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MARIHUANA

SOME QUESTIONS AND ANSWERS



WHAT IS MARIHUANA?

Marihuana is a drug found in the flowering tops and leaves of the Indian hemp plant, *cannabis sativa*. The plant grows in mild climates in countries around the world, especially in Mexico, Africa, India, and the Middle East. It also grows in the United States, where the drug is known as pot, tea, grass, weed, Mary Jane, and by other names.

For use as a drug, the leaves and flowers of the plant are dried and crushed or chopped into small pieces. This green product is usually rolled and smoked in short cigarettes or in pipes, or it can be sniffed or taken in food. The cigarettes are commonly known as reefers, joints, and sticks. The smoke from marihuana is harsh, and smells like burnt rope or dried grasses. Its sweetish odor is easily recognized.

The strength of the drug differs from place to place, depending on where and how it is grown, how it is prepared for use, and how it is stored. The marihuana available in the United States is much weaker than the kind grown in Asia, Africa, or the Near East.

WHAT IS ITS USE?

Although it has been known to man for nearly 5,000 years, marihuana is one of the least understood of all natural drugs. In China, very early in history, it was given to relieve pain during surgery and, in India, as a medicine. Unlike other drugs, it has no known use in modern medicine. It is used mainly for its intoxicating effects. According to a United Nations survey, it has been most widely used in Asia and Africa.

Traffic in and use of drugs from the cannabis plant is now legally restricted in nearly every civilized country in the world, including countries where marihuana is used in religious ceremonies or as a native medicine.

HOW WIDELY IS IT USED IN THE UNITED STATES?

The use of marihuana as an intoxicating drug was introduced in the United States in 1920. In

1937, its general use was outlawed by the Federal Marihuana Tax Act, followed by strict laws and enforcement in every State. In the mid-1960's, authorities reported a sharp increase in the use of marihuana. Arrests on marihuana charges have more than doubled since 1960, according to the President's Commission on Crime.

The exact extent of marihuana use in the United States is not known. Some health authorities believe that 4 to 5 million Americans may have used the drug at least once in their lives. Other estimates are as high as 20 million. Research studies are underway to determine more precisely just how widely the drug is used.

HOW DOES THE DRUG WORK?

When smoked, marihuana quickly enters the bloodstream and acts on the brain and nervous system. It affects the user's mood and thinking. Its pathway into the brain is not yet understood. Some scientists report that the drug accumulates in the liver. Because it may cause hallucinations when taken in higher strengths, it is classed as a mild "hallucinogen." Just how the drug works in the body and how it produces its effects have not yet been discovered by medical science.

WHAT ARE ITS PHYSICAL EFFECTS?

The long-term physical effects of taking marihuana are not yet known. The kind of research needed to learn the results of chronic use has not yet been done.

The more obvious physical reactions include rapid heart beat, lowering of body temperature, and reddening of the eyes. The drug also changes blood sugar levels, stimulates the appetite, and dehydrates the body. Users may get talkative, loud, unsteady, or drowsy, and find it hard to coordinate their movements.

WHAT ARE ITS OTHER EFFECTS?

The drug's effects on the emotions and senses vary widely, depending on the amount and

strength of the marihuana used. The social setting in which it is taken and what the user expects also influence his reaction to the drug.

Usually, the drug effect is felt quickly, in about 15 minutes after inhaling the smoke of the cigarette. Its effects can last from 2 to 4 hours. The range of effects can vary from depression to a feeling of excitement. Some users, however, experience no change of mood at all. The sense of time and distance of many users frequently becomes distorted. A minute may seem like an hour. Something near may seem far away.



HOW DOES MARIHUANA AFFECT JUDGMENT?

A person using marihuana finds it harder to make decisions that require clear thinking. And he finds himself more easily open to other people's suggestions. Doing any task that takes good reflexes and thinking is affected by the drug. For this reason it is dangerous to drive while under the influence of the drug.

WHAT ARE THE LATEST FINDINGS ABOUT THE DRUG?

Working with a new chemical that copies the active ingredient of marihuana, a leading scientist recently found that strong doses of the drug brought on severe reactions in every person tested. The National Institute of Mental Health study also showed that psychotic reactions sometimes occur, for unknown reasons, in some individuals who take smaller amounts.



The scientist observed that a dose equal to one cigarette of the United States type can make the smoker feel excited, gay, or silly. After four, the user notices changes in what he can perceive. He reports that colors seem brighter, his sense of hearing keener. After a dose equal to 10 cigarettes, other reactions set in. He experiences visual hallucinations (seeing things that are not there), illusions (seeing or imagining shapes in objects that are not there), or delusions (beliefs not based in reality). His mood may swing from great joy to extreme anxiety. He may become deeply depressed, or have feelings of uneasiness, panic, or fear.

IS MARIHUANA ADDICTING?

Authorities now think in terms of drug "dependence" rather than "addiction." Marihuana does not cause physical dependence like heroin or other narcotics. This means that the body does not become dependent on continuing use of the drug. The body probably does not develop a tolerance to the drug, either, which would make larger and larger doses necessary to get the same effects. Withdrawal from marihuana does not produce physical sickness.

A number of scientists think the drug can cause psychological dependence, however, if its users take it regularly. All agree that more knowledge of the physical, personal, and social consequence of marihuana use is needed before factual statements can be made.

DOES IT LEAD TO USE OF NARCOTICS?

A 1967 study of narcotic addicts from city areas showed that more than 80 percent had previously used marihuana. Of the much larger number of persons who use marihuana, scientists agree that few go on to use morphine and heroin. No direct cause-and-effect link between the use of marihuana and narcotics has been found. Researchers point out, however, a person predisposed to abuse one drug may be likely to abuse other, stronger drugs. Also, users of one drug may be exposed to a variety of them through contacts with drug sellers and other users.

WHY IS SO LITTLE KNOWN ABOUT THE DRUG?

Medical science does not yet know enough about the effects of marihuana use because its active ingredient—*tetrahydrocannabinol*—was produced in pure form only recently. In the summer of 1966 the chemical, first synthesized by an NIMH-supported scientist in Israel, was made available for research purposes. Now for the first time researchers can accurately measure the drug's effects and study its short- and long-term action on the body.

WHAT RESEARCH IS BEING DONE?

The National Institute of Mental Health, an agency of the Public Health Service, is responsible for supporting and conducting research to learn more about marihuana and to present this knowledge to the public.

The program of the NIMH Center for Studies of Narcotics and Drug Abuse includes surveys of how people get the drug, how widely students and others use it, and what effects different amounts and periods of use have upon people, physically and psychologically. With NIMH support, scientists are now studying the special drug qualities of marihuana, and its physical effects on the body.

The NIMH Addiction Research Center in Lexington, Kentucky, plans research to discover exactly how marihuana affects memory, perception (or awareness), mood, and physical movement. Other studies are planned to learn more about the drug's long-range effects on the body and mind.

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