselling and psychotherapy, because it is possible that they have unearthed a repressed (bad) memory, or unhinged some mental mechanism. Another dubious claim is that tripping can lead to depression and mood disorders, and so possibly to suicide. Though there is no evidence that mind-benders generally cause mood problems, recent research does suggest that many users of ecstasytype drugs experience a depressive 'come-down' for a day or two after using the drug

day or two after using the drug (the mid-week ecstasy blues). More worryingly, other studies have concluded that regular use of ecstasy may lead to serious depression or brain disorders usually associated with old age in mid-life (40's/50's) – based on the debatable claim that MDMA causes brain damage

(see below).

BRAIN DAMAGE

Since the 1960's, numerous claims have been made about **LSD** causing damage to the brain, chromosomes and other parts of the body, though all have been rejected. Similar claims are now being made about 'ecstasy' (MDMA). One of the main arguments is that the high levels of serotonin produced by MDMA destroy brain cell structures - and dead brain cells stay dead (do not regenerate). But, the main structures that serotonin damages (rather than destroys) are not the brain cell itself, but 'axons' and 'dendrites'structures attached to brain cells which respectively release and pick up serotonin and other neurotransmitters in the gap (synapse) between the cells, and feed it down to the receptors on the surface of the cell. This damage (which looks like a scorched tree under a microscope) is typically temporary - that is, research shows dendrites will 'heal' over a period of days/weeks. Other studies have concluded that more serious and permanent damage occurs to brain cells. However, an article in New Scientist in April 2002 argued that these studies are scientifically flawed, and that the claim that ecstasy causes

brain damage is more political than scientific. However, this does not mean that ecstasy does not cause brain damage — it simply means that there is no conclusive evidence so far that it does. By contrast, one group of mind-benders definitely can cause brain damage, particularly with repeated use: the solvents. For instance, petroleum may contain lead (a notorious brain-damager), while cleaning and polishing products may contain equally nasty chemicals.

DEATHS AND SERIOUS ILLNESS & INJURY

There are four main ways in which mind-bending drugs can lead to immediate death or serious injury/illness: overdose, allergic reactions, suicide and accidents. The most common are overdoses and accidents.

Overdose (poisoning) from cannabis or indole drugs like **LSD** and **psilocybe** is extremely rare due to their low toxicity (though picking and eating the 'wrong' mushrooms can lead to serious illness or death). By contrast, many methoxyamphetamines and most deliriants are far more toxic and can cause serious illness or death in amounts much closer to a standard dose. Among the methoxyamphetamines, MDA and PMA have been associated with a relatively high number of poisoning deaths in the USA. Plants containing tropane drugs - such as deadly nightshade and fly agaric – are known to be particularly poisonous, which is the main reason why they are not at all popular. Anaesthetic gases generally have a high potential for overdose, which is why an anaesthetist is present throughout any surgical operation in which the patient is 'knocked out'. One exception to this is nitrous oxide,

which is relatively safe — at least when inhaled with a mixture of air. But the most lethal mind-benders of all are the **solvents**, whose ingredients can damage the brain, liver, kidneys and many other organs. Though the intoxicants in solvents - hydrocarbons such as toluene - can damage the body, the main culprits are often other chemicals found in aerosols, cleaning products, etc. — such as lead.

Allergic reactions to drugs are experienced by some people with unusual or weak physiological systems – including heart attacks, brain seizures and liver failure. Though almost unheard of in respect to LSD, allergic reactions are more common with deliriants, and about one in 10 people could have an allergic reaction to ecstasy (though not necessarily fatal).

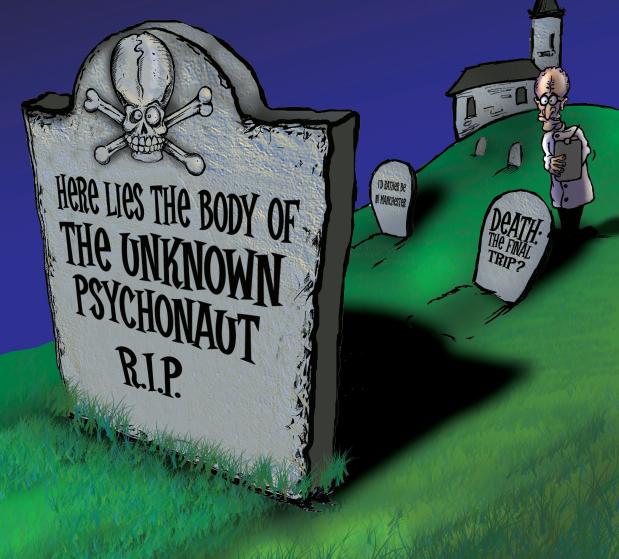
Suicides while tripping, though fairly rare, have also been reported – including as a panic reaction to a bad trip (e.g. jumping from a height), and using the drug to intentionally overdose.

Accidental deaths while tripping can come about from three main types of behaviour: (a) errors in consuming the drug (e.g. injecting mistakes, suffocating while inhaling solvents from a large bag); (b) not being able to efficiently perform what would normally be fairly safe activities (e.g. driving, swimming, dancing), or (c) engaging in dangerous activity due to intoxicated state of mind (e.g. jumping from a building, playing with a gun). Though accidental death can come in many forms, two of the commonest types linked to tripping are heatstroke (e.g. excessive dancing, not drinking enough) or physical trauma (e.g. driving accidents, drowning and falling from heights). The latter example includes the classic - but luckily rare - cases of people who believe that they can fly.

THE DEATH TOLL

The annual **death toll** for most mind-bending drugs in the UK is zero, with LSD and psilocybe causing one or two deaths per decade. The clear exceptions are ecstasy-type drugs (10-50 deaths per year) and solvents (50-80 deaths per year). Hospital casualty departments also deal with over 1,000 non-fatal cases involving each of these drugs every year.

The annual number of solvents deaths in the UK, though erratic, is not rising — whereas ecstasy deaths, which generally stayed between 10 and 25 per year in the decade prior to 1998, have since risen steadily to a record 40+ deaths in 2001 though most are actually poly-drug deaths. Like solvents, the other deliriant drugs (tropanes and anaesthetics) would probably cause a higher number of fatalities if they were more popular. By contrast, ODs are extremely rare among users of cannabis, LSD and psilocbye, with rare cases of death being accidental (e.g. falling from height).





Apart from health risks, the main problem linked to mind-bending drugs involves getting caught with any which are prohibited, which may give you a criminal record - so affecting your work, travel, and other life prospects. Of the controlled mind-bending drugs in the UK, only three involve significant numbers of convictions (or cautions): cannabis, LSD and ecstasy-type drugs (MDMA, MDA, MDE, etc.).

LEGAL STATUS

There are legal, illegal and quasilegal mind-benders. Legal/illegal refers to whether possession and supply of a drug is controlled by drug laws. Quasi-legal means that the drug is legal to possess and/or supply under certain conditions, but not others. Some otherwise illegal drugs are also legal to possess with a medical prescription (eg. heroin), though nearly all of the Class A mind-benders (eg. LSD, ecstasy, psilocybe) are in Schedule I of the Misuse of Drugs Act. This means that they are regarded as having no medical use, and so cannot be prescribed by doctors or dispensed by pharmacists. The two exceptions to this are PCP and synthetic THC, which are both in schedule 2 (can be prescribed/dispensed under strict conditions).

THE MISUSE OF DRUGS ACT

The Misuse of Drugs Act defines which drugs are controlled by the state and what the penalties are for possessing, selling, manufacturing and trafficking (importing and exporting) in these drugs (see chart).

OTHER DRUG LAWS

Other than **cannabis and GHB**, mindbenders are either Class A or unclassified. **Unclassified** means that they are not controlled by the Misuse of Drugs Act. But there are two more levels of legal controls:

General anaesthetics such as ketamine are controlled only by the 'Medicines' Act' and so are legal to possess - though unauthorised production or supply of a drug controlled under the 1968 Medicines Act as a Prescription Only or Pharmacy Only medicine can be penalised by up to two years imprisonment In short, unless you are a doctor or pharmacist, selling or giving drugs like ketamine to other people could theoretically get you locked up, even though possession and use (and even importation for personal use) is totally legal.

Solvents are legal to possess and use, but the Intoxicating Substances Supply Act (1985) prohibits shopkeepers from selling volatile substances such as toluene (in glue) and butane (lighter fuel) to children under 18 years of age, if it is believed they may 'abuse' them. Also, the Cigarette Lighter Refill Safety Regulations (1999) prohibits the sale of butane to anyone aged under 18 years (for whatever reason).

Lastly, other deliriants – such as nitrous oxide (laughing gas), butyl nitrites (poppers) and tropane drugs (e.g. atropine) – are not controlled by any legislation, and so are legal to produce, possess and supply – though they are usually advertised as being for particular household/industrial purposes, since it is not legal to distribute them as medicines. For instance, the label on bottles of Poppers usually states that the product is sold as a 'room odoriser' and is 'not to be inhaled' (amyl nitrite, a chemical cousin of butyl nitrite, is controlled by the Medicines Act).

THE MISUSE OF DRUGS ACT (1971)

The Misuse of Drugs Act is organised into three classes. Class A carries the most severe penalties etc. Focusing on mind-benders:

CLASS A includes:

LSD, PCP, Mescaline, DMT, Ecstasy-type drugs (MDMA, MDA, etc.)

Psilocybe mushrooms are legal to grow and possess if in natural form (fresh), but if 'prepared', or the active ingredient (psilocin) is extracted, they become Class A.

Any Class B drug in injectable form becomes a Class A drug.

CLASS B

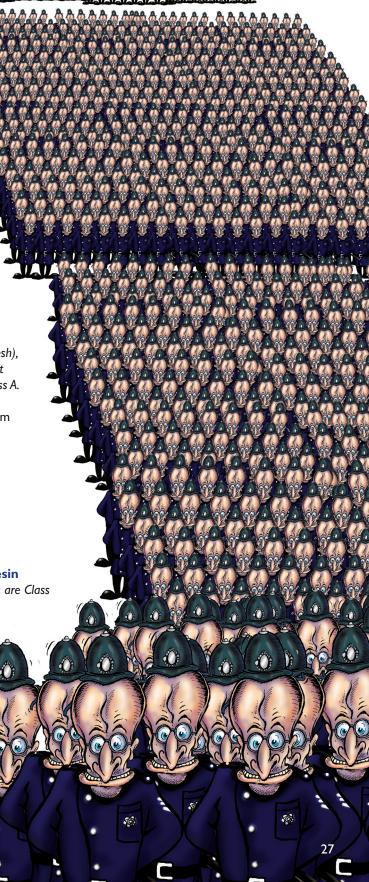
Cannabis became a Class C drug on 29 Jan 2004.

CLASS C includes:

herbal cannabis and cannabis resin (extracted THC and other cannabinoids are Class A).

GHB

Included in 2003.



PART 7

PSYCHEDELIC DRUGS





LSD

(ACID)

BACKGROUND: Known by my fellow scientists as d-lysergic acid diethylamide-25 or LSD, it is better known as acid (or to those who remember the 90's as aceeeeeeed!). Albert Hoffman, a Swiss scientist, discovered LSD 'accidentally' in 1943, while attempting to make drugs from ergot, a rye mould (he had the world's first ever LSD trip as he cycled home on his bicycle). In the 50's and 60's it was explored as an aid to therapy by psychiatrists and as a 'weapon' by the US military, but was rejected in both cases. It remained fairly obscure (and legal) until the hippies adopted it as one of their main drugs, partly due to promotion by 'acid gurus' such as the US Brotherhood of Eternal Love. One of LSD's most famous advocates was Ken Kesey (author of 'One Flew Over the Cuckoo's Nest') who toured around America in a 'Magic Bus' offering people the opportunity to experiment with the drug. LSD was prohibited in the UK in 1965, becoming a Class A drug in 1971. Following a resurgence of interest on the rave/dance scene, its popularity has waned over the last five years.

CONSUMPTION: LSD is very

potent: 200 micrograms (mcg for short) produces a full trip (a postage stamp weighs about 60,000 mcg). Because so little is required, it is usually sold in the form of blotters - little squares of paper impregnated with liquid LSD, and decorated with images (e.g. Bart Simpson, patterns). LSD is also sometimes sold as microdots (tiny pills), though pure liquid/powder is now rare. Effects are discernible from 25 mcg, though clear psychedelic effects require about 100 mcg - and a full-blown trip requires 200

mcg. The trip gets 'stronger' up to about 500 mcg, which is the effect 'ceiling' (i.e. nothing is really gained by using doses higher than this). Forensic analyses of seized LSD now show that average

purity is about 20-80 mcg, averaging 50 mcg. Some LSD blotters contain no drugs at all (rip offs), though adulterants are rare in LSD products. LSD is nearly always swallowed, though other methods of use include absorbing it through skin or other membranes. The typical frequency of use of LSD ranges from about once or twice a month to once or twice a year. This is both because an acid trip is mentally exhausting, and because tolerance is rapid – after 4 or 5 days of daily use, no practical dose would be effective. Set and setting are very important, as with all trips.

of an LSD dose reaches the brain, and most of this has left the brain after a few minutes – a kind of 'hit and run' trigger effect. The duration of LSD effects is about 8 to 12 hours, depending on dose, etc. – it is long-lasting because the liver degrades it slowly. The effects are called a trip because there is a strong feeling of being on a spiritual/psychological journey. All areas of the mind are affected – thoughts, perceptions, emotions, drives, self/identity and consciousness. Though all types of mental state can be enhanced, they can also be diminished. For instance, thoughts can seem

incredibly clear and insightful, but can also become confused and disconnected. There can be 'explosions' of ideas, or fascination with a single thing. You can be captured by a single emotion or overwhelmed by cascades of different feelings.

LSD trips have four phases, each lasting one to three hours:

Onset: includes **physical effects** (e.g. nausea, salivation, faster pulse, twitches, pains, blurred vision) and a **release of emotional tension** – repressed feelings can surface, leading to crying, etc.

The second phase involves **visual pseudo-hallucinations**, with typical effects including colours/forms trailing from moving objects, and psychedelic patterns. Other people may look beautiful, comical or terrifying. **Synaesthesia** often occurs (e.g. seeing music and hearing pictures).

By the third **peak phase** mood may swing from **euphoric** to **anxious**, and sense of **time becomes distorted**. Sense of **identity may change** or disappear (ego death, rebirth), as **altered states of consciousness/delusions** take hold (e.g. telepathy, Zen states, out-of-body feelings).

In the final **re-entry phase**, the gradual return to a normal state of mind comes in waves, with feelings that the trip is over being suddenly replaced by a wave of psychedelia. Users are often philosophical, a little sad or quiet during this phase; some report fatigue and headaches.

MAIN RISKS: LSD has a very low toxicity (the lethal dose for 50% of people known as the 'LD50' = 14 mg), making overdose almost non-existent - the only known case injected 320mg (over 3,000 doses!). LSD related deaths are rare, averaging less than one a year in UK, and are typically due to accidents (e.g. falling from windows). The three main related risks of LSD use, which are all quite uncommon, are: having a bad trip; flashbacks (which typically last a few minutes) and, rarest of all, suffering from a longer-lasting LSD psychosis after a trip.

LEGAL STATUS: LSD is a



RELATIVES OF LSD: LSD

comes from a branch of the **tryptamine** family of drugs known as **indoles**. LSD's chemical relatives include **LSA** (or ergine) and **ISA** (or isoergine). LSA is found in *morning glory seeds*, but is only 10% as strong as LSD.

Two more distant relatives of LSD include: *harmaline* (in Syrian Rue seeds); and *ibogaine*, found in the roots of a Western African plant – a stimulant, which becomes a psychedelic in doses over 300 mg. Unlike LSD, other indole drugs are legal in their natural plant form. Hallmark effects include powerful/spiritual trips, and various hallucinations – though harmaline is mainly used to heighten the effect of indole drugs (it produces only a mild 'stoned' effect when smoked alone).

USER REPORT ON LSD TRIP (19 year old man)

... I had only smoked cannabis once or twice when I 'dropped' my first tab of acid (Strawberry Fields microdot, allegedly 200 mcg LSD) - which totally blew my mind ... in the park, we saw a squirrel by a tree, and my friend, who was an experienced tripper, began messing with my suggestibility - he span me round a few times, and said 'look now there's lots of squirrels', and there they were, dozens of squirrels, multiplying as I looked and laughed uncontrollably ... At one point, we went into a pub to buy some cigarettes, and I stared and laughed at the Muppet-like people sitting in seats and wondered why they did not sit on the floor like me because there was so much space - luckily my friend reappeared, dragged me to my feet, and said 'Lets get out of here, before they throw you out'...Later, crossing a bridge, we saw a tube-train coming down the line, and my friend said 'Wow, it's a steam train' - and so suddenly it was, though as it got closer I noticed that the steam was a big piece of cotton-wool, like the steam effect on a toy train. My friend then said 'everything's stopped' and the train and the people crossing the bridge became a still photograph - time had stopped ...





DIMETHYLTRYPTAMINE - THE BUSINESSMAN'S TRIP

BACKGROUND: DMT and its relatives occur naturally in South American vines and tree barks, and is often made into a snuff by natives (e.g. yopo, cohoba). These drugs are also made synthetically for illicit use. DMT was recently found to be naturally present in the human brain and spinal fluid – which means we are all in possession of a **Class A drug!** It is still quite rare in UK, and quite expensive (£10-20 a dose, or about £200 a quarter-gram).

CONSUMPTION: Though sniffed (as snuff powder) by South American natives, westerners get it as a white to brown crystalline powder or paste. Because it is inactive orally (unless mixed with harmaline), it is usually smoked, though is also sniffed and/or injected. About 5-20 mg is required as a standard dose for 'smoking' (50-60 mg of DET) – either by inhaling the vapour after heating it in a glass pipe, or smoking it in a 'reefer' mixed with herbs, which burn at a low temperature (parsley is preferable to cannabis or tobacco). This dose can usually be inhaled from a pipe in one to three lungfuls, though DMT smoke feels like burning rubber inside your lungs, and some people find it hard to hold in without coughing violently.

MAIN effects: Come on in 20 to 60 seconds, peaking for 5-15 minutes, though the whole trip lasts about 30 minutes (half as short for MDMT) - but time distortions can make it seem longer. Two main effects dominate the experience: a huge energy rush and strong visual hallucinations. These increase

in intensity when the eyes are closed (music and lighting can also affect the nature of the hallucinations). Open-eyed experiences typically involve partial pseudohallucinations about the environment (e.g. room) - heightened colours, spatial distortions, shifting shapes and sizes - with other people appearing particularly hallucinatory (e.g. like robots, gods, animals, etc.). Closed-eye experiences can involve total hallucinations, which are about as amazing as they get - for instance, the feeling of moving through vast psychedelic landscapes, kaleidoscopes of colours and forms, natural and science-fiction scenarios etc. As with ketamine, DMT trips sometimes include the appearance of so-called 'machine elves' - hallucinations involving intelligent but mischievous aliens/ spirits/ beings - either low-level (feeling that they are there or are watching you), mediumlevel (laughing, calling, controlling imagery), or high-level (appearing visually, communicating messages).

MAIN RISKS: Bad trips are pretty rare with DMT (because the trip is so short), though new users sometimes suffer anxiety (because the effects are so rapid). Because DMT is a MAO inhibitor, it can interact badly with certain foods and drugs to cause dangerous changes in blood pressure (particularly aged and fermented foods such as mature cheese and pickled things).

LEGAL STATUS: DMT is a Class A drug.

RELATIVES OF DMT: DMT comes from a family of drugs known as **tryptamines**. Close chemical relatives include **DET, DPT** and **meoDMT**. They typically produce short-lasting trips and amazing visual hallucinations. DMT is generally less potent and shorter-acting than the others, though its visual hallucinations are far more intense. DET is more euphoric/mystical; DPT is arguably not psychedelic, and ends abruptly; a meoDMT trip is even shorter than DMT, but with a notable energy rush.

USER REPORT ON A DMT TRIP (35 year old woman)

... as I choked out the acrid smoke from my lungs, I felt a surge of energy building up and passing through me, and thought I was going to puke ... I looked up at my friends and nearly screamed with amazement - they looked like a mixture of Aztec warriors, synthetic gods and alien creatures, draped in fantastic psychedelic gowns and costumes ... when I closed my eyes I moved into a kaleidoscopic panorama of swirling shapes and colours, which eventually became like a slowed down psychedelic roller coaster, accompanied by waves of sensuality and pleasure ...there was a

constant sense of external intelligence producing or directing the experience ... something bad I had done jumped into my mind, and suddenly I was cruising close to the ground in a thick dark jungle full of dark greens and browns. Then in the darkness I sensed other beings but all I could see was the shields they held in front of them, on which were painted vicious animal faces and demonic visages. For a few seconds, I felt very scared, then some light appeared ahead and I was back in the psychedelic roller coaster, though the images were now faint and fading, and I started to come back into the real world...

33





LIBERTY CAP OR MAGIC MUSHROOMS

BACKGROUND: Psilocin and psilocybin (which breaks down into psilocin

in the body) are the 'active ingredients' in ten species of psilocybe mushrooms. The amounts of these drugs in the mushrooms can vary enormously - though the type containing the most 'constant' amounts is psilocybe semilanceata (liberty cap).

CONSUMPTION: Magic mushrooms are 'free' if you know how, where and when to pick them.

'How' means having the expertise to identify the right type of mushroom, and pick out wormy/bad shrooms (illustrated books and/or old hippies are the best starting point); 'where' means knowing/finding out which fields/parks they grow in (such as fields which have not been ploughed or dug up for centuries, nor sprayed with pesticide); and 'when' means the growing season, namely September to the first frost of November in the UK. The number of mushrooms required for a trip is hard to specify, because the amount of psilocin in each mushroom varies by species and individual mushroom - and people differ in sensitivity too. About I to 3 grams of dried liberty cap mushrooms (10-30) usually produces psychedelic effects, though many people take between 3.5 and 7 grams (up to 80 mushrooms) for a full-blown trip. Five grams of dried mushroom typically contains about 10-20 mg of psilocin (standard dose of the synthetic form).

New users are advised to start with a 'test dose' of two to five mushrooms - if they don't 'agree' with you, you will find out without feeling too bad. Psilocybe

mushrooms can be eaten raw (fresh or dried) or cooked. People who find them hard to digest often brew them in hot water and drink the liquid ('mushroom tea').

MAIN **effects**: Depending

on dose and other things, a psilocybe trip lasts between 2 and 8 hours, averaging four hours. Physical effects include nausea, facial numbness, and sweating or shivering. Though much shorter, it's similar to an LSD trip, though mushies may be experienced as more 'magical' and dreamy, and as providing greater contact with nature (or God). Visual hallucinations on psilocybe are also considered more vivid and colourful. Some people have no comedown, others report a little fatigue.

MAIN RISKS: A

fatal overdose would require about 8 pounds of fresh mushrooms - though some people experience initial nausea whatever dose they use. The biggest risk is picking and eating poisonous mushrooms by mistake - which can kill you, or at least make you seriously ill. Various types of mushrooms often grow where magic mushrooms grow. When picking magic mushrooms, the rule is: if you are not 100% sure, don't pick it (go picking with someone experienced if you are new to it). Someone who has been

poisoned by mushrooms may have watery eyes and mouth and yellowish skin, and may be vomiting, suffering cramps, and getting the shits – or even having fits. If so, there is only one (urgent) course of action: get them to a hospital. Bad trips on 'mushies' are fairly rare (see: Bad Trips).

LEGAL STATUS: Psilocybe mushrooms are legal to grow, possess and supply in natural

form, but psilocin is illegal to possess and supply – whether synthetic or extracted from the natural mushrooms. However, if picked mushrooms are prepared in any way – including simple drying or cutting up – this can lead to the courts classifying them as preparations of psilocin – making them Class A drugs. Thus, the only totally legal way of using psilocybe mushrooms is to swallow them as you pick them – which is inadvisable because it leads to fewer checks and erratic doses (unless you cultivate your own crop).

RELATED DRUGS:

Psilocin comes from a family of drugs know as hydroxytryptamines and are largely natural indole drugs. Bufotenine is a close relative found in the skin excretions of some toads (e.g. cane toad), and various trees that grow in Central/South America (where it has been identified as an ingredient in voodoo potions). One species of toad (bufo alvarius) produces both bufotenine and meo-DMT. Bufotenine can also produce dangerous physical effects, including high blood pressure and muscle paralysis. A more obscure relative is yohimbine hydrochloride (found in the bark of Indian and African plants), a mild hallucinogen. Hallmark effects of these drugs include feelings of closeness to nature/earth, and visual hallucinations.

PSILOCYBE TRIP (25 year old woman)

One lazy Sunday morning, me and my two (girl)friends decided to finish off some mushies I had left. The first thing I noticed about an hour after swallowing 30 'caps' was that things looked brighter and sharper - but a sickly feeling was also growing in my belly. Just at the point I thought I was going to vomit, it began to subside. By now, it wasn't just the world that looked different, I felt different on the inside too – and my two friends were giggling and mumbling, but not to each other. The curtains, though still, looked like they were fluttering in a draft, and my room seemed to be changing into a cave-like hole with hidden tunnels and other things in the shadows - unless I shook my head and looked hard at one thing. I felt thirsty and went to stand up to get a drink - but nothing happened. I looked at my legs, and could not decide whether they were crossed or uncrossed. I asked my nearest friend 'are my legs crossed?' and she stared at them for ages before saying 'non-crossed'. Then it dawned on me that I could not remember what I normally did when I wanted to stand up - so I said aloud 'Just remind me how you stand up', but both of my friends simply fell about in fits of laughter...



HEADSHOP SHROOMS

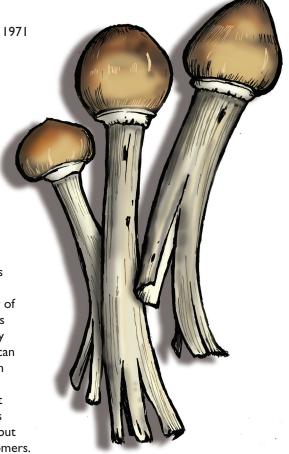
CUBENSIS. HAWAIIAN. PSILOCYBE TRUFFLES

Magic mushrooms are now being cultivated indoors, and sold commercially in shops, market stalls and through mail-order companies. Because of a legal loophole they are being sold 'fresh' or in the form of growing kits (spores etc.). Alongside the native liberty cap (and sometimes fly agaric), three foreign fungi are particularly popular products: **cubensis, Hawaiian** and **truffles**. All three contain psilocin and psilocybin (which turns into psilocin in the body), and sometimes baeocystin. They are each described in more detail below - though since they all contain the same drugs, the section on liberty cap should be consulted for information about effects and consequences. But first, a brief update on the latest legal rulings.

MUSHROOM LAW

As detailed in the section on liberty cap, the 1971 Misuse of Drugs Act made psilocin a Class A drug, whether synthetic or extracted from the mushrooms. Mushrooms containing psilocin are legal to grow, possess and supply as long as they are not 'prepared'. But, over the years, court cases have reached different conclusions as to what 'prepared' means, with definitions including everything from drying and crushing to powdering and compressing.

In 2003, the government was pressed to clarify the legal situation following requests from several companies and shops. A standard letter from the Home Office makes it clear that mushrooms containing psilocin are legal to grow, possess and sell if in either of two forms: (1) growing kits - including spores and live/growing mushrooms - and (2) freshly picked mushrooms. But how fresh/dry they can be is still unclear, as is the issue of freezing. In addition, the UK Medicines Control Agency has advised such companies that they cannot distribute information about the mushrooms they sell unless they are qualified herbalists, but they can answer direct questions from customers. To prevent possible prosecution under other laws, most retailers advertise their products as for 'ornamental' or 'research purposes' only, and/or prohibit sales to under-18s.



Cubensis mushrooms

CUBENSIS

BACKGROUND: Classified by different experts as either *Stropharia cubensis* or *Psilocybe cubensis*, this species is native to Central/South America (and South-East Asia). Though natives call it *San Isidro*, it is known in Britain as *cubensis*, or by the country of origin of its varieties - notably **Mexican**, **Colombian** and **Thai** ('dwarf' mushrooms), but also Amazonian, Equatorian, etc.. Its popularity is due to it being easier to grow in terrariums than liberty cap; also, some varieties have a relatively low water content, which keeps them fresh for up to 10 days after picking.

APPEARANCE: Cubensis grows mainly on animal dung in fields and woods in America, but may also grow on soil, rotting leaves and wood. Its cap is a spherical 'button' coloured yellow-orange-red (though Thai strains can be greenish), which can go wavy looking. Its gills are whitish to purple-brown, and the stem can be white or bluish (the top of the stem goes purple to chocolate when separated from the cap). The cap grows to between 1.5 cm and 5 cm in diameter, while the stem is up to 7 cm high, and is often thickened at the base.

CONSUMPTION: Cubensis mushrooms generally contain about the same to double the amounts of psilocin found in liberty cap - about 0.5-1.4%, averaging 0.9% - depending on the variety (Thai is the strongest, and Mexican the weakest). So, a medium trip would require between one and three grams of dried shrooms (2-12 grams if fresh), while a strong trip would take between two and seven grams of dried shrooms (4-28 grams if fresh).

HAWAITAN

BACKGROUND: Classified as both Copelandia cyanescens and Panaeolus cyanescens, it is called 'cone-head' or 'gold cap' by Hawaiians, but is known to British users simply as Hawaiian.

APPEARANCE: It grows wild on manure heaps (except horse dung) in tropical states of

the USA (Hawaii, Florida), South America and South-East Asia. The brown-grey hemispherical cap is about 1.5-3.5 cm wide, its gills are mottled, and the stem is about 1 cm high and thick.

CONSUMPTION: The amount of Hawaiian mushrooms (Copelandia cyanescens) needed to trip are the smallest of all, because, at 1-3% psilocin (averaging 2%), they are up to 10 times as strong as liberty cap. The recommended dose for a medium trip is between half a gram and and one gram of dried mushrooms (1-4 grams if fresh), while a strong trip requires between one and two grams of dried shrooms (2-8 grams if fresh).

PSILOCYBE TRUFFLES

BACKGROUND: These are subterranean fungal growths, derived from two species - Psilocybe tampanensis and Psilocybe mexicana - and are sold under the name 'Philosopher's Stone'. They have a low water content - nearer 50% than the usual 90% - which helps them stay fresh for longer, making them a popular retail magic mushroom. Not to be confused with the other kind of truffle, which looks similar but is actually a crunchy chocolate ball.

APPEARANCE: They look like brown, speckled lumps of congealed muesli, and taste pleasantly nutty. They grow underground from mycelium (fungal roots), feeding off plant roots. Since there are no obvious signs of them above ground, pigs and dogs are trained to sniff them out.

CONSUMPTION: Since they usually taste OK, they can be chewed up before swallowing as well as swallowed in chunks washed down with water. Truffles have a psilocin content somewhere between liberty cap and cubensis - between 0.3% and 1%, averaging 0.7%. A medium trip would require between one and 2.5 grams of dry truffles (2-8 grams if fresh), while a strong trip would need between two and eight grams of dry truffles (6-18 grams if fresh).



Реуоте

BACKGROUND: Mescaline

has been consumed in its natural form in cacti (notably peyote and San Pedro) for centuries, and was first made synthetically in 1919. Its chemical name is trimethoxyphenethylamine — which makes it a natural relative of MDMA (ecstasy).

CONSUMPTION: About five

grams (5 to 20 buttons) of peyote produces a trip, as does a 10-inch long 3-inch wide piece of San Pedro — these doses contain 200-800 mg of mescaline. The cactus can be chewed and swallowed, but has an unpleasant taste and texture, so many people prefer to make a mushy drink out of it (by boiling it for several hours). Synthetic mescaline is usually a white crystalline powder, sometimes a liquid, and is too rare to have a set price in the UK. A full trip requires about 400-500 mg of mescaline sulphate (looks line fine shards of glass) or 300-400 mg of mescaline hydrochloride.

MAIN **effects**: The effects

of synthetic mescaline differ from those of peyote – mainly because when people eat the cactus they are also ingesting about 30 related compounds. The effects can take 2 or 3 hours to come on, but start with a dreamy, relaxed state of mind (and nausea – particularly with peyote). Though mescaline is physically stimulating (e.g. faster heart rate), it slows down reflexes

and makes concentration cloudy. This is followed by a peak phase, similar to *LSD*, with visual and other hallucinations; and then a fairly slow, smooth comedown. The whole trip lasts about 8 to 12 hours (like LSD, mescaline is broken down slowly by the liver). Like *psilocybe*, mescaline gives the user the feeling of being in touch with ancient, natural forces – though various hallucinations can occur, they often include plant/animal creatures including the cactus spirit 'Mescalito', and geometric designs/ symbols. Awareness of ego/self is also affected.

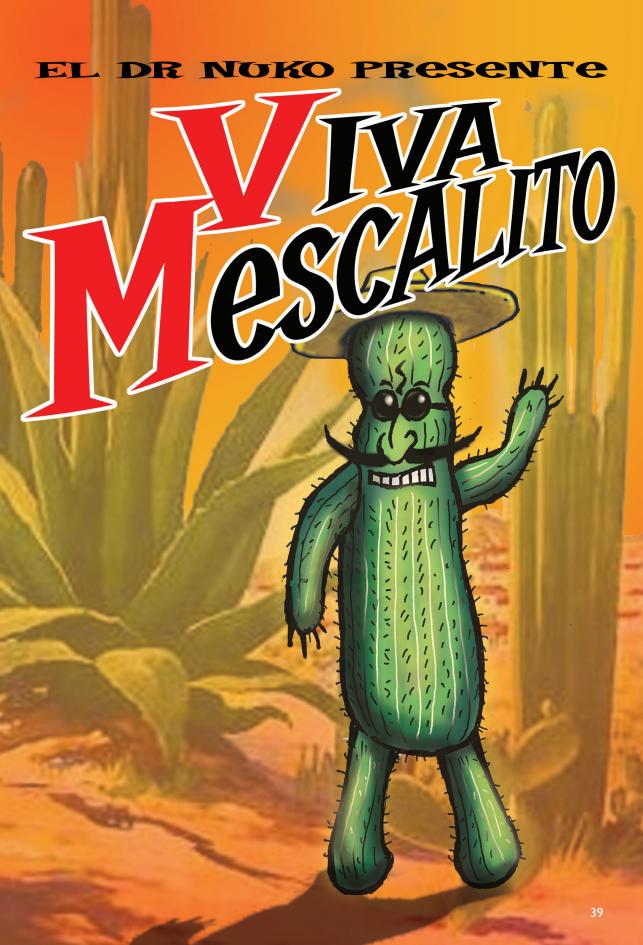
MAIN RISKS: Risks are more like those of LSD than MDMA - though fatal poisoning can result from very high doses, death is rare. In short, a small proportion of bad trips and occasional flashbacks are the main problems.

LEGAL STATUS: It is legal

to grow and possess peyote or San pedro cacti - but it becomes a Class A drug if extracted (see psilocybe). Synthetic or extracted mescaline is a class A drug.

RELATED DRUGS: TMA

(trimethoxyamphetamine), a close relative, produces trippy effects in doses of 200 mg or more - but is virtually unheard of in the UK.





DOM

DIMETHOXYMETHAMPHETAMINE - STP

BACKGROUND: DOM

(dimethoxymethamphetamine) first appeared in the USA in the late sixties, earning the inaccurate name **STP** (Serenity, Tranquillity and Peace). Pretty unpopular and rare in the UK.

CONSUMPTION: Sold as a white powder, or sometimes in coloured gelatine/ sugar cubes, **DOM** is one of the most potent hallucinogenic amphetamines. Doses for tripping start at about 5mg, and go up to 20 mg. It is nearly always swallowed, but can be used other ways.

MAIN CFFCCTS: The effects are very dose-dependent. Moderate doses (2-4 mg) produce a speedy self-aware state with mild trippy effects, lasting 12-18 hours; while higher doses (5-20mg) produce a trip similar to strong LSD and mescaline, lasting about 24 hours. Core effects are altered awareness of self and reality, visual and auditory hallucinations - and relentless, manic energy (it's also called 'rocket fuel' in the USA). It also has various physical effects - notably nausea, blurred vision, sweating, aches, and tremors.

MAIN RISKS: DOM carries a high risk of bad trips, mainly because it lasts so long; and a potential for overdose, because such small amounts are required for a trip. Many people get fatigued by the long-lasting, cumulative effects (the peak phase lasts more than 12 hours!) and the comedown can also involve a day or two of mental fatigue and moodiness (which limits popularity).

LEGAL STATUS:

DOM and its relatives are all Class A drug

RELATIVES OF

DOM: Include DMA, bromo-DOM, and DOET. **Bromo-DOM** may last two or three days! But whereas DOM-type drugs produce intense trips and hallucinations, **DOET** mainly produces euphoria and a major rise in self-awareness. These drugs are rarely available in the UK. **DOB** is a potent drug, requiring just I-3 mg to produce a 12-24 hour trip. Related to DOM, its effects are milder, centred around manageable changes in selfawareness - though doses higher than 5 mgs have caused serious illness (seizures, coma) and

death in

some cases.





STP TRIP - WITH COCAINE (25 year old man)

The strangest trip I ever had was in 1989 ... I had gone to a dance party in a huge warehouse with a bunch of friends, and, after a few lines of cocaine, had necked a pink cube of STP (DOM), which allegedly contained a double-dose. About an hour later I started feeling trippy, and moved into the throbbing throng and started dancing to the top tunes ... lots of people seemed to be wearing animal masks, which started to unnerve me, so I closed my eyes for a while. Some time later I realised that I was 'seeing' a golden bar revolving slowly in some strange headspace. Puzzled, I tried to focus more closely and then I noticed five mysterious letters emerging on it as it turned around; I felt excited, and when the letters came round again, I eagerly read them: I-N-G-O-T. This really tickled me, and I began laughing, opening my eyes at the same time - to 'see' that all the other people were dancing about a hundred yards from me in all directions. Then, out of the shadows came a most solid and scary apparition - a nine-

> foot angry-looking Indian demon-woman with three pairs of arms ending in huge

sword. The name 'Kali' came into my head though at this time I knew little about Indian mythology. She was dancing slowly toward me, moving the swords around in a hypnotic fashion, and staring right at me with large murderous white eyes. When she had reached 10 yards away, I suddenly felt terrified, and turned to run towards other people, but they just seemed to get further away. Then, though I thought they were already open, I opened my eyes and saw two people waving at me from under a table about 20 yards away - it was two of my friends, Lyn and Al. I staggered over to them, and went to fall down into the space between them, but jumped back up as I hit something and heard a voice vell 'watch out'. Where there was a space a moment ago, I now saw a third friend Pete sitting wedged between the other two. It dawned on me that I was really off my head. They gave me a line of cocaine, and then things started to get really weird ... including hearing one of my favourite Joy Division guitarnumbers being played perfectly on a violin somewhere between my ears ... and shutting my eyes again and going walkabout inside my unconscious mind until I came across a deep red-glowing hole from which were rising frantic voices pleading 'help me' and 'get me out of here' ... this was far too 'real' and nasty for my liking, and after that I would

hands each holding a glistening

not shut my eyes any more...and
I stayed under the table
chain-smoking cigarettes
until things started to look
more like they used to...



ECSTASY, MDA AND MDE

BACKGROUND: Ecstasy

originally contained MDMA (methylenedioxymethamphetamine), though E-tablets today commonly include various other drugs - making it the most adulterated drug ever (common adulterants include amphetamine and LSD). MDMA was discovered in 1914, since when hundreds of other 'methoxylated ambhetamines' have been identified - two of which are often found in British ecstasy tablets: MDA (methylenedioxyamph etamine) - 'the love drug' - a stronger, more LSD-like form of E; MDE (methylenediox yethylamphetamine) - 'eve' - a milder, less emotional form of ecstasy. Though popular in the USA from the 70's, ecstasy emerged as a new illicit drug in the UK in the mid-80's. Providing stimulation and a collective state of altered consciousness, it was ideally suited to all-night partying and soon became the prototype 'dance drug' of the acid-house and rave/dance-party scenes.

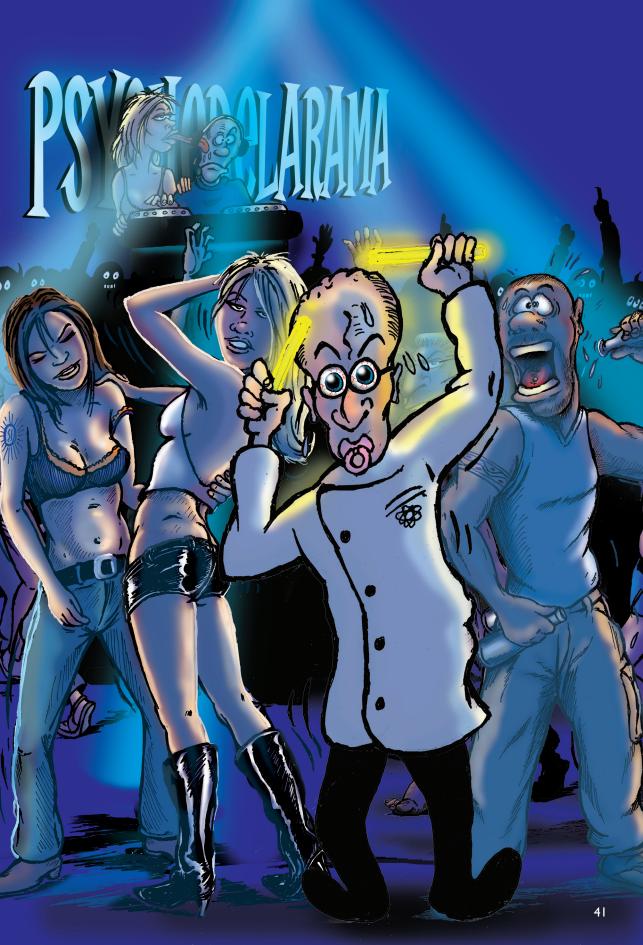
dose of MDMA depends on body weight (and other things) — about 1.5 to 2 mg per kilogram of body weight. So, a standard dose of MDMA is in the range 75-150 mg, averaging about 120 mg. MDA and MDE are more potent, with standard doses being 50-125 mg. Seized ecstasy tablets often contain between 60 and 130 mg of MDMA. Some devotees claim that MDMA works best by taking a booster dose (e.g. 30-60 mg) a few hours after the starting dose (80-120 mg). 'Stacking' means repeatedly taking doses at intervals throughout the evening/night. Mixing E

with other drugs is common at nightclubs (e.g. speed, acid, poppers). Ecstasy comes in many brands – tablets are identified by colour/shape/logo, and a given brand name (e.g. Mitsubishis, Doves etc).

MAIN EFFECTS: MDMA

and its chemical cousins are called empathogens (increased understanding of others) or entactogens (increase tactile and emotional feelings), because they have unique effects on people's 'social emotions'. MDA is more trippy, 'sexy' and longer lasting than MDMA, and has a bigger comedown. MDE lacks the initial rush of MDMA, and is less empathogenic, but is somewhat longer lasting with fewer physical effects. Otherwise the effects of the three drugs are similar. They begin with physical sensations - including dry mouth, clenched muscles, dilated pupils, higher temperature, faster heart rate - most of which continue throughout the trip (erection and orgasm may also be inhibited).

Effects can start with an injection-like 'queasy rush' of euphoria and sensuality as serotonin suddenly floods the brain. The main psychedelic phase of effects lasts an hour or two, and is followed by a 'speedier' phase with energy bursts for several more hours, with the whole 'trip' lasting four to eight hours. Ecstasy makes people more self-aware (open and honest about themselves) and more empathetic (understanding of others) – sometimes with longer-term after-effects (personality changes). Ecstasy users are renowned for their friendly, loving and peaceful



attitude. This is why it has been used by psychotherapists in therapy with couples – and why T-shirts can be bought with the message 'Don't get married for six months after ecstasy!'.

Although hallucinations are rare with MDMA (but not with MDA), some people report closed-eye imagery but it more widely produces heightened perceptions - visual (e.g. brighter colours, sharper images), auditory (e.g. music sounding better) and tactile (e.g. skin feeling more sensual). Like stimulant amphetamines, ecstasy makes repetitive action seems pleasurable - combined with increased energy and sociability and the perceptual effects described above, this makes it ideal for mass dancing and partying. Many users complain that the positive effects of MDMA wear off with repeated use.

MAIN RISKS: Overdosing, over-using and overheating are key risks. Although the lethal dose of MDMA is 50 times greater than a standard dose (120 mg), unpleasant physical effects increase dramatically in doses higher than 300 mg. Some people are also prone to allergic reactions to MDMA (e.g. liver failure). But the main immediate health risk posed by MDMA involves a sometimes fatal syndrome based on heatstroke or heat exhaustion, which leads to bloodclotting problems, muscular rigidity, coma, respiratory collapse, etc. This syndrome, which kills half a dozen or more club/ party-goers a year in the UK*, is based on the development of a very high

body temperature (40C+) from several contributory factors - notably MDMA use, continuous dancing (no rest), hot environments (e.g. badly ventilated clubs), dehydration (not drinking enough), and wearing heat-retaining clothing/hats. In some cases it appears that MDMA may cause death from overheating without any other factors being present (similarly, heat exhaustion can occur in dance-clubs without any drugs being used). Some people become anxious or paranoid on or after using MDMA, though bad trips and flashbacks of the LSD type are very unlikely. Many people get a mild to moderate depressed mood (come-down) from MDMA two or three days after using it, usually just for a day or two (mid-week ecstasy blues). But there have also been claims that long-term regular use can lead to brain damage, early senility, depression, memory defects, liver damage and other disorders. These claims are not proven, but this does not mean that they are not true or that these drugs are 'safe'. For people who choose to use, the best advice is to stick below one or two doses once or twice a month. It is best to avoid using ecstasy when taking prescribed medications - particularly MAO inhibitors (e.g. betablockers) and SSRI anti-depressants (e.g. Prozac) although there are conflicting views on the effects of mixing Prozac-type drugs with ecstasy-type drugs.

LEGAL STATUS: Ecstasy
- MDMA, MDEA, MDE and most
other drugs in this family are Class
A drugs.

^{*}Throughout the 1990's at least half a dozen deaths a year were thought to have been caused by ecstasy type drugs. This has risen dramatictally recently with 81 deaths reported in the first three years of the new millenium. However, only 6 of these deaths involved ecstasy type drugs on their own. The other 'ecstasy deaths' involved a number of drugs in the body, in half the cases heroin was detected (a far more likely cause of death).

CHEMICAL COUSINS:

In addition to MDMA, MDE, MDA, there are hundreds of synthetic methoxyamphetamines. This group includes MMDA- noted for its closed-eye visual imagery - and DMMDA and HMDMA (more toxic variants). MBDB, in doses of 180-200 mg, has effects on empathy very similar to MDMA, but lacks its euphoriant and stimulant effects. There are many other hallucinogenic amphetamines - better known ones include: 2CB. It is taken in doses of 10 to 30 mg, averaging 20-25 mg - effects last about six hours and are somewhere between LSD and MDMA – hallmark effects include intense visual distortions, tactile/ bodily awareness and heightened sexual arousal. 2CE produces a longer and more internal 'headtrip'. PMA is particularly toxic, PMA can kill in doses close to the effective dose (50-80 mg) - it has recently been banned by many European states (it's already illegal in UK).

NATURAL RELATIVES:

Chemicals related to methoxyamphetamines have also been found to occur naturally in such plants as dill and parsley (apiole), sassafras (safrole), sweet flag (asarone), fennel (estragole) and nutmeg/mace (myristicin and elemicin). However, tripping on such herbs/spices is not very popular because the large amounts of leaves/ seeds/ roots/ etc. which need to be eaten to get high invariably produces very unpleasant physical side effects (mostly from other chemicals present in the plants) - and can lead to serious health problems (e.g. seizures) or even death.



ECSTASY EXPERIENCE (18 year old man)

I had never been able to dance, so after necking my first ever E, I told my mates that I would sit by the bar and watch them dancing. They were like 'Yeah sure!' and boogied off to the dance floor. I smoked a joint and felt nicely stoned; then about 30 minutes later, I started to feel a bit queasy and wobbly, but was also getting an energetic and excited feeling bubbling up inside me. The music gradually mixed into 'Everything Starts with an E', and I felt something shifting inside my head, like a big wave moving across my brain. I suddenly sprang to my feet, ran over to my mates, and started dancing like a lunatic. Huge waves of energy went down my spine and through my body, the music sounded heavenly, everyone looked beautiful, I felt incredibly happy, and wanted to stay in this moment forever. I could not believe what was happening. Someone I didn't know hugged me and though I expected to have mixed feelings about this, it felt good and I hugged them back and smiled like an idiot. My heart was racing, my skin was hot, my jaw was clenched, and when I danced into the toilets I saw in the mirror that the pupils of my eyes were almost totally dilated - black on white. It was three days later before I could stop moving to the music inside my head.



Weed, Pot. Grass, skunk, wacky baccy etc.

BACKGROUND: Cannabinoids

are the dozen or so chemicals in cannabis (herbal or resin), which produce its psychoactive effect – *THC* (tetrahydrocannabinol) is the main cannabinoid, others include *CBN*, *CDN*, etc.

CONSUMPTION: Smoking

enough to trigger a trip can be difficult, so those seeking a cannabis trip usually eat it. Swallowing raw herb or resin, whether chewed or not, is not too pleasant. Because cannabinoids are not water-soluble but fat-soluble, the leaves cannot be made into a tea by infusing with boiled water. So, it is typically crumbled up and cooked with fat-based foods (e.g. milk, butter, margarine, vegetable oil) to make a more easily digestible product — such as herbal curries and 'milky teas', and hash cookies and cakes (space cake).

MAIN EFFECTS: When two

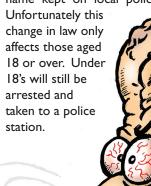
or more grams of quality cannabis are eaten, the typical effect is a dream-like, spacey trip, often accompanied by intense hunger (rare with other mind-benders) and fits of giggles. The body often feels heavier, and some people become temporarily immobilised (too stoned to move).

MAIN RISKS: Fatal overdosing is nigh impossible – in the worst cases, people who have eaten several ounces have fallen into a deep sleep, awaking very stoned but unharmed. Cases of so-called 'cannabis

psychosis' are very rare (and debatable). For more detail get yourself a copy of the new version of "Potology".

LEGAL STATUS: Cannabis

is now a class C drug. You can no longer be arrested for possessing cannabis, except for smoking (blatantly) in public or near children: Instead adults will have their weed confiscated (provided they're not thought to be dealing) and their name kept on local police records.





DELIRIANT DRUGS





FLY AGARIC MUSHROOMS

BACKGROUND: Fly agaric has been used for more than 2,000 years. It is the red/amber-capped, white-flecked magic mushroom of fairy tales, and also underlies the Father Christmas myth - his red costume represents the mushroom, and flying reindeers are based on the facts that reindeers in Lapland are partial to them, and that the mushroom can cause flying hallucinations. The active ingredients are muscimole, muscarine and ibotenic acid.

is the only known mind-bending drug which passes unaltered through the body into the urine — an almost everlasting drug (if you can stand the taste of piss)! In some countries like Lapland, this led to the practice of drinking the urine of people (or reindeers) who have eaten the mushroom. Fly agaric should not be consumed in its fresh, raw state — it should be dried first, or else cooked at a low heat. When the mushrooms have been dried, it is best to powder them (to even out the strength). Fly agaric caps vary too much in size to base the recommended dose on number of shrooms. So, a medium trip requires about 5-10 grams of

dried fly agaric, and a strong trip requires 10 to 20 grams. New users should start with a test dose of less than five grams.

MAIN CFFCCTS: Begins with a sleepy, trance-like phase with visual hallucinations – followed by a burst of energy and a delirious, self-absorbed trip – which may include size distortions and 'flying' fantasies. The duration of the trip is unpredictable: anything from two to eight hours.

MAIN RISKS: As with psilocybe a major risk is picking the wrong mushroom, there are close relatives of fly agaric – called the Death Cap and Destroying Angel – which are known to kill half of all people who eat them (and cause 90% of all UK mushroom deaths). Death can also be caused by higher doses of fly agaric - involving convulsions, coma and heart failure. For mushroom trips, psilocybe are a much safer option.

LEGAL STATUS: It remains totally legal (not controlled under the Misuse of Drugs Act).

RELATED DRUGS: Tropanes are anticholinergic drugs found in various plants, including **belladonna**/ **deadly nightshade** (atropine and scopolamine/hyoscine), daturalthorn-apple (hyoscyamine, atropine and scopolamine), mandrake (mandragorine, hyoscyamine, and scopolamine), and henbane (tropine and scopine). These drugs were used by witches and sorcerers in the Middle Ages and are processed by boiling/cooking the plants, and making ointments of the product. These were administered by rubbing them onto a membrane (e.g. the vagina) with a suitable household instrument (e.g. broomstick). Since hallucinations about flying often occur on these drugs, all this led to the myth about witches flying on broomsticks. Along with many (often unpleasant) physical effects - loss of coordination, dilated pupils, blurred vision, faster heart rate, high temperature, nausea, dry mouth, thirst - these drugs produce a dream-like trance or stupor, often with visual illusions and hallucinations. The user appears delirious and confused, and memory of the experience afterwards is usually very poor (more so than with other drugs). But the main problem is that these drugs can cause respiratory failure at doses only slightly higher than the effective dose. For instance, atropine is effective in doses of I-2 mg - yet 10 mg produces clear toxic effects. This is why tropane drugs are not very popular.





K. SPECIAL K. VITAMIN K. TECHNO-SMACK

BACKGROUND: Ketamine is a dissociative anaesthetic discovered in 1962, and is closely related to PCP (discovered in 1956 and known as angel dust). It is used by vets to tranquillise animals during surgery and by surgeons in various operations - including on children, because it is cheaper, safer and easier to use than other anaesthetics. But it has mind-bending effects when used by humans in doses just short of those which induce unconsciousness.

deliriants, it typically comes in powder form, though diverted pharmaceutical ketamine can be in tablet or liquid form. It is generally sniffed or injected, but can also be swallowed and smoked. The dose for a full ketamine trip is about 75-125 mg by sniffing or intramuscular injection, or 40-80 mg by intravenous injection – though tolerance may lead to much higher doses being used.

MAIN EFFECTS: Along with DMT, ketamine is often regarded

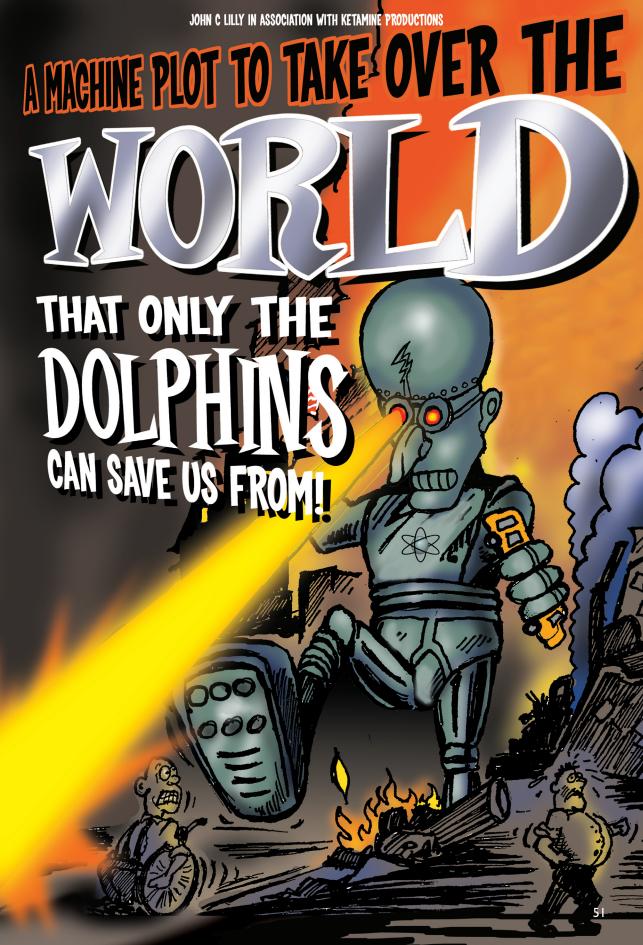
as the most intense and bizarre of the hallucinatory drugs (though the two are very different). What makes ketamine unique is that in doses just short of those causing unconsciousness it has a mixture of stimulant, depressant, psychedelic, deliriant and analgesic effects. And, because ketamine blocks glutamate, the brain's main neurotransmitter, its effects occur in just about every part of the mind. Ketamine has been described as sending your mind 'into a **K-hole**' or 'down a K-line'. The effects come on in seconds when injected, or minutes when sniffed, peaking for about

30-60 minutes, and then winding down for another hour or so. The whole experience lasts about 1 to 3 hours (much longer if swallowed), though may feel timeless.

The main bodily effects are blurred vision, insensitivity to pain, and a major lack of coordination. Trying to walk is like being on a ship in a storm, so it's best to keep still to avoid nausea. Though it may be sold at dance parties/clubs, ketamine is not a dance drug. The 'mongy' analgesic effects have led ketamine becoming known as 'technosmack', though users can also feel energised and manic.

Shared hallucinations are often reported by groups of experienced users, including the feeling of being part of a collective mind, and telepathic and psychic experiences. Many people feel that their ego (sense of identity) has dissolved or changed, and some cannot recall their previous life or how they got into their current state.

Other common effects include out-of-the-body (astral projection), near-death (floating down a tunnel toward light, etc.), and time-travel experiences. Like **DMT**, ketamine can also produce total hallucinations - though unlike DMT, it may also cause true hallucinations. Some devotees believe ketamine puts them in touch with alternative 'meta-realities', cyberspace communication systems, and intelligent disembodied entities (e.g. the 'machine elves'). However, of three famous ketamine advocates, two died while on the drug, and one (to use a technical term) went a bit bonkers.



Ketamine has also been called a 'psychological cul-de-sac' and the 'Frankenstein molecule', meaning that some experts regard it as producing an ultimately meaningless, unnatural state of consciousness — a sort of chemical 'fool's gold'. Tolerance to ketamine is rapid — within a few weeks of daily use, even large doses produce little effect. Long-term users often report that ketamine stops having a trippy effect, even after a break in use - i.e. regular use eventually results in ketamine producing only a 'mongy' feeling rather than a trip.

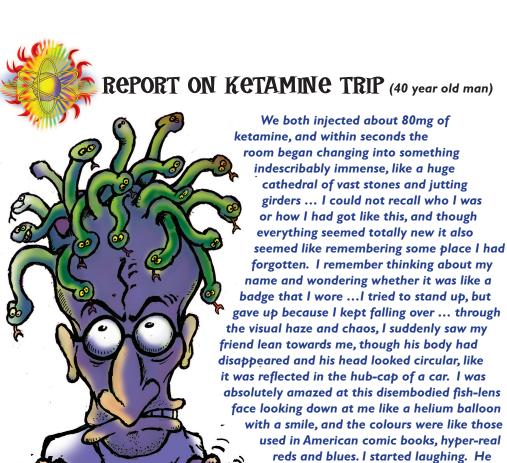
MAIN RISKS: Bad trips are rare because fear is usually blocked by wonderment. Overdosing can lead to unconsciousness, and even death. The ketamine comedown can sometimes be a bit unpleasant, with a mixture of nausea and fatigue (which can be slept off) — and snorting ketamine causes a very sore nose. Dependence is more likely with

regular use of ketamine than most other mind-benders (except solvents) - which can be particularly risky if injecting is the main route of use. Regular use can also lead to personality changes and the development of bizarre ideas and strange belief systems. Dr John C Lilly (already famous for inventing the isolation tank and using his computer to talk to dolphins) dedicated his life to using drugs to explore 'other realities'. After being admitted to a psychiatric hospital (after years of injecting himself with ketamine), he rang the President of the United States to warn him of "A machine plot to take over the world, that only the dolphins can save us from!"

Legal status: Ketamine is not controlled under the Missue of Drugs Act, though its sale is controlled by the Medicines Act. PCP is illegal: its a Class A drug like LSD and ecstasy.

SIMILAR DRUGS: the *arylcyclohexamines* are distinguishable from other anesthetics by being longer acting, weird substances which are used by most methods other than inhaling – notably, *phencyclidine* (PCP/angel dust), and *tiletamine* (Breakfast Mix). The effects of PCP are similar to ketamine, but PCP is reknowned for an apparent increase in strength (its actually based on insensitivity to pain - its pain which stops us pushing ourselves too far, eg. when lifting things) and PCP lasts longer (4-8 hours). Bad trips are more common with PCP, which is also more toxic than ketamine, with overdoses occurring from 20 mg - only 2-3 times higher than the standard doses used.





reds and blues. I started laughing. He was saying things to me, which sounded like white noise at first, but eventually became fuzzy sounding words. I started trying to say things, but my mouth just kept repeating stuff like: "This is K-World" and "I am K-man". Suddenly, his distorted face became mixed with a memory of a classical painting of Medusa, the gorgon, reflected in a shield. My friend has dreadlocks, and when I focused on

these they were
clearly snakes
with eyes
and lashing
tongues on
the end. I
wasn't afraid,
and thought I said
so - though on the tape
afterwards all I had said
was: "You have a gorgon's
head"...



GAMMAHYDROXYBUTYRATE. GBH. LIQUID E

BACKGROUND: GHB is a salty tasting colourless, odourless liquid, which has been used in medicine as a sleeping aid, to reduce weight, and as a mild anaesthetic. It is used by bodybuilders to stimulate muscle-building growth hormone and as a dance drug by some club-goers. It has also been implicated in 'date rape' cases (along with Rohypnol).

CONSUMPTION: It is usually bought in bottles/phials at about £5-£30 (depending on size), though also comes as a powder. Before the recent ban (2003) it could be obtained from some sex shops and mail-order companies, and is swallowed in standard doses of about one to three grams - this is usually about 10 to 40 mls of liquid, but it varies widely. Toxic effects begin at doses between 5 and 10 grams, and doses over 10 grams can cause fatal **overdose**. But because illicit production means that the strength of GHB liquid can vary widely, it's safer to start with no more than half a bottlecap-full (5 ml) of a new batch of GHB.

MAIN CFFCCTS: Depending on dose, effects last 2-6 hours, but can last all day. GHB provides relaxation, sedation, and increased confidence in small doses; euphoria and slightly altered states of

consciousness in moderate doses; and respiratory depression, unconsciousness and coma in large doses. Physical effects include nausea, poor coordination, dizziness, and slower heart rate. Many people claim GHB is a powerful aphrodisiac.

MAIN RISKS: Overdose has caused several deaths in the USA and the UK. GHB is not a good 'dance drug' because it can make the user confused and uncoordinated. Heavy use causes nausea. stiff muscles, and even fits. GHB made by amateur chemists could contain toxic chemicals which burn the mouth, etc. It should never be mixed with alcohol/ sedatives, as unconsciousness and coma are highly likely. Although many people say they wake up 3-4 hours later feeling refreshed, collapsing and being unconscious leaves you vulnerable (to anything) and liable to die from choking on your own vomit (the traditional way of entering rock star heaven).

LEGAL STATUS: GHB is a Class C drug.

RELATED DRUGS: GHB has many close chemical relatives, including **GHV, GVL** and **GBL** - which are sometimes sold as GHB.



INHALANTS. VOLATILE SUBSTANCES

BACKGROUND: Solvents - also called inhalants and volatile substances, are a range of household and industrial products (mainly liquids and pastes), which give off intoxicating fumes containing hydrocarbons (e.g. toluene, hexane, propane, pentane, benzene, acetone, acetate, trichloroethane) and chlorofluorocarbons (CFCs) at room temperature. The most popular solvents are lighter fuel, aerosols and glue, but others used include petrol, dyes, fire extinguisher fluid, cleaning/polishing products, nail varnish/remover, marker pens - the list goes on. Some people even get stoned on animal shit. For instance, in Nigeria, some people get high on a concoction based on mixing lizard dung with petrol, rubber solution or local detergent. In Summer 2002, the Malaysian drug enforcement agency reported an epidemic of cow-dung sniffing among the country's poorer kids - an attempt to get 'high' on such chemicals as sulphur and methane.



Dr Nuke investigates!

CONSUMPTION: Like the liquid anaesthetics, the fumes of these products can be inhaled by soaking them into materials, but they are generally poured into a bag, and then the fumes are inhaled by pressing the bag against the mouth (direct contact with skin can cause chemical 'burns').

MAIN **EFFECTS**: The effects of different solvents last between half an hour and a few hours - though regular users may sniff several times a day, and so stay high for much longer. Though effects are attributed to particular chemicals (e.g. toluene in glue), some of the solvents' buzz is due to the toxic effects of other chemicals - and simple oxygen depletion. The usual effect of smaller doses of solvents is disinhibition (a drunken feeling similar to alcohol), though larger doses can lead to anaesthetic-like and hallucinogenic effects - typically a crude, disoriented, dizzy stupor with visual and tactile hallucinations. Shared hallucinations are also common in groups of solvents sniffers (as with ketamine). Toluene and hexane (e.g. glue) have a more depressant effect, while butane and related gases (e.g. lighter fuel) have a more stimulant effect.

MAIN RISKS: Because they often contain many other industrial chemicals, the effects of solvents are potentially the most toxic of all the mindbenders. Regular use of some solvents can lead to physical dependence, with a withdrawal syndrome based on insomnia, nausea, shakiness and sweating. Solvents also kill and seriously harm more

of their users than any other mind-bender - in the UK, one in 50 of all deaths involving older teenagers are solvent-related. About 70 youths a year presently die from sniffing solvents - the specific causes are a mixture of toxic effects (particularly heart failure), suffocation (in bags) and other accidents (e.g. falling). Sniffing directly from gas lighter refills (butane) can freeze the airway causing suffocation and death, up until recent regulations on the sale of lighter refills, this was the major cause of solvent deaths in the UK. Solvents can also damage just about every major organ in the body, including the brain - a charge often falsely levelled at other mind-bending drugs, but true in the case of solvents. In short, solvents are just not worth it.

LEGAL STATUS: Solvents are not controlled under the

Misuse of Drugs Act, meaning they are legal to possess and use. However, under the 1985 Intoxicating Substances Supply Act, it is an offence to sell volatile substances such as glue and lighter fuel to children (under 18's) *if* it is suspected that they are going to 'abuse' them. In 1999, it also became illegal to sell lighter-fuel (butane) to under 18's *whatever* one's suspicions.





The main advice for people who are still going to inhale solvents is: choose a safe setting; don't sniff on your own; learn first aid; avoid aerosols and in particular gas lighter refills; if using a bag don't cover your head with it; and avoid vigorous exercise while high.



POPPERS, RUSH/LIQUID GOLD/TNT/ RAVE/RAM/THRUST/ETC.

BACKGROUND: Alkyl nitrites

- amyl, propyl, butyl, isoamyl and isobutyl nitrite - are clear to yellowish, flammable liquids which smell sweet and fruity when fresh but like sweaty socks when stale. They were originally medicines for people with heart conditions like angina, but are now mainly sold as 'room odorisers' from various shops, nightclubs and mail order companies — for about £5 a bottle. They are also used as a 'sex aid' because they can enhance orgasm - and dilate the anal sphincter.

CONSUMPTION: The fumes of poppers are generally inhaled from the small bottle they come in, though the liquid is sometimes soaked into <u>unlit</u> cigarettes, which are drawn on to inhale the fumes (e.g. while dancing). A single bottle may contain up to or over 50 'goes'.

MAIN **EFFECTS**: Isobutyl

nitrite is the main version available in the UK. Effects come on almost immediately, and last about one to two minutes. The main effect is a 'head rush' (with flushed face) and pounding chest, caused by a sudden rise in blood pressure, as blood surges through the heart and brain. Many people feel nothing more than a fuzzy head, while others report perceptual distortions, energy bursts, time slowing and weird

states of mind. While some people find that poppers temporarily enhance the effects of **ecstasy** or other drugs, others claim that they can 'bring you down'.

MAIN RISKS:

Daily regular use will result in tolerance (no/few effects) within two to three weeks, and should be avoided to prevent health problems - which include glaucoma and anaemic symptoms, and in extreme cases death. Contact with skin can cause sores. Swallowing nitrites is extremely dangerous, and can kill rapidly. Regular use can lead to aftereffects like headaches.



Poppers should be avoided by people with heart or **blood pressure** problems.

Their high flammability creates a **fire risk** – don't smoke when sniffing poppers.

LEGAL STATUS: They are

legal to possess and to supply (for non-drug purposes). Sale of amyl nitrite is controlled under the Medicines Act.



LAUGHING GAS, WHIPPETS

BACKGROUND: Nitrous oxide (laughing gas) is one of the safest inhalants/ anaesthetics, because it has little effect on critical body functions — which is why it is a preferred painkiller for women giving birth, and a preferred general anaesthetic for dentistry on children. Favoured by the Victorians, its popularity has waned since the 1920's. Nitrous oxide comes in three main forms:

- (1) refills of pure nitrous oxide for whipped cream dispensers (whippets) sold from catering shops in boxes of 50 costing about £25, i.e. about 50p each.
- (2) large hospital-type canisters with face-masks, containing a mixture of nitrous oxide and air (still used in childbirth). These should not be confused with a third (rarer) form.
- (3) large industrial canisters of pure nitrous oxide used by fishermen and other industries, not intended for human use i.e. with valves rather than face-masks (containing several kilograms of NO2, and costing about £20).

CONSUMPTION: In the case of pure NO2, the gas has to be transferred into a balloon or bag first since it is too cold to be inhaled directly. 'Whippets' are fitted into and released from a whipped cream dispenser, which has a balloon/bag fitted to the release valve (and no cream inside it!) — so that when the lever is pressed the balloon fills with gas, which can then be inhaled safely. A similar procedure is following for large canisters of pure NO2, except that the balloon is fitted directly onto the release valve.

MAIN effects:

After inhaling one or two canisters, effects last a minute or two; though inhaling a nitrous/air mix through a mask produces constant effects until the supply is cut. Hallmark effects include a silly deep voice (the opposite of helium), hilarity (bursts of laughter), the 'eureka experience' (the feeling that you



experience' (the feeling that you are having a brilliant idea when you are not), and a pulsating, echoey state of mind. When used with other mind-benders, it briefly magnifies their effects.

MAIN RISKS: If inhaled direct from the canister, it's so cold that it could seriously damage the throat and lungs (like butane). Death from asphyxiation will occur if the gas is inhaled continuously with no air breathed. A safe location is also needed on laughing gas (e.g. on sofa or floor) – in case you pass out or fall over. If someone has had too much, in addition to appearing unconscious or unresponsive, their lips and maybe face will look blueish. Clearly, it's best not to smoke or hold drinks or anything sharp when inhaling laughing gas. Regular use can lead to vitamin B12 deficiency.

Legal as drugs can be - not controlled by the Misuse of Drugs Act or Medicines Act., and so is legal to possess and use.

RELATED DRUGS: Other medical anaesthetics which have been used for their mind-bending effects include **chloroform** and **ether**. However, they are more like solvents than laughing gas. For instance, they are liquids which give off fumes at room temperature which can be inhaled. And, their main effects are drunken feelings (they are related to alcohol) and a dreamy, disoriented, mental state lasting half an hour to an hour. Their crude effects, bad smell and inflammability explain their lack of popularity.

LAUGHING GAS SESSION (22 year old man)

The balloon made a farting noise as it emptied, and then the gas hit my brain and I shouted 'Psyche-fucking-delic!'

ridiculously deep like Barry White with a cold. To start with, there was an echoey sound to things which got stronger, along with a feeling of energy in my brain though my vision was hazy. I had a metallic taste in my mouth, felt uncoordinated and jerky, and think I would have fallen over if I hadn't already been lying down. But after about half a minute my head felt clearer, and I shut my eyes, and I got a sudden massive feeling of having had a great idea - but without actually having had an idea - and I laughed out loud. After about a minute, just before the buzz faded, I had a strange experience - I suddenly realised that I couldn't locate the direction of any of the sounds around me (people's voices, birds singing, etc.) - it sounded like they were all on

some very small line a few inches from my head.

- and was amazed to hear my voice sounding

PART 9

THER MIND-BENDING



Kylie Minogue playing the part of the 'Absinthe Fairy' in the film Moulin Rouge

NATURAL CHEMICALS

Sources of **Natural chemicals** that have been used for their mind-bending effects include: **green plants, fungi, animal excretions** and **organs** – including several species of **toad**, several types of **fish** in Indian and Pacific oceans (e.g. the **Dream** - **fish**), and various **creepy crawlies** (spiders, ants, centipedes).

There are also certain *alcoholic drinks* that are alleged to have hallucinogenic effects – including *tequila mescal* (if you eat the worm at the bottom of the bottle), and some real ales – such as 'Old Peculiar'. Indeed, it's interesting that *hops* – one of the main ingredients of beer – is one of the two species which comprise the family of plants called *Cannabaceae* – the other one, of course, being *hemp* (cannabis). But the only definite case of a trippy alcoholic beverage is *Absinthe*, known as the *Green Goddess*, which contains both alcohol (55% ABV) and *wormwood* (Kylie Minogue played the part of the 'Absinthe Fairy' in the film *Moulin Rouge*). Wormwood is a herb containing *thujone* - a trippy drug also found in other herbs like sage.

Herbal highs (HHs) are legal plant substances - seeds, leaves, roots, stalks advertised as having similar effects to illegal drugs - particularly LSD or MDMA. Many have been known to and used by particular cultures as medicines or ritual drugs for centuries. Since the sixties, there have been repeated claims in 'alternative' publications that smoking dried banana skin or various herbs and spices will get you stoned or tripping. However, in the rare cases that these claims had any truth, vast amounts typically had to be smoked or eaten to get a small buzz - usually along with unpleasant side effects. But over the last few decades, 'herbal highs' have become a more sophisticated business, marketed by both 'head shops' and 'herbalists' - including mail-order companies advertising in youth/alternative magazines. Most of these attractively packaged products contain tablets or capsules of powdered plant extracts - for instance, various brands of 'natural ecstasy' are now available (e.g. Herbal E, Cloud 9). Unfortunately, most of these products produce nothing more than physical effects and minor mental effects which vary from quite unpleasant (e.g. dizzy) to OK (e.g. mildly stoned). This is because their active ingredients are often little more than minor stimulants like xanthines (e.g. caffeine) and ephedrine, sometimes along with obscure chemicals claimed to be mind-benders. Those rare HHs which do have trippy effects are likely to contain minor indole- or methoxyamphetamine-related chemicals found in various herbs, spices, and plants (deliriants like tropanes are generally too toxic/risky). Some outlets sell psilocybe growing kits or **peyote/San Pedro cacti.** 'Rediscoveries' of some interest include:

- Kavakava drinking a brew of the roots and stems of a shrub from the Pacific Islands, which produce euphoria and 'magical' mental states
- **Salvia divinorum** smoking the dried leaves or concentrated extract produces a stoned feeling with subtle visual effects and brief time distortions

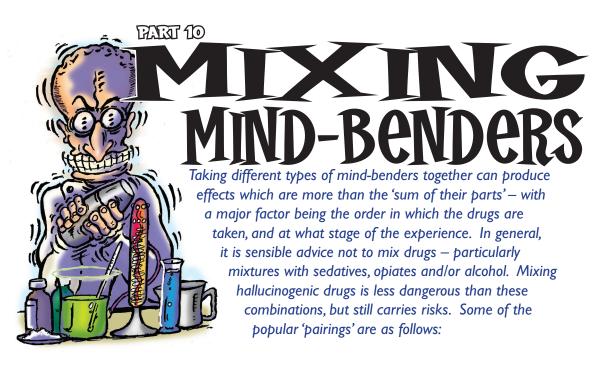
Medicines

Most psychedelics are Schedule I in the Misuse of Drugs Act, meaning that they cannot be prescribed by doctors or dispensed by pharmacists (e.g. LSD, MDMA). But some deliriant drugs are available as prescribed or over-the-counter (OTC) pharmaceuticals for treating specific medical conditions. In the UK, these include tropane drugs, which are available on prescription for the treatment of stomach cramps/diarrhoea and other conditions - for example, atropine (e.g. Lomotil). Other drugs 'abused' for trippy effects include tricyclic anti-depressants such as amitriptyline, and anti-Parkinsonism drugs such as Artane (withdrawn in 1997). Cyclizine and other chemicals found in travel sickness pills have also been used to get trippy effects, particularly by mixing them with opiates or other drugs (very dangerous). OTC medicines containing dextromethorphan have also been used to produce a mild trip. This opiate cough suppressant affects the same brain receptors as PCP, but it is in a cough syrup, which requires at least four ounces to trip. All of these pharmaceutical drugs - and the other chemicals contained in the preparations in which they are dispensed - are very toxic, and can easily kill when used in higher doses by people chasing a 'high'. This is why using such medicines to trip is extremely rare - and extremely stupid.

Designer Drugs

Designer drugs are substances made by illicit chemists which typically have similar molecular structures (and therefore similar effects) to illegal mind-benders, but which are legal at the time of discovery - i.e. find a loophole in the drug laws. But since legal loopholes are often closed when it is noticed that they are being exploited, drug laws now control many past designer drugs. Because so many designer mind-benders are possible, and because their manufacturers may be more interested in profit than safety, their side-effects and after-effects are often not well understood, and some have the potential to seriously damage health - including brain damage and movement disorders (e.g. *MPTP*) - and even death.

One good rule of safer drug use is that when offered a designer drug, if you have not heard about it – particularly if you do not know people who have taken it and OKed it - THEN DON'T TAKE IT.



Ecstasy and other mind-benders:

some say taking **MDMA** an hour or two before taking **LSD** or other strong hallucinogens can make the trip a lot more 'handleable' and 'centred', and strongly reduces the chances of a bad trip.

Nitrous oxide & other

hallucinogens: inhaling a lungful of laughing gas during any part of a trip can massively enhance the effects for a few minutes (particularly in the peak phase) – it can bring on strong visual hallucinations on LSD, and has been described as raising your trip 'up the flagpole'. This mix is only for people with a strong appetite for weird experiences.

Harmaline and other drugs: though it only has mild, relaxing 'stony' effects on its own, if about three grams of the finely ground Rue seeds are swallowed or smoked before or during a trip, it boosts the effects – particularly for drugs like LSD, DMT and psilocybe. Harmaline can also make the trip last up to twice as long, and can make DMT active orally. However, it may have unpleasant side effects if mixed with ecstasy-type drugs.

Cannabis is probably the drug most usually taken when tripping on mindbenders - like laughing gas and harmaline it can boost the effects of other trippy drugs, but is also used to 'take the edge' off a trip - that is, make the user feel calmer and less overwhelmed by the experience.

Multiple combinations: are also used by experienced psychonauts, though deliriants are typically used sparingly in such cocktails. Amongst numerous 'cocktails' described in *The Psychedelic Guide* (D. M. Thompson), one especially recommended is LSD, harmaline, nitrous oxide, DMT and cannabis – described as "absolutely beautiful ... infused with a spiritual quality".

Taking **stimulants** (speed or cocaine) with a hallucinogen generally intensifies the trip, while taking **depressants** (sedatives, opiates or alcohol) generally reduces the intensity of the trip – though these outcomes can vary depending on the drug, stage of the trip, and other factors.



DATE II

SAFER TRIPPING: BUT OS FOR

RULES FOR REDUCING RISKS



GET INFORMED:

Find out what you can about a drug before you take it – by reading about it, calling helplines, talking about it, checking it out on the internet, etc. In particular, find out about suitable doses, the effects, and potential risks/harms. Be sure it is an experience you want.



AVOID CRIMINALISATION:

If you want to avoid any chance of being given a criminal record, use only legal mind-benders (e.g. laughing gas, ketamine). If using controlled drugs, avoid carrying them in public; if storing them at home, find a container and safe hiding place which will keep them dry, dark, cool and air-tight and safely away from children. Avoid charges of intent to supply by not possessing more than a few doses at a time — and by remembering that supply means 'giving to friends' as well as dealing.



STORE DRUGS SAFELY:

Don't leave mind-bending drugs in containers or places where others — especially children - might unwittingly pick them up and mistakenly swallow them (e.g. sweet bags, coffee tables, refrigerators). Some drugs may look like innocent liquids/foods (e.g. GHB, space-cake) while some can be absorbed through the skin with enough contact (e.g. liquid LSD). Also, exposure to light, heat, air, and moisture over time (as well as pollutants in the last two) reduces the potency of drugs - by half or more for some drugs in a matter of days/weeks — for instance, LSD is particularly sensitive to 'exposure'.

PRODUCE AND PREPARE FOR USE CAREFULLY:



Take care when growing mind-bending plants or picking wild magic mushrooms (some look like the real thing, but may be poisonous forms which can kill you – so take an expert or guidebook with you). Rinse well with cold water any plant materials before consuming them – plant leaves and mushrooms may have been sprayed with pesticide, and commercial flower seeds (e.g. morning glory) may have been coated with fungicide or other 'treatments'. Many people find making a hot brew (like tea) of the materials, sieving the roughage, and drinking the liquid, is the least unpleasant way of taking plant drugs. With solvents, a small bag should be used for inhaling fumes to avoid accidental suffocation.

PREPARE YOUR MIND AND BODY:



It is best to prepare mentally for a trip - particularly if you are not very introspective, and have not spent much time thinking about your own mind and personality. At the very least, you should be sure that there is nothing on your mind which you are very worried about, or having difficult emotional responses to (e.g. relationship problems) – if there is, it is best to try to work these through before tripping. Discussing or planning the trip with your co-trippers is also a good idea, particularly what you would like to get from it or 'do' on it. Breathing exercises before and during the trip are good preparation, as are meditation, yoga, martial arts, tai chi, and related disciplines.

SELECT A SUITABLE SET/SETTING:



Only take mind-benders when in the right set (e.g. good mood) and setting (e.g. spare time, right place). Traditionally, the harmful effects of these drugs have been minimised by limiting them to ritual uses (e.g. in ceremonies and celebrations), though modern Western society neglects such rituals. At the other extreme, spontaneous use of trippy drugs should be avoided – planning and preparation works better. Tripping with a small group of friends is preferable to tripping alone, with strangers, or with people you don't like. The safest place to trip is in your or a friend's home, or else in a rural area – tripping in city streets can be dangerous and scary. If you are a parent, never trip while you are looking after your children.



Never 'spike' Anyone. even friends. With Mind-bending drugs:

You may cause temporary or permanent insanity, or the victim could seriously hurt themselves while intoxicated but unaware of it (e.g. if they drive). 'Spiking' is also a criminal offence (administering a noxious substance), and could lead to imprisonment. And don't offer trips to nervous people, under-18's, people with health problems, or people with little drug experience or who have had bad trips.



TAKE THE RIGHT DOSE:

Try to find out how strong a particular batch of a drug is by asking the supplier - or preferably others who have taken it - for their views. If in doubt, take half of a standard dose, erring on the cautious side if you are estimating – you can always take more but you cannot take less! Also, for most psychedelics, though doubling or trebling the dose typically boosts the intensity of the effects, increasing the dose further than this generally produces only more unpleasant physical effects with few or no gains in desirable effects.



AVOID FREQUENT USE:

Many psychedelics have no effect within a week if you take them every day anyway. Once or twice a year to once or twice a month is the typical range – people who trip out every week are not giving their minds and bodies enough time to properly recover.



AVOID INJECTING:

Swallowing is safest, followed by sniffing and smoking. Sniffers should chop up powder finely before use, and wash out their noses with water afterwards. Smokable powders/pastes such as DMT ideally require a glass pipe (or makeshift equivalent involving a glass, tin-foil, elastic band, and pin for making holes) - though can also be 'chased' on cooking foil. Injecting should be avoided, but if you do inject, clean equipment should be employed and safer injecting procedures followed (seek advice at your local needle exchange).

AVOID MIXING MIND-BENDERS:



Avoid mixing mind-benders in the same session. However, trip-cocktails are common in some groups of experienced 'psychonauts' – the most general advice is to avoid mixing them with alcohol or prescribed medications. Also, avoid eating for two or three hours before using and during the trip (it can make you nauseous) – your last meal should be basic but nutritious (bland and light, with plenty of carbohydrates such as bread, pasta, etc.). Remember to drink liquids at your normal rate even if you are not thirsty (i.e. about a glass of water/liquid every hour). Be careful with hot drinks (or hot anything) – heat may not seem painful when tripping.

DON'T DRIVE OR OPERATE MACHINERY.



or play with dangerous objects (e.g. knives) or take part in any risky sports or activities; avoid flames or 'naked lights' when using solvents and inflammable gases; and consider turning off your mobile phone and not answering any other calls during the trip (you may feel OK but sound/look strange!). Also, don't get in the bath or go swimming while tripping – more than a few people have drowned this way.

LOOK OUT FOR FRIENDS WHEN TRIPPING.



especially at parties/clubs – help any friends who react badly to the drug – tell them (or yourself) not to panic during a bad trip (see 'Bad trips'). If other friends turn up during a trip (e.g. a flatmate), it's best to let them know what's going on – or they may think you are going crazy for staring at an 'off' TV. When taking a 'new' drug (for the first time), it's better if one friend remains straight – called 'ground control' or your 'guide'.

CARRY CONDOMS & PRACTICE SAFER SEX WHEN YOU ARE TRIPPING:



The hippies certainly had a lot of sex on LSD, and ecstasy can make you think you have fallen in love at first sight. Also, ecstasy and other trip-drugs can affect erections in men (stopping you getting or keeping a hard-on) and vaginal lubrication in women — so water-based lubricants are also useful. But most importantly, be very careful if you decide to fuck while on a major trip — in rare cases, people at parties have fucked the wrong person, by mistaking someone else for their partner (resulting in relationship breakdown); or taken a 'no' as a 'yes' (leading to sexual assault); or else had sex in front of other people whilst thinking that they were alone and in privacy (leading to acute embarrassment).

HELP THE PHYSICALLY ILL:

If a friend should become unconscious while tripping, put them in the **recovery position** (illustrated) and use First Aid if you are trained; if they don't come round quickly, or show other serious symptoms – like fits or high fever – call an ambulance.



Put the right hand by the head (as if they were waving)



Put the left arm across the chest, so that the back of the hand rests against the cheek



Hold the hand in place and lift up the left knee



Turn the victim on their side by pushing down on the knee

WAIT AND CONTEMPLATE AFTER THE TRIP:



Don't make any important decisions about relationships, work, life etc. for a while, particularly if they relate to the trip experience — talk to friends about things, and wait until your head is firmly back on your shoulders (it can take a few weeks to straighten out). Also, any insights gained while tripping may be lost if you don't think about them afterwards — memories of trips usually fade within a few days/weeks (the mind has trouble storing information about such unusual experiences). Some groups of users, without reading intellectual ideas about psychedelia in academic books, develop their own concepts and language for describing and discussing their trips.

Seek Help for Long-Term Problems:



If mental disturbances continue beyond the trip – particularly for more than a few days – or you suffer from any other serious drugrelated health problems, you should consider seeking professional help (e.g. GP, psychotherapist, counsellor). Seeking help for flashbacks is not necessary unless they are regular and very upsetting.



TAKE EXTRA VITAMINS AND NUTRIENTS:

Take them in natural or tablet form after tripping, to replace any depleted by the drugs taken. Glucose is the main fuel of the brain, but we rarely run short of it like we do with other nutrients - e.g. water-soluble vitamins, which need replenishing every day. Vitamin uptake is also affected by most drugs, and the neurotransmitters (NTs) boosted by drugs are depleted afterwards for several days or even weeks. In the first case, vitamin C and the vitamin B group are the main ones, which need boosting – B12 can be seriously depleted by regular hits of laughing gas. In the second case, even if you could buy them, there would be no point in swallowing most NTs - they cannot pass the blood-brain barrier - so the best solution is to take substances used by the brain to make NTs, such as amino acids and fats. For instance:

- * people using a lot of amphetamine based mind-benders could take tyrosine supplements to increase the production of dopamine and norepinephrine;
- * those using a lot of any psychedelic drug could take tryptophan to aid serotonin production;
- those using anaesthetic drugs (like GHB and ketamine) could take glutamine to enable production of glutamate and GABA;
- * people taking tropane drugs could take choline (a B vitamin) for production of acetylcholine.

Though available as dietary supplements in health food shops, these nutrients can also be found in many common foods. For instance, tyrosine, tryptophan and glutamine are all amino acids found in meat (eg. chicken, beef) and dairy products; while choline is a B vitamin found in eggs, peanuts, margarine, chocolate, ice-cream etc.



ABOUT LIFELINE PUBLICATIONS

Lifeline have worked to help drug users for over 30 years. We have hundreds of staff based in the North of England working in treatment centres, needle exchanges and various other projects. We produce publications with the help and co-operation of various groups of drug users. We aim to provide information to drug users in a credible, entertaining and non-moralistic, non-patronising way. We aim to inform and where possible reduce the harm that drugs can cause. We aim to "Tell the truth about drugs". Lifeline is a registered charity, any profits made from the sale of this book go towards helping drug users.

To find out more about Lifeline and to see the range of drug publications we produce, visit our web site www.lifeline.org.uk

©Lifeline publications 2003

lifeline | publication guidelines

aims
To provide honest, accurate
information on the use of mindbending drugs. Clear warnings of
dangers and tips on safer use and
reducing harm are included

audience
Adults and young people over 16
engaged in recreational drug use

content Some swearing and explicit graphics

funding Self financed





