

## PUBLIC HEALTH

# Danger in Happy Drugs

Rivaling the powers of old-fashioned narcotics, drugs that produce sensational visions and penetrating insights into nature of existence have come to the attention of thrill-seekers.

By ELIZABETH MIREL

► OPIUM AND MARIJUANA have rivals in a batch of 20th century "happy drugs" used by today's youth and underworld characters in search of new thrills.

Some of the drugs are old in primitive religious use. Others are fresh out of chemical laboratories.

The appealing drugs bring all the mysteries of the dream world to waking life. Unlike narcotics, they are not habit-forming and leave no unpleasant withdrawal symptoms.

## Handle With Care

Because the drugs may be dangerous in the hands of amateurs, the Food and Drug Administration has restricted the use of the vision-giving, or hallucinogenic, drugs to qualified researchers who must be properly cleared.

The majority of investigators agree that the drugs should be handled with care, since they may duplicate symptoms of severe mental disorder: hallucinations in the form of visual or sound sensations, and feelings of unreality, isolation or strange detachment.

Some researchers go farther, warning that use of the drugs can bring on psychological breakdown. Refuting claims that the drugs foster creative thinking, investigators argue that the great insights revealed through the drugs may be full of terror, conflict and guilt. When these feelings are released from their hiding place in the mind, psychotic collapse may follow.

## Three Main Drugs

Three of the controversial drugs are now in wide use:

1. LSD (lysergic acid diethylamide), the most famous and most potent, was discovered by the Swiss chemist, Dr. Albert Hofmann, in 1943. In nature, lysergic acid is found in ergot, a fungus that grows on rye. LSD is a powerful tool in the hands of researchers trying to find the causes of mental illness.

2. Mescaline, the oldest, is the least potent of the trio of drugs. Mescaline is the main vision-giving compound in the peyote cactus, a plant used by the Native American Church in religious ceremonies. Because it is weak, difficult to control and may be mildly toxic, mescaline is believed to lack promise in medical research.

3. Psilocybin, the mushroom drug, was synthesized by Hofmann in 1958. According to botanical experts, there are 15 varieties of mushrooms that give visions, 14 in the psilocybe category. Psilocybin, although it is not as powerful as LSD, is used with it in psychic research.

There are many natural products that contain the crucial chemical elements found in the "happy drugs."

The latest may be ordered from the innocent pages of a seed catalogue. Morning glory seeds, according to California investigators, may produce sensational hallucinations if chewed in sufficient quantity.

The FDA is currently investigating the seeds to determine if the crucial chemicals are present and to see if the morning glory seeds are intended to be used for drug purposes. If both conditions are fulfilled, then the seeds will be placed on the restricted



Smithsonian Institution

**PEYOTE EATER**—A leader of the peyote religious cult, Gunavi, a Kiowa (Okla.) Indian, is shown holding the wooden staff and gourd rattle used in religious ceremony. The photograph was taken in 1893 by James Mooney, first modern anthropologist to describe the peyote ceremony.

list along with LSD and the mushroom and cactus drugs.

A group with the fancy title of International Federation for Internal Freedom has recently come to the public's attention. IFIF pushes the drug trio as a road to happiness through increased self-awareness and plays down their potential dangers. The drugs, Drs. Timothy Leary and Richard Alpert, IFIF leaders, have said, expand consciousness and open men's minds to the natural state of "ecstatic wonder, ecstatic intuition, ecstatic movement."

## LSD Research Opposed

Drs. Leary and Alpert were dismissed from the Harvard University faculty earlier this year. Although the reason given was technical, Dr. Alpert said it merely masked the University's attitude toward research with LSD and like drugs.

IFIF then set up headquarters in Zihuatanejo, a village near the beach resort of Acapulco in Mexico. They were recently ordered to leave that country on the technical charge of entering as tourists and conducting operations that were therefore unauthorized.

While IFIF's devotion to pure science is being questioned, members of the Native American Church, a bona fide religion, have had better luck with their drug. They use peyote buttons, made by slicing the top of the carrot-shaped peyote cactus, as a sacrament in their ceremony.

The Church, numbering about 200,000 Indians in 17 states, looks to peyote for inspiration. Peyote is a way to God. It is a cure for physical and moral ills that beset the Indians as their old tribal ways crumble and new white man's ways are not adopted.

## Religious Protection

There appears to be a tacit agreement among authorities that protects Church members using peyote. Attempting to make the constitutional protection of freedom of religion explicit, Navaho peyote eaters have worked their way through the courts. No ruling on the religious issue has been given, but the religion's practice is not condemned.

The FDA declares that when peyote is used for religious purposes it is "not a drug" and therefore not subject to Government regulation. But when used for "anti-social" purposes, peyote is a drug and falls under FDA domain.

## How Drugs Work

Although experiments have shown what mescaline, LSD and psilocybin can do to the mind, there is scant knowledge of how the drugs work. Researchers are currently pursuing several theories.

One theory is that the drugs interfere with major enzyme systems and convert normal body substances into forms that act like drugs. Another proposes that the drugs act on serotonin, a chemical in the brain believed to play an important role in the working of the nervous system, to heighten

neural activity. A third theory is that these drugs, because of their chemical structure, may be able to pass through natural physiological barriers and penetrate the reaches of the brain.

The more optimistic of the investigators are looking to the drugs to unravel the mystery of mental disturbance. Others, more cautious, fear the drug may hold more perils than promises.

The explanation of how the drugs work has, so far, remained as elusive as the visions they produce.

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#### PUBLIC HEALTH

### Program Organized to Improve Nursing Homes

➤ A NATIONAL COUNCIL for the Accreditation of Nursing Homes, jointly sponsored by the American Medical Association and the American Nursing Home Association, has been organized to carry out a nationwide program to promote high standards among nursing homes.

Organization of the new council, including the appointment of a nine-member board of directors, was completed at a meeting of representatives of the AMA and the ANHA in Chicago.

The National Council for the Accreditation of Nursing Homes will be headquartered in Chicago, with a full-time executive director to administer the program.

The number of skilled nursing homes increased from 7,000 in 1954 to 9,700 in 1961, with a total bed capacity increase from 180,000 to 338,700.

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#### PSYCHOLOGY

### Military Psychologists Take on New Roles

➤ MILITARY PSYCHOLOGISTS no longer are concerned mainly with testing the intelligence of troops or printing propaganda leaflets to drop among the enemy. Today they prefer to think of themselves as "human engineers."

"Our job has become much more complex," said Col. Donald C. Almy, one of the Air Force's top psychologists. "We must know as much about the behavior of machines as we do of men."

Col. Almy, who is with the Systems Command Headquarters, Andrews AFB, Washington, was named to head a four-day conference attended by 71 psychologists from ten North Atlantic Treaty Organization countries.

The closed-door conference held in the State Department is the third get-together in the past two years by NATO psychologists. This one was called to thrash out problems of military communications between men and computer-run weapons.

The military human engineers want to make sure that new NATO weapons are not so complex that they become useless to the fighting man who will need them.

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#### ANTHROPOLOGY

### Underworld Borrows Rites from Witchcraft

➤ WITCHCRAFT on a large-scale supposedly died in the 17th century, but underworld syndicate "Cosa Nostra" is reviving some of its practices.

The initiation pact of blood and oath of silence, with which ex-gangster Joseph Valachi recently made headlines, are part of the oldest rite in the world.

The mingling of blood, the element which gives life, symbolically stands for brotherhood. History is full of stories about men of opposing races and countries who became "blood brothers" in this way.

A more modern version of blood brotherhood is found in the initiation rites of some college fraternities and other secret societies that still abide by the rites of a blood covenant.

An ancient Egyptian custom required that those wishing to join a secret society open a vein and drip blood into a cup. Members of the society drank from the cup, pledging lifelong allegiance.

The potent, life-giving quality of the blood made it ideal for sacrifice to the gods and holy sacraments. The substitution of wine, symbolizing blood, came later.

The annals of demonology tell of aged crones who practiced witchcraft and required a signature in blood from those who wished to sell their soul to the devil. In return Satan bequeathed knowledge, wealth, fame, revenge on enemies, or anything else that was desired.

The history of voodoo, still widely practiced in Haiti and Africa today, includes a blood pact which in the 18th century won liberation for the slaves and aided the cause of independence for Haiti.

The Bois Caiman ceremony on Aug. 14, 1791, immediately preceded the revolt of the slaves. In a tradition passed down from Dahomey in French West Africa, the slaves joined in drinking the blood of a black pig, sacrificed for the occasion. This ceremony of brotherhood, which was supposed to produce magic powers, eventually led to freedom after a 12-year war.

Thus, when the underworld informer, Joseph Valachi, appears before the Senate Rackets Committee soon, he will be breaking one of the oldest pledges in history—an oath sealed in his own blood.

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#### PSYCHOLOGY

### Women's Personalities Do Not Depend on Age

➤ A MIDDLE-AGED woman may not have the figure of a young lady, but her emotional make-up is essentially the same.

A psychological study of older and young married women shows no significant difference in their personality structures.

This finding is at odds with the theories of psychoanalysis which hold that, at the time of menopause, a woman undergoes emotional as well as physiological changes. At this time, unresolved problems of ado-

lescence return to her mind, and she feels that the world around her is restricting the expression of her impulses.

Because of these added stresses and strains, the theories state, impulse and control systems are less balanced in middle-aged women than in younger women.

Tests on 25 middle-aged and 25 young married women, however, reveal no such differences. Both groups admit they have strong inner urges to control, show a strong grasp over reality and are conventional rather than deviant in their outlook.

This means that impulse, ego and super-ego systems have the same strengths in both groups of women, and that impulses and controls are in balance.

Drs. Jeanne G. Gilbert of Mt. Carmel Guild Guidance Clinic, Newark, N. J., and Raymond F. Levee, St. Vincents Hospital, New York, explain that the emotional changes of menopause, if present, may not appear until later on in life. The average age of the older women studied is 50 years, and average age of the younger is 26 years.

The study was reported in *Perceptual and Motor Skills*, 16:773, 1963.

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#### PSYCHOLOGY

### Adults Often Mistaken In Children's Abilities

➤ GROWN-UPS have strange and stereotyped ideas about the abilities of the normal, average child.

They expect too much of the seven-year-old's mental powers and not enough of the four-year-old's physical coordination.

These are the "remarkable" and "systematic" results of studies on Italian adults reported by Prof. Ezio Ponzo of the University of Rome.

Even adults who are most familiar with young children and who might be expected to know better have these misconceptions. Mothers and school teachers, Prof. Ponzo told a 17th International Congress of Psychology meeting in Washington, D. C., are no more accurate in their judgments of children's abilities than other adults.

Studies of the growth and development of the normal child have shown that the average four-year-old, or preschool, child has many motor skills. He has come a long way from the clumsy, uncoordinated two-year-old, and can climb, jump, tricycle and throw a ball with a great deal of control. He is adept with his hands and fingers. These are the abilities that adults may underestimate.

In overestimating the intellectual capacity of the seven-year-old, adults may expect the child to understand and remember more than he can. They may think the child has insight into a situation when he actually cannot judge what is taking place.

Misconceptions of children's abilities are often buried in the adult's mind, Prof. Ponzo said. Stereotypes may arise from watching the child's behavior and may be maintained by the adult's desires to see the child dependent or independent.

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