

Welcome to Frequently Asked Questions about Cannabis Hemp

Version: 1.0

This document contains straight answers to tough questions about hemp and marijuana. Every effort has been made to ensure their accuracy, and sources, if not provided, are available by request. BE WARNED -- this text has changed minds. The author and contributors do not take responsibility for any change in outlook, new ideas, or re-evaluation of one's relationship with current political parties which may result from allowing photons to travel into your eyeballs, even when said photons originate from a cathode ray tube, backlit LCD screen, microfiche reader or illuminated sheet of paper on which this document is being displayed. Unless of course you feel like showering us with fan mail and candy-grams. In that case we'll take the blame.

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The following persons have contributed to this document at some point in it's evolution: Laura Kriho (original list of questions), Marc Anderson (fact finding), Paul L. Allen (LaTeX formatting), plus some others who haven't said they want their name put in.

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More information on the document is at the end -- wouldn't want to bore you... So without further ado:

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PART ONE

WHAT'S ALL THIS FUSS ABOUT HEMP?

1a) What is hemp?

For our purposes, hemp is the plant called 'cannabis sativa.' There are other plants that are called hemp, but cannabis hemp is the most useful of these plants. In fact, 'cannabis sativa' means 'useful (sativa) hemp (cannabis)'. 'Hemp' is any durable plant that has been used since pre-history for many purposes. Fiber is the most well known product, and the word 'hemp' can mean the rope or twine which is made from the hemp plant, as well as just the stalk of the plant which produced it.

1b) What is cannabis?

Cannabis is the most durable of the hemp plants, and it produces the toughest cloth, called 'canvass.' (Canvass was widely used as sails in the early shipping industry, as it was the only cloth which would not rot on contact with sea spray.) The cannabis plant also produces three other very important products which the other hemp plants do not (in usable form, that is): seed, pulp, and medicine. The pulp is used as fuel, and to make paper. The seed is suitable for both human and animal foods. The oil from the seed can be used in as a base for paints and varnishes. The medicine is a tincture or admixture of the sticky resin in the blossoms and leaves of the hemp plant, and is used for a variety of purposes.

1c) Where did the word 'marijuana' come from?

The word 'marijuana' is a Mexican slang term which became popular in the late 1930's in America, during a series of media and government programs which we now refer to as the 'Reefer Madness Movement.' It refers specifically to the medicine part of cannabis, which Mexican soldiers used to smoke.

Today in the U.S., hemp (meaning the roots, stalk, and stems of the cannabis plant) is legal to possess. No one can arrest you for wearing a hemp shirt, or using hemp paper. Marijuana (The flowers, buds, or leaves of the cannabis plant) is not legal to possess, and there are stiff fines and possible jail terms for having any marijuana in your possession. The seeds are legal to possess and eat, but only if they are sterilized (will not grow to maturity.) Since it is not possible to grow the hemp plant without being in possession of marijuana, the United States does not produce any industrial hemp products, and must import them or, more often, substitute others. (There is a way to grow hemp legally, but it involves filing an application with the Drug Enforcement Administration and the DEA very rarely ever gives its permission.) This does not seem to have

stopped people from producing and using marijuana, though. In many of the United States, marijuana is the number one cash crop, mostly because it fetches a very high price on the black market.

2a) How can hemp be used as a food?

Hemp seed is a highly nutritious source of protein and essential fatty oils. Many populations have grown hemp for its seed -- most of them eat it as 'gruel' which is a lot like oatmeal. The leaves can be used as roughage, but not without slight psycho-active side-effects. Hemp seeds do not contain any marijuana and they do not get you 'high.'

Hemp seed protein closely resembles protein as it is found in the human blood. It is fantastically easy to digest, and many patients who have trouble digesting food are given hemp seed by their doctors. Hemp seed was once called 'edestine' and was used by scientists as the model for vegetable protein.

Hemp seed oil provides the human body with essential fatty acids. Hemp seed is the only seed which contains these oils with almost no saturated fat. As a supplement to the diet, these oils can reduce the risk of heart disease. It is because of these oils that birds will live much longer if they eat hemp seed.

With hemp seed, a vegan or vegetarian can survive and eat virtually no saturated fats. One handful of hemp seed per day will supply adequate protein and essential oils for an adult.

2b) What are the benefits of hemp compared to other food crops?

Hemp requires little fertilizer, and grows well almost everywhere. It also resists pests, so it uses little pesticides. Hemp puts down deep roots, which is good for the soil, and when the leaves drop off the hemp plant, minerals and nitrogen are returned to the soil. Hemp has been grown on the same soil for twenty years in a row without any noticeable depletion of the soil.

Using less fertilizer and agricultural chemicals is good for two reasons. First, it costs less and requires less effort. Second, many agricultural chemicals are dangerous and contaminate the environment -- the less we have to use, the better.

2c) How about soy? Is hemp competitive as a world source of protein?

Hemp does not produce quite as much protein as soy, but hemp seed protein is of a higher quality than soy. Agricultural considerations may make hemp the food crop of the future. In addition to the fact that hemp is an easy crop to grow, it also resists UV-B light, which is a kind of sunlight blocked by the ozone layer. Soy beans do not take UV-B light very well. If the ozone layer were to deplete by 16%, which by some estimates is very possible, soy production would fall by 25-30%. We may have to grow hemp or starve -- and it won't be the first time that this has happened. Hemp has been used to 'bail out' many populations in time of famine. Unfortunately, because of various political factors, starving people in today's underdeveloped countries are not taking advantage of this crop. In some places, this is because government officials would call it 'marijuana' and pull up the crop. In other countries, it is because the farmers are busy growing coca and poppies to produce cocaine and heroin for the local Drug Lord. This is truly a sad state of affairs. Hopefully someday the Peace Corps will be able to teach modern hemp seed farming

techniques and end the world's protein shortage.

3a) How can hemp be used for cloth?

The stalk of the hemp plant has two parts, called the

bast and the hurd. The fiber (bast) of the hemp plant can be woven into almost any kind of cloth. It is very durable. In fact, the first Levi's blue jeans were made out of hemp for just this reason. Compared to all the other natural fibers available, hemp is more suitable for a large number of applications. Here is how hemp is harvested for fiber: A field of closely spaced hemp is allowed to grow until the leaves fall off. The hemp is then cut down and it lies in the field for some time washed by the rain. It is turned over once to expose both sides of the stalk evenly. During this time, the hurd softens up and many minerals are returned to the soil. This is called 'retting,' and after this step is complete, the stalks are brought to a machine which separates the bast and the hurd. We are lucky to have machines today -- men used to do this last part by hand with hours of back-breaking labor.

3b) Why is it better than cotton?

The cloth that hemp makes may be a little less soft than cotton, (though there are also special kinds of hemp, or ways to grow or treat hemp, that can produce a soft cloth) but it is much stronger and longer lasting. (It does not stretch out.) Environmentally, hemp is a better crop to grow than cotton, especially the way cotton is grown nowadays. In the United States, the cotton crop uses half of the total pesticides. (Yes, you heard right, one half of the pesticides used in the entire U.S. are used on cotton.) Cotton is a soil damaging crop and needs a lot of fertilizer.

4a) How can hemp be used to make paper?

Both the fiber (bast) and pulp (hurd) of the hemp plant can be used to make paper. Fiber paper was the first kind of paper, and the first batch was made out of hemp in ancient China. Fiber paper is thin, tough, brittle, and a bit rough. Pulp paper is not as strong as fiber paper, but it is easier to make, softer, thicker, and preferable for most everyday purposes. The paper we use most today is a 'chemical pulp' paper made from trees. Hemp pulp paper can be made without chemicals from the hemp hurd. Most hemp paper made today uses the entire hemp stalk, bast and hurd. High-strength fiber paper can be made from the hemp bast, also without chemicals. The problem with today's paper is that so many chemicals are used to make it. High strength acids are needed to make quality (smooth, strong, and white) paper out of trees. These acids produce chemicals which are very dangerous to the environment. Paper companies do their best to clean these chemicals up (we hope.) Hemp offers us an opportunity to make affordable and environmentally safe paper for all of our needs, since it does not need much chemical treatment. It is up to consumers, though, to make the right choice -- these dangerous chemicals can also be used on hemp to make a slightly more attractive product. Instead of buying the whiter, brighter role of toilet paper, we will need to think about what we are doing to the planet. Because of the chemicals in today's paper, it will turn yellow and fall apart as acids eat away at the pulp. This takes several decades, but because of this publishers, libraries and archives have to order specially processed acid free paper, which is much more expensive, in order to keep records. Paper made naturally from hemp is acid free and will last for centuries.

4b) Why can't we just keep using trees?

The chemicals used to make wood chemical pulp paper today could cause us a lot of trouble tomorrow. Environmentalists have long been concerned about the effects of dioxin and other compounds on wildlife and even people. Beyond the chemical pollution, there are agricultural reasons why we should use cannabis hemp instead. When trees are harvested, minerals are taken with them. Hemp is much less damaging to the land where it is grown because it leaves these minerals behind. A simpler answer to the above question is:

Because we are running out! It was once said that a squirrel could climb from New England to the banks of the Mississippi River without touching the ground once. The European settler's appetite for firewood and farmland put an end to this. When the first wood paper became a huge industry, the United States Department of Agriculture began to worry about the 'tree supply.' That is why they went in search of plant pulp to replace wood. Today some 'conservatives' argue that there are more forests now than there ever were. This is neither true, realistic nor conservative: these statistics do not reflect the real world. Once trees have been removed from a plot of land, it takes many decades before biological diversity and natural cycles return to the forest, and commercial tree farms simply do not count as forest -- they are farm land.

As just mentioned, many plant fibers were investigated by the USDA -- some, like kenaf, were even better suited than cannabis hemp for making some qualities of paper, but hemp had one huge advantage: robust vitality. Hemp generates immense amounts of plant matter in a three month growing season. When it came down to producing the deluge of paper used by Americans, only hemp could compete with trees. In fact, according to the 1916 calculations of the USDA, one acre of hemp would replace an entire four acres of forest. And, at the same time, this acre would be producing textiles and rope. Today, only 4% of America's old-growth forest remains standing -- and there is talk about building roads into that for logging purposes! Will our policy makers realize in time how easy it would be to save them?

5a) How can hemp be used as a fuel?

The pulp (hurd) of the hemp plant can be burned as is or processed into charcoal, methanol, methane, or gasoline. The process for doing this is called destructive distillation, or 'pyrolysis.' Fuels made out of plants like this are called 'biomass' fuels. This charcoal may be burned in today's coal-powered electric generators. Methanol makes a good automobile fuel, in fact it is used in professional automobile races. It may someday replace gasoline. Hemp may also be used to produce ethanol (grain alcohol.) The United States government has developed a way to make this automobile fuel additive from cellulosic biomass. Hemp is an excellent source of high quality cellulosic biomass. One other way to use hemp as fuel is to use the oil from the hemp seed -- some diesel engines can run on pure pressed hemp seed oil. However, the oil is more useful for other purposes, even if we could produce and press enough hemp seed to power many millions of cars.

5b) Why is it better than petroleum?

Biomass fuels are clean and virtually free from metals and sulfur, so they do not cause nearly as much air pollution as fossil fuels. Even more importantly, burning biomass fuels does not increase the total amount of carbon dioxide in the Earth's atmosphere. When petroleum products are burned, carbon that has been stored underground for millions of years is added to the air; this may contribute to global warming through the 'Greenhouse Effect', (a popular theory which says

that certain gases will act like a wool blanket over the entire Earth, preventing heat from escaping into space.) In order to make biomass fuels, this carbon dioxide has to be taken out of the air to begin with -- when they are burned it is just being put back where it started.

Another advantage over fossil fuels is that biomass fuels can be made right here in the United States, instead of buying them from other countries. Instead of paying oil drillers, super-tanker captains, and soldiers to get our fuel to us, we could pay local farmers and delivery drivers instead. Of course, it is possible to chop down trees and use them as biomass. This would not be as beneficial to the environment as using hemp, especially since trees that are cut down for burning are 'whole tree harvested.' This means the entire tree is ripped up and burned, not just the wood. Since most of the minerals which trees use are in the leaves, this practice could ruin the soil where the trees are grown. In several places in the United States, power companies are starting to do this -- burning the trees in order to produce electricity, because that is cheaper than using coal. They should be using hemp, like researchers in Australia started doing a few years ago. (Besides, hemp provides a higher quality and quantity of biomass than trees do.)

6a) How can hemp be used as a medicine?

Marijuana has thousands of possible uses in medicine. Marijuana (actually cannabis extract) was available as a medicine legally in this country until 1937, and was sold as a nerve tonic -- but mankind has been using cannabis medicines much longer than that. Marijuana appears in almost every known book of medicine written by ancient scholars and wise men. It is usually ranked among the top medicines, called 'panaceas', a word which means 'cure-all'. The list of diseases which cannabis can be used for includes: multiple sclerosis, cancer treatment, AIDS (and AIDS treatment), glaucoma, depression, epilepsy, migraine headaches, asthma, pruritis, sclerodoma, severe pain, and dystonia. This list does not even consider the other medicines which can be made out of marijuana -- these are just some of the illnesses for which people smoke or eat whole marijuana today.

There are over 60 chemicals in marijuana which may have medical uses. It is relatively easy to extract these into food or beverage, or into some sort of lotion, using butter, fat, oil, or alcohol. One chemical, cannabinal, may be useful to help people who cannot sleep. Another is taken from premature buds and is called cannabidiolic acid. It is a powerful disinfectant. Marijuana dissolved in rubbing alcohol helps people with the skin disease herpes control their sores, and a salve like this was one of the earliest medical uses for cannabis. The leaves were once used in bandages and a relaxing non-psychoactive herbal tea can be made from small cannabis stems. The most well known use of marijuana today is to control nausea and vomiting. One of the most important things when treating cancer with chemotherapy or when treating AIDS with AZT or Foscavir, being able to eat well, makes the difference between life or death. Patients have found marijuana to be extremely effective in fighting nausea; in fact so many patients use it for this purpose even though it is illegal that they have formed 'buyers clubs' to help them find a steady supply. In California, some city governments have decided to look the other way and allow these clubs to operate openly. Marijuana is also useful for fighting two other very serious and widespread disabilities. Glaucoma is the second leading cause of blindness, caused by uncontrollable eye pressure. Marijuana can control the eye pressure and keep glaucoma from causing blindness. Multiple Sclerosis is a disease where the body's immune system attacks nerve cells. Spasms and many other problems result from this. Marijuana not only helps stop these spasms, but it may also keep multiple sclerosis from getting worse.

6b) What's wrong with all the prescription drugs we have?

They cost money and are hard to make. In many cases, they do not work as well, either. Some prescription drugs which marijuana can replace have very bad, even downright dangerous, side-effects. Cannabis medicines are cheap, safe, and easy to make.

Many people think that the drug dronabinol should be used instead of marijuana. Dronabinol is an exact imitation of one of the chemicals found in marijuana, and it may actually work on a lot of the above diseases, but there are some big problems with dronabinol, and most patients who have used both dronabinol and marijuana say that marijuana works better.

The first problem with Dronabinol is that it is even harder to get than marijuana. Many doctors do not like to prescribe dronabinol, and many drug stores do not want to supply it, because a lot of paperwork has to be filed with the Drug Enforcement Administration. Secondly, dronabinol comes in pills which are virtually useless to anyone who is throwing up, and it is hard to take just the right amount of dronabinol since it cannot be smoked. Finally, because dronabinol is only one of the many chemicals in cannabis, it just does not work for some diseases. Many patients do not like the effects of dronabinol because it does not contain some of the more calming chemicals which are present in marijuana.

7) What other uses for hemp are there?

One of the newest uses of hemp is in construction materials. Hemp can be used in the manufacture of 'press board' or 'composite board.' This involves gluing fibrous hemp stalks together under pressure to produce a board which is many times more elastic and durable than hardwood. Because hemp produces a long, tough fiber it is the perfect source for press-board. Another interesting application of hemp in industry is making plastic. Many plastics can be made from the high-cellulose hemp hurd. Hemp seed oil has a multitude of uses in products such as varnishes and lubricants. Using hemp to build is by no means a new idea. French archeologists have discovered bridges built with a process that mineralizes hemp stalks into a long-lasting cement. The process involves no synthetic chemicals and produces a material which works as a filler in building construction. Called Isochanvre, it is gaining popularity in France. Isochanvre can be used as drywall, insulates against heat and noise, and is very long lasting. 'Bio-plastics' are not a new idea, either -- way back in the 1930's Henry Ford had already made a whole car body out of them -- but the processes for making them do need more research and development. Bio-plastics can be made without much pollution. Unfortunately, companies are not likely to explore bio-plastics if they have to either import the raw materials or break the law. (Not to mention compete with the already established petrochemical products.)

PART TWO

WELL WHY AREN'T WE USING HEMP, THEN?

1) How and why was hemp made illegal?

Tough question! In order to explain why hemp, the most useful plant known to mankind, became illegal, we have to understand the reasons why marijuana, the drug, became illegal. In fact, it helps to go way back to the beginning of the century and talk about two other drugs, opium (the grandfather of heroin) and cocaine. Opium, a very addictive drug (but relatively harmless by today's standards) was once widely used by the Chinese. The reasons for this are a whole other story, but suffice to say that when Chinese started to immigrate to the United States, they brought opium with them. Chinese workers used opium to induce a trance-like state which helped make boring, repetitive tasks more interesting. It also numbs the mind to pain and exhaustion. By using opium, the Chinese were able to pull very long hours in the sweat shops of the Industrial Revolution. During this period of time, there was no such thing as fair wages, and the only way a worker could make a living was to produce as much as humanly possible. Since they were such good workers, the Chinese held a lot of jobs in the highly competitive industrial work-place. Even before the Great Depression, when millions of jobs disappeared overnight, the White Americans began to resent this, and Chinese became hated among the White working class. Even more than today, White Americans had a very big political advantage over the Chinese -- they spoke English and had a few relatives in the government, so it was easy for them to come up with a plan to force Chinese immigrants to leave the country (or at least keep them from inviting all their relatives to come and live in America.) This plan depended on stirring up racist feelings, and one of the easiest things to focus these feelings on was the foreign and mysterious practice of using opium. We can see this pattern again with cocaine, except with cocaine it was Black Americans who were the target. Cocaine probably was not especially useful in the work-place, but the strategy against Chinese immigrants (picking on their drug of choice) had been so successful that it was used again. In the case of Blacks, though, the racist feelings ran deeper, and the main thrust of the propaganda campaign was to control the Black community and keep Blacks from becoming successful. Articles appeared in newspapers which blamed cocaine for violent crime by Blacks. Black Americans were painted as savage, uncontrollable beasts when under the influence of cocaine -- it was said to make a single Black man as strong as four or five police officers. (sound familiar?) By capitalizing on racist sentiments, a powerful political lobby banned opium and then cocaine. Marijuana was next. It was well known that the Mexican soldiers who fought America during the war with Spain smoked marijuana. Poncho Villa, A Mexican general, was considered a nemesis for the behavior of his troops, who were known to be especially rowdy. They were also known to be heavy marijuana smokers, as the original lyrics to the song 'la cucaracha' show. (The song was originally about a Mexican soldier who refused to march until he was provided with some marijuana.) After the war had ended and Mexicans had begun to immigrate into the South Eastern United States, there were relatively few race problems. There were plenty of jobs in agriculture and industry and Mexicans were willing to work cheap. Once the depression hit and jobs became scarce, however, Mexicans suddenly became a public nuisance. It was said by politicians (who were trying to please the White working class) that Mexicans were responsible for a violent crime wave. Police statistics showed nothing of the sort -- in fact Mexicans were involved in less crime than Whites. Marijuana, of course, got the blame for this phony outbreak of crime and health problems, and so many of these states made laws against using cannabis. (In the Northern states, marijuana was also associated with Black jazz musicians.) Here is where things start to get complicated. Put aside, for a moment, all the above, because there are a few other things involved in this twisted tale. At the beginning of the Great Depression, there was a very popular movement called Prohibition, which made alcohol illegal. This was motivated mainly by a Puritan religious ethic left over from

the first European settlers. Today we have movies and television shows such as the ``Untouchables" which tell us what it was like to live during this period. Since it is perhaps the world's most popular drug, alcohol prohibition spawned a huge `black market' where illegal alcohol was smuggled and traded at extremely high prices. Crime got out-of-hand as criminals fought with each other over who could sell alcohol where. Organized crime became an American institution, and hard liquor, which was easy to smuggle, took the place of beer and wine. In order to combat the crime wave, a large police force was formed. The number of police grew rapidly until the end of Prohibition when the government decided that the best way to deal with the situation was to just give up and allow people to use alcohol legally. Under Prohibition the American government had essentially (and unwittingly) provided the military back-up for the take-over of the alcohol business by armed thugs. Even today, the Mob still controls liquor sales in many areas. After Prohibition the United States was left with nothing to show but a decade of political turmoil -- and a lot of unemployed police officers. During Prohibition, being a police officer was a very nice thing -- you got a relatively decent salary, respect, partial immunity to the law, and the opportunity to take bribes (if you were that sort of person.) Many of these officers were not about to let this life-style slip away. Incidentally, it was about this time when the Federal Bureau of Narcotics and Dangerous Drugs was reformed, and a man named Harry J. Anslinger was appointed as its head. (Anslinger was appointed by his uncle-in-law, Andrew Mellon, who was the Secretary of the United States Treasury.) Anslinger campaigned tirelessly for funding in order to hire a large force of narcotics officers. After retiring, Anslinger once mused that the FBNDD was a place where young men were given a license to steal and rape. The FBNDD is the organization which preceded what we now call the DEA, and was responsible for enforcing the new Federal drug laws against heroin, opium, and cocaine. One of Anslinger's biggest concerns as head of the FBNDD was getting uniform drug laws passed in all States and the Federal legislature. (Anslinger also had a personal dislike of jazz music and the Black musicians who made it. He hated them so much that he spent years tracking each of them and dreamed of arresting them all in one huge, cross-country sweep.) Anslinger frequented parents' and teacher's meetings giving scary speeches about the dangers of marijuana, and this period of time became known as Reefer Madness. (The name comes from the title of a silly movie produced by a public health group.)

2) OK, so what the heck does all this other stuff have to do with hemp?

To make a long story short, during the first decades of this century, opium was made illegal to kick out the Chinese immigrants who had flooded the work-force. Cocaine was made illegal to repress and control the Black community. And, marijuana was made illegal in order to control Mexicans in the Southeast (and Blacks.) All these laws were based mainly on emotional racism, without much else to back them up -- you can easily tell this by reading the hearings held in state legislatures. Also at this time, the end of Prohibition left us with a large force of unemployed police officers, who looked for work enforcing the new drug laws. Consequently, these same police officers needed to convince the country that their jobs were important. They did so by scaring parents about the dangers of drugs. All this set the stage for a law passed in the Federal legislature which put a prohibitive tax on marijuana. This is what killed the hemp industry in 1937, since it made business in hemp impossible. Before the 1937 Marijuana Tax Act, the state of Kentucky was the center of a relatively large American hemp industry which produced cloth and tow (rope for use in shipping.) The industry would have been larger, but hemp had one major disadvantage: processing it required a lot of work. Men had to `brake' hemp stalks in order to

separate the fiber from the woody core. This was done on a small machine called a hand-brake, and it was a job fit for Hercules. It was not until the 1930's that machines to do this became widely available. Today we use paper made by a process called 'chemical pulping'. Before this, trees were processed by 'mechanical pulping' instead, which was much more expensive. At about the same time as machines to brake hemp appeared, the idea of using hemp hurds for making paper and plastic was proposed. Hemp hurds were normally considered to be a worthless waste product that was thrown away after it was stripped of fiber. New research showed that these hurds could be used instead of wood in mechanical pulping, and that this would drastically reduce the cost of making paper. Popular Mechanics Magazine predicted that hemp would rise to become the number one crop in America. In fact, the 1937 Marijuana Tax Act was so unexpected that Popular Mechanics had already gone to press with a cover story about hemp, published in 1938 just two months after the Tax Act took effect.

3) Now wait, just hold on. You expect me to believe that they wouldn't have thought to pass a better law, one that banned marijuana and allowed commercial hemp, instead of throwing the baby out with the bath water?

There's more. 'Chemical pulping' paper was invented at about this time by Dupont Chemicals, as part of a multi-million dollar deal with a timber holding company and newspaper chain owned by William Randolph Hearst. This deal would provide the Hearst with a source of very cheap paper, and he would go on to be known as the tycoon of 'yellow journalism' (so named because the new paper would turn yellow very quickly as it got older.) Hearst knew that he could drive other papers out of competition with this new advantage. Hemp paper threatened to ruin this whole plan. It had to be stopped, and the Marijuana Tax Act of 1937 was the way they did it. As a drug law, the Tax Act really was not a very big step -- it did not really accomplish much at all and many historians have caught themselves wondering why the bill was even written. Big business interests took advantage of the political climate of racism and anti-drug rhetoric to close the free market to hemp products, and that, my friend, is how hemp became illegal.

(Whew!)

For the 1930's, this business venture was one very large transaction; it included other timber companies and a few railroads. Dupont's entire deal was backed by a banker named Andrew Mellon. Don't look up! That's the same Andrew Mellon who appointed his nephew-in-law Harry Anslinger to head up the FBNDD in 1931. The Marijuana Tax Act was passed in a very unorthodox way, and nobody who would have objected was informed about the bill. The American Medical Association found out about the bill only two days before the hearings, and sent a representative to object to the banning of cannabis medicines. A hemp bird seed salesman also showed up and complained. However, the bill was passed, partially due to the testimony of Harry J. Anslinger. Not that Americans would have protested against this bill, even if they had known it existed most Americans did not know that cannabis hemp and marijuana is the same thing. The separate word 'marijuana' was one of the reasons for this. Nobody would associate the evil weed from Mexico with the stuff they tied their shoes with. Also, this was the time when synthetic fabrics were the latest fad -- nobody was interested in natural fibers any more. To top this all off the word 'hemp' was often wrongly used to refer to other natural fabrics, specifically jute. The ignorance of hemp continues today, but it is even more scary. During the 1970's (Reefer Madness II) all mention of the word 'hemp' was removed from high school text books here in the United States. So much for free speech! When Jack Herer, the world's most beloved hemp

activist, asked a curator at the Smithsonian Museum why this word had been removed from all their exhibits, the answer he got was astounding: ``Children do not need to know about hemp anymore. It confuses them." Jack Herer went on to uncover a film made by the United States government, a film which the government did not want to admit existed. The film ``Hemp For Victory" details how the United States government bypassed the Tax Act during World War II, when they needed hemp for the War Effort, and ran a large hemp-growing project in Kentucky and California. (Bravo, Jack!)

4) Is there a lesson to be learned from all this?

Several. The first is that hate does not pay. It is ironic that the racism of the American people would end up hurting them this way -- a sort of divine justice if you will. Because Americans were blinded by fear, hatred, and intolerance of other races, they allowed a prosperous future to slip between their fingers. Another thing this whole history tells us is that Americans need to take Democracy more seriously. If they had devoted more of their time to informing themselves about the world around them, they would have known what the real issues were. Instead they read the tabloids -- look where that has gotten us. Finally, now that we have put marijuana prohibition into historical context, we can see clearly that it had nothing to do with public safety, or national security, or what have you. By all rights, marijuana should not have been made illegal in the first place. If today prohibition still has no rational basis to stand on, then let us repeal it. One point which bears emphasizing is this: the laws which are passed in this country may not mean what they say on paper. Historically the United States has a long record of passing laws with ulterior motives. Even when there is no ulterior motive, though, passing laws which are not specific enough leads to abuse. Most of our tough drug laws are like this -- enacted to fight drug kingpins, but enforced against casual drug users and small-time drug dealers. In fact, most of these laws never even get used against a real drug kingpin, and the first people prosecuted under the statutes are not what the legislators had in mind. If this upsets you, you should pay more attention to what goes on in your legislature.

PART THREE

----- The next question would normally be ``Why is it still not legal," but since we have uncovered an understanding of the history, it is time to take a little detour. Politicians love to tell us that marijuana must remain illegal for our own good. In the next section we will examine some of the so-called facts about marijuana so that you can decide for yourselves whether you agree or not. Is marijuana prohibition there to protect the people, or is it just the result of decades of refusal to admit our mistakes?

DOES IT? DOESN'T IT? IS IT TRUE THAT?

1) Doesn't marijuana stay in your fat cells and keep you high for months?

No. The part of marijuana that gets you high is called `Delta-9-tetrahydrocannabinol.' Most people just call this THC, but this is confusing: your body will change Delta-9-THC into more

inert molecules known as 'metabolites,' which don't get you high. Unfortunately, these chemicals also have the word 'tetrahydrocannabinol' in them and they are also called THC -- so many people think that the metabolites get you high. Anti-drug pamphlets say that THC gets stored in your fat cells and then leaks out later like one of those 'time release capsules' advertised on television. They say it can keep you high all day or even longer. This is not true, marijuana only keeps you high for a few hours, and it is not right to think that a person who fails a drug test is always high on drugs, either.

Two of these metabolites are called '11-hydroxy-tetrahydrocannabinol' and '11-nor-9-carboxy-delta-9-tetrahydrocannabinol' but we will call them 11-OH-THC and 11-nor instead. These are the chemicals which stay in your fatty cells. There is almost no Delta-9-THC left over a few hours after smoking marijuana, and scientific studies which measure the effects of marijuana agree with this fact.

2) But ... isn't today's marijuana much more potent than it was in the Sixties? (Or, more often ... Marijuana is 10 times more powerful than it was in the Sixties!)

GOOD! Actually, this is not true, but if it were, it would mean that marijuana is safer to smoke today than it was in the Sixties. (More potent cannabis means less smoking means less lung damage.) People who use this statistic just plain do not know what they are talking about. Sometimes they will even claim that marijuana is now twenty to thirty times stronger, which is physically impossible because it would have to be **over** 100% Delta-9-THC. The truth is, marijuana has not really changed potency all that much, if at all, in the last several hundred years. Growing potent cannabis is an ancient art which has not improved in centuries, despite all our modern technology. Before marijuana was even made illegal, drug stores sold tinctures of cannabis which were over 40% THC. Even so, the point is moot because marijuana smokers engage in something called 'auto-titration.' This basically means smoking until they are satisfied and then stopping, so it does not really matter if the marijuana is more potent because they will smoke less of it. Marijuana is not like pre-moistened towelettes or snow-cones. There is nothing forcing marijuana smokers to smoke an entire joint. Experienced marijuana users are accustomed to smoking marijuana from many different suppliers, and they know that if they smoke a whole joint of very potent bud they will get 'TOO STONED'. Since being 'too stoned' is a rather unpleasant experience, smokers quickly learn to take their time and 'test the waters' when they do not know how strong their marijuana is.

3a) Doesn't Marijuana cause brain damage?

The short answer: No.

The long answer: The reason why you ask this is because you probably heard or read somewhere that marijuana damages brain cells, or makes you stupid. These claims are untrue. The first one -- marijuana kills brain cells -- is based on research done during the second Reefer Madness Movement. A study attempted to show that marijuana smoking damaged brain structures in monkeys. However, the study was poorly performed and it was severely criticized by a medical review board. Studies done afterwards failed to show any brain damage, in fact a very recent study on Rhesus monkeys used technology so sensitive that scientists could actually see the effect of learning on brain cells, and it found no damage. But this was Reefer Madness II, and the prohibitionists were looking around for anything they could find to keep the marijuana

legalization movement in check, so this study was widely used in anti-marijuana propaganda. It was recanted later. (To this day, the radical anti-drug groups, like P.R.I.D.E. and Dr. Gabriel Nahas, still use it -- In fact, America's most popular drug education program, Drug Abuse Resistance Education, claims that marijuana ``can impair memory perception & judgement by destroying brain cells." When police and teachers read this and believe it, our job gets really tough, since it takes a long time to explain to children how Ms. Jones and Officer Bob were wrong.) The truth is, no study has ever demonstrated cellular damage, stupidity, mental impairment, or insanity brought on specifically by marijuana use -- even heavy marijuana use. This is not to say that it cannot be abused, however.

3b) If it doesn't kill brain cells, how does it get you `high'?

Killing brain cells is not a pre-requisite for getting `high.' Marijuana contains a chemical which substitutes for a natural brain chemical, with a few differences. This chemical touches special `buttons' on brain cells called `receptors.' Essentially, marijuana `tickles' brain cells. The legal drug alcohol also tickles brain cells, but it will damage and kill them by producing toxins (poisons) and sometimes mini-seizures. Also, some drugs will wear out the buttons which they push, but marijuana does not.

4) Don't people die from smoking pot?

Nobody has ever overdosed. For any given substance, there are bound to be some people who have allergic reactions. With marijuana this is extremely rare, but it could happen with anything from apples to pop-tarts. Not one death has ever been directly linked to marijuana itself. In contrast, many legal drugs cause hundreds to hundreds of thousands of deaths per year, foremost among them are alcohol, nicotine, valium, aspirin, and caffiene. The biggest danger with marijuana is that it is illegal, and someone may mix it with another drug like PCP. Marijuana is so safe that it would be almost impossible to overdose on it. Doctors determine how safe a drug is by measuring how much it takes to kill a person (they call this the LD50) and comparing it to the amount of the drug which is usually taken (ED50). This makes marijuana hundreds of times safer than alcohol, tobacco, or caffiene. According to a DEA Judge ``marijuana is the safest therapeutically active substance known to mankind."

5) I forgot, does marijuana cause short-term memory impairment?

The effect of marijuana on memory is its most dramatic and the easiest to notice. Many inexperienced marijuana users find that they have very strange, sudden and unexpected memory lapses. These usually take the form of completely forgetting what you were talking about when you were right in the middle of saying something important. However, these symptoms only occur while a person is `high'. They do not carry over or become permanent, and examinations of extremely heavy users has not shown any memory or thinking problems. More experienced marijuana users seem to be able to remember about as well as they do when they are not `high.'

Studies which have claimed to show short-term memory impairment have not stood up to scrutiny and have not been duplicated. Newer studies show that marijuana does not impair simple, real-world memory processes. Marijuana does slow reaction time slightly, and this effect has sometimes been misconstrued as a memory problem. To put things in perspective, one group of researchers made a control group hold their breath, like marijuana smokers do. Marijuana

itself only produced about twice as many effects on test scores as breath holding. Many people use marijuana to study. Other people cannot, for some reason, use marijuana and do anything that involves deep thought. Nobody knows what makes the difference.

6a) Is marijuana going to make my boyfriend go psycho? Marijuana does not 'cause' psychosis. Psychotic people can smoke marijuana and have an episode, but there is nothing in marijuana that actually initiates or increases these episodes. Of course, if any mentally ill person is given marijuana for the first time or without their knowledge, they might get scared and 'freak.' Persons who suffer from severe psychological disorders often use marijuana as a way of coping. Because of this, some researchers have assumed that marijuana is the cause of these problems, when it is actually a symptom. If you have heard that marijuana makes people go crazy, this is probably why.

6b) Don't users of marijuana withdraw from society?

To some extent, yes. That's probably just because they are afraid of being arrested, though. The same situation exists with socially maladjusted persons as does with the mentally ill. Emotionally troubled individuals find marijuana to be soothing, and so they tend to use it more than your average person. Treatment specialists see this, and assume that the marijuana is causing the problem. This is a mistake which hurts the patient, because their doctors will pay less attention to their actual needs, and concentrate on ending their drug habit. Sometimes the cannabis is even helping them to recover. Cannabis can be abused, and it can make these situations worse, but psychologists should approach marijuana use with an open mind or they risk hurting their patient. Marijuana itself does not make normal people anti-social. In fact, a large psychological study of teenagers found that casual marijuana users are more well adjusted than 'drug free' people. This would be very amusing, but it is a serious problem. There are children who have emotional problems which keep them from participating in healthy, explorative behavior. They need psychological help but instead they are skipped over. Marijuana users who do not need help are having treatment forced on them, and in the mean-time marijuana takes the blame for the personality characteristics and problems of the people who like to use it improperly.

7) Is it true that marijuana makes you lazy and unmotivated?

Not if you are a responsible adult, it doesn't. Ask the U.S. Army. They did a study and showed no effect. If this were true, why would many Eastern cultures, and Jamaicans, use marijuana to help them work harder? 'Amotivational syndrome' started as a media myth based on the racial stereotype of a lazy Mexican borracho. The prohibitionists claimed that marijuana made people worthless and sluggish. Since then, however, it has been scientifically researched, and a symptom resembling amotivational syndrome has actually been found. However, it only occurs in adolescent teenagers -- adults are not affected. When a person reaches adolescence, their willingness to work usually increases, but this does not happen for teenagers using marijuana regularly -- even just on the weekends. The actual studies involved monkeys, not humans, and the results are not verified, but older studies which tried to show 'amotivational syndrome' usually only succeeded when they studied adolescents. Adults are not effected. The symptoms are not permanent, and motivation returns to normal levels several months after marijuana smoking stops. However, a small number of people may be unusually sensitive to this effect. One of the monkeys in the experiment was severely amotivated and did not recover. Doctors will need to study this more before they know why.

8) Isn't marijuana a gateway drug? Doesn't it lead to use of harder drugs?

This is totally untrue. In fact, researchers are looking into using marijuana to help crack addicts to quit. There are 40 million people in this country (U.S.) who have smoked marijuana for a period of their lives -- why aren't there tens of millions of heroin users, then? In Amsterdam, both marijuana use and heroin use went *down* after marijuana was decriminalized -- even though there was a short rise in cannabis use right after decriminalization. Unlike addictive drugs, marijuana causes almost no tolerance. Some people even report a reverse tolerance. That is, the longer they have used the less marijuana they need to get 'high.' So users of marijuana do not usually get bored and 'look for something more powerful'. If anything, marijuana keeps people from doing harder drugs. The idea that using marijuana will lead you to use heroin or speed is called the 'gateway theory' or the 'stepping stone hypothesis.' It has been a favorite trick of the anti-drug propaganda artists, because it casts marijuana as something insidious with hidden dangers and pitfalls. There have never been any real statistics to back this idea up, but somehow it was the single biggest thing which the newspapers yelled about during Reefer Madness II. (Perhaps this was because the CIA was looking for someone to blame for the increase in heroin use after Viet Nam.) The gateway theory of drug use is no longer generally accepted by the medical community. Prohibitionists used to point at numbers which showed that a large percentage of the hard drug users 'started with marijuana.' They had it backwards -- many hard drug users also use marijuana. There are two reasons for this. One is that marijuana can be used to 'take the edge off' the effects of some hard drugs. The other is a recently discovered fact of adolescent psychology -- there is a personality type which uses drugs, basically because drugs are exciting and dangerous, a thrill. On sociological grounds, another sort of gateway theory has been argued which claims that marijuana is the source of the drug subculture and leads to other drugs through that culture. By the same token this is untrue -- marijuana does not create the drug subculture, the drug subculture uses marijuana. There are many marijuana users who are not a part of the subculture. This brings up another example of how marijuana legalization could actually reduce the use of illicit drugs. Even though there is no magical 'stepping stone' effect, people who choose to buy marijuana often buy from dealers who deal in many different illegal drugs. This means that they have access to illegal drugs, and might decide to try them out. In this case it is the laws which lead to hard drug use. If marijuana were legal, the drug markets would be separated, and less people would start using the illegal drugs. Maybe this is why emergency room admissions for hard drugs have gone down in the states that decriminalized marijuana during the 70's.

9a) I don't want children (minors) to be able to smoke marijuana. How can I stop this?

Legalize it. They can smoke it now; it is about as easy to get as alcohol. There would be less marijuana being sold in schools, playgrounds, and street corners, though, if it was sold legally through pharmacies -- because the dealers would not be able to compete with the prices. If you are a parent, the choice is really up to you: Do you want your children to sneak off with their friends and use marijuana which they bought off the street, or do you want to talk to them calmly and explain to them why they should wait until they are older? Your children are not going to walk up to you and tell you that they use an illegal drug, but if it was not such a big deal they might give you a chance to explain your feelings. Besides, would you rather children use speed, cocaine, and alcohol? Consider, also, that children have a natural urge to do things that they aren't supposed to. It is called curiosity. By making such a fuss over marijuana, you make it

interesting (some call it the 'forbidden fruit' factor.) This is made worse when children are lied to about drugs by teachers and police -- they lose respect for the school and the government. In a lot of ways, it is the hysteria about drugs which causes the most harm. When marijuana users do none of the horrible things they are supposed to, children may think that other more harmful drugs are OK, too. Your children will not respect you unless you are calm and give good reasons for your rules. The first step is for you, the parent, to learn the facts about drugs.

9b) Won't children be able to steal marijuana plants that people are growing?

Well, if you are worried about them stealing the hemp plants from the paper-pulp farm down the road, you should know that the commercial grades of hemp do not contain much THC (the stuff that gets you high.) If they were to smoke it, they would probably just get a headache. Otherwise, it should be the responsibility of the grower to take measures to prevent this. Most "home-grown" marijuana is cultivated indoors anyway. If the children in your town have nothing better to do than go around stealing marijuana to smoke, your town needs to buy a library or something.

10a) Hey, don't you know that marijuana drops testosterone levels in teenage boys causing [various physical and developmental problems]?

Marijuana does not turn young healthy boys into lanky, girlish looking wimps, no. This scare tactic (call it homo-phobic if you will) was a common device used in early anti-drug literature. It attempts to scare boys away from marijuana by telling them, essentially, that it will turn them into a girl. Young men probably should not use marijuana heavily (see the section on amotivational syndrome), but the risks are not horrendous. Anti-marijuana pamphlets used this claim often during Reefer Madness II, but the studies which are cited are mostly faulty or misinterpreted. This is not to say that marijuana use does not affect childhood development at all, just that the effects are not as drastic as some people would like them to sound. In fact they are pretty much unknown.

10b) Doesn't heavy marijuana use lower the sperm count in males?

Not by much, (if at all) and this can be a good thing. It does not make you impotent or sterile. (If it did -- there would be no Rastafarians left!) Give those testicles a rest, already! Marijuana is certainly not birth control, please don't let your lover tell you it is. Many people think that marijuana enhances their sex lives. It is not an aphrodisiac, that is, it does not make people want to have sex. What it does do for some people is make everything more sensual -- it makes food taste better and feelings and emotions more vivid.

10c) I heard marijuana use by teenage girls may impair hormone production, menstrual cycles, and fertility. Is this true?

Also unproven and unfounded, but there is no data available to tell either way, (and it won't be coming from the U.S. -- current U.S. laws prohibit research on women.) This is the female version of the boy's "It'll turn you into a sissy" tactic. As far as anyone knows, it is only a scare tactic.

11) I forgot, does marijuana cause short-term memory impairment?

Go away.

12) Isn't smoking marijuana worse for you than smoking cigarettes? There are many reasons why it is not. You may have heard that "one joint is equal to ten cigarettes" but this is exaggerated and misleading. Marijuana does contain more tar than tobacco -- but low tar cigarettes cause just as much cancer, so what is that supposed to mean? Scientists have shown that smoking any plant is bad for your lungs, because it increases the number of 'lesions' in your small airways. This usually does not threaten your life, but there is a chance it will lead to infections. Marijuana users who are worried about this can find less harmful ways of taking marijuana like eating or vaporizing. (Be careful -- marijuana is safe to eat -- but tobacco is not, you might overdose!) Marijuana does not seem to cause cancer the way tobacco does, though. Here is a list of interesting facts about marijuana smoking and tobacco smoking:

- o Marijuana smokers generally don't chain smoke, and so they smoke less. (Marijuana is not physically addictive like tobacco.) The more potent marijuana is, the less a smoker will use at a time.

- o Tobacco contains nicotine, and marijuana doesn't. Nicotine may harden the arteries and may be responsible for much of the heart disease caused by tobacco. New research has found that it may also cause a lot of the cancer in tobacco smokers and people who live or work where tobacco is smoked. This is because it breaks down into a cancer causing chemical called 'N Nitrosamine' when it is burned (and maybe even while it is inside the body as well.)

o Marijuana contains THC. THC is a bronchial dilator,

which means it works like a cough drop and opens up your lungs, which aids clearance of smoke and dirt. Nicotine does just the opposite; it makes your lungs bunch up and makes it harder to cough anything up.

o There are benefits from marijuana (besides bronchial

dilation) that you don't get from tobacco. Mainly, marijuana makes you relax, which improves your health and well-being.

o Scientists do not really know what it is that causes

malignant lung cancer in tobacco. Many think it may be a substance known as Lead 210. Of course, there are many other theories as to what does cause cancer, but if this is true, it is easy to see why **NO CASE OF LUNG CANCER RESULTING FROM MARIJUANA USE ALONE HAS EVER BEEN DOCUMENTED**, because tobacco contains much more of this substance than marijuana.

o Marijuana laws make it harder to use marijuana

without damaging your body. Water-pipes are illegal in many states. Filtered cigarettes, vaporizers, and inhalers have to be mass produced, which is hard to arrange 'underground.' People don't eat marijuana often because you need more to get as high that way, and it isn't cheap or easy to get (which is the reason why some people will stoop to smoking leaves.) This may sound funny to you -- but the more legal marijuana gets, the safer it is.

It is pretty obvious to users that marijuana prohibition laws are not "for their own good." In addition to the above, legal marijuana would be clean and free from adulterants. Some people add other drugs to marijuana before they sell it. Some people spray room freshener on it or soak in chemicals like formaldehyde! A lot of the marijuana is grown outdoors, where it may be sprayed with pesticides or contaminated with dangerous fungi. If the government really cared about our health, they would form an agency which would make sure only quality marijuana was sold. This would be cheaper than keeping it illegal, and it would keep people from getting hurt and going to the emergency room.

13) Don't children born to pot-smoking mothers suffer from "Fetal Marijuana Syndrome?"

If a fetal cannabis syndrome exists, cases are so rare that it cannot be demonstrated. Many mothers use marijuana during pregnancy -- it controls the nausea called 'morning sickness' and many say it actually increases the appetite and reduces stress. This is especially important in less developed countries, where modern medical care is not as easily available, but even so, the benefits of responsible marijuana use may outweigh the risks even under modern medicine. Studies conducted in Jamaica have shown that mothers who smoke marijuana have healthier children, but this may be due to the extra income generated by marijuana dealing and other factors. It has been a common ploy in the War on Drugs to claim that marijuana, and especially cocaine, causes birth defects or behavior problems like alcohol does. This scares caring mothers into thinking drugs are 'evil.' The claims are not based on valid scientific research -- many of them do not even consider the life-style or living conditions of the mothers before pointing at drugs with the blame. Obviously, pregnant mothers should not smoke as much pot as they possibly can. If marijuana is abused, it may hurt the health of both mother and child. Delta-9-THC does cross the placenta and enter the fetus. Oddly, though, the marijuana metabolite, 11-nor-9-carboxy-delta-9-THC does not, and the fetus does not break delta-9-THC down into 11-nor like the mother's body does, so unborn children are not exposed to 11-nor. The third trimester is the time when the child is most vulnerable. Parents should bear these facts in mind when they make decisions about using cannabis.

14) Doesn't marijuana cause a lot of automobile accidents?

Not really. The marijuana using public has the same or lower rate of automobile accidents as the general public. Studies of marijuana smoking while driving showed that it does affect reaction time, but not nearly as much as alcohol. Also, those who drive 'stoned' have been shown to be less foolish on the road (they demonstrate 'increased risk aversion'.) Recent studies have emphasized that alcohol is the major problem on our highways, and that illicit drugs do not even come close to being as dangerous. As funny as it may seem, you may be safer driving 'stoned', as long as you aren't 'totally blasted' and seeing things -- but few users are irresponsible enough to drive in this state of mind, anyway. Still, many people have reported making mistakes while driving because they were stoned. There are those who think that marijuana is a major problem on the streets, because of a newspaper article or news story which they have seen which said a large number of people who were killed in driving accidents tested positive for marijuana use. For various reasons, these studies are not reliable: o Some studies use drug tests which can only tell whether a person has used marijuana in the last month. o Some studies were done near colleges or other areas where drinking, marijuana use, and accidents are all very high, and they did not

correct for age or alcohol use. o In many of the studies there were more stoned drivers killed -- but it was not their fault, and when the police "culpability scores" were factored in marijuana was not to blame for the accidents.

15) Aren't you afraid everyone will get hooked?

Marijuana produces no withdrawal symptoms no matter how heavy it is used. It is habit forming (psychologically addictive), but not physically addictive. The majority of people who quit marijuana don't even have to think twice about it. Comparing marijuana to addictive drugs is really quite silly.

For a drug to be physically addictive, it must be reinforcing, produce withdrawal symptoms, and produce tolerance. Marijuana is reinforcing, because it feels good, but it does not do the other two things. Caffeine, nicotine and alcohol are all physically addictive.

16a) Is urine testing for marijuana use as a terms of employment a good idea? I want to make sure my business is run safely.

No! Some of your most brilliant, hard working, and reliable employees are marijuana users. When you drug test, you put all marijuana users in the same place as the abusers -- the unemployment line. Drug testing is bad for business. (Not to mention it is an invasion of privacy.) If a worker has a drug problem, you can tell by testing how well he does his job. Firing *all* the drug users who work for you will hurt your business, costs money, and will get people very mad at you -- and for what? There isn't even any hard evidence that marijuana users have more accidents or health problems. Your employees will probably resent being drug tested; drug testing allows an employer to govern the actions of an employee in his off time -- even when these actions do not effect his job performance. (As told above, marijuana drug tests do not test whether a person is 'high'. They test whether or not they have used in the last few weeks.) Asking employees to urinate in a plastic cup every month is not a good way to make them feel like part of the business, or make friends, either. There is growing concern about drug tests, sometimes because they misfire and accuse the wrong person, but mostly because they might be used to find out other confidential information about an employee. Legal professionals are beginning to question whether they are even constitutional.

16b) Isn't all this worth the trouble, though, in order to reduce accident risks and health care costs?

Everyone knows that marijuana users are bad employees, right? Wrong -- or at least someone forgot to tell the millions of hard working marijuana smokers that. Drug testing companies will hand you piles of statistics which they say prove marijuana use costs you money. The truth is there are just as many studies which show that marijuana users are more successful, use less health care, and produce more than non-users. Before you buy into workplace drug testing, make sure you get the other side of the story. In the 1980's, the Bush administration went to great lengths to promote drug testing. In fact, George Bush estimated the cost of drug use at over 60 billion dollars a year, based on a study which supposedly showed that persons who had used marijuana at some time during their life were less successful. The very same study could be used to show that current, heavy users of marijuana and other illegal drugs were actually more successful. Something is a bit fishy here, and when you add to that the fact that several former

heads of the DEA and former Drug Czars now own or work in the urinalysis industry, this whole scene begins to smell a bit funny.

17) Wouldn't it be best to just lock the users all up?

How do you plan to pay for that? Already, well over five percent of the people in this country (U.S) are in custody (including probation, parole, bail, etc.) Murderers and rapists are being let out of our penitentiaries right now to make room for a few more 'deadheads' -- there are about 2,500 Grateful Dead fans in our federal prisons. Imprisoning one person for one year costs about \$20,000. The United States leads the world in imprisonment -- at any one time, 425 people out of every 100,000 are behind bars. In the Federal Prison System, one fifth of the prisoners are drug offenders who have done nothing violent. State laws are usually less strict, but state mandatory minimum sentences for drugs are getting more popular. Our prisons and our courtrooms are so crowded that the American Bar Association's annual report on the state of the Justice System is basically one long plea for an end to drug laws that imprison users. Even the Clinton Administration recognizes that locking people up is not the solution. This is especially true for the people who actually have drug abuse problems -- they need treatment, not mistreatment. The Drug War put mandatory minimum jail sentences for drug crimes on the lawbooks. If we do not take those laws (at least) back off, we will be in sorry shape come the end of the century. A retroactive policy of marijuana legalization or decriminalization would go a long way in helping to solve this crisis. Also consider this -- Once a person gets put in jail, he becomes angry with the world. He will probably be victimized while he is there, and most likely will learn criminal behaviors from hard-core violent offenders. There is also a very good chance that he will have caught AIDS or tuberculosis by the time he gets let back out. By locking up drug users, you are digging yourself a very big trench to fall in -- is it worth it? Besides, lots of these people don't deserve to be in jail. Why should they serve time just because they like to get 'high' on marijuana? Especially when someone can drink alcohol without being arrested... what kind of law is that? You have to think about what kind of a world you are making for yourself before you act. How are the police of the future going to treat the people? How far are you willing to let the government go to get the drug users? How many of your own rights will you sacrifice by trying to jail 'the druggies'?

18) I heard that there are over 400 chemicals in marijuana... Welllllll...?

True, but so what? There are also over 400 chemicals in many foods, (including coffee, which contains over 800 chemicals and many rat carcinogens) and we don't see police arresting people in McDonald's, or giving Driving while Eating citations. Only THC is very psycho-active; a few other chemicals also have very small degrees of psycho-activity. People who use marijuana do not get sick more, or die earlier, or lose their jobs (except to drug tests), or have mutant kids... so what's your point? The fact that there are over 60 unique chemicals in cannabis, called 'cannabinoids,' is something that scientists find very interesting. Many of these cannabinoids may have valuable effects as medicine. For example, 'cannabinol' is a cannabinoid which can help people with insomnia. Doctors think that this chemical is why most patients prefer to use marijuana rather than pure Delta-9-THC pills (called dronabinol) -- the cannabinol takes the edge off being 'high' and calms the nerves. Another cannabinoid, 'cannabidiolic acid', is a very effective anti-biotic, like penicillin. Many of these chemicals can be extracted from marijuana without any fancy laboratory equipment.

19) Doesn't that stuff mess up your immune system and make it easier for you catch colds?

Marijuana (Delta-nine-THC) does have an 'immunosuppressive effect.' It acts on certain cells in the liver, called macrophages, in much the same way that it acts on brain cells. Instead of stimulating the cells, though, it shuts them off. This effect is temporary (just like the 'high') and goes away quickly; people who suffer from multiple sclerosis may actually find this effect useful in fighting the disease.

Recent research has also found that marijuana metabolites are left over in the lungs for up to seven months after the smoking has stopped. While they are there, the immune system of the lungs may be affected (but the macrophages do not get 'turned off' like in the liver.) The effects of smoking itself are probably worse than the effects of the THC, and last just as long.

All this said, doctors still have not decided whether marijuana users are at risk for colds or not. With the possible exception of bronchitis, there are no numbers which suggest that marijuana users catch more colds, but... this did not stop Carlton Turner, a United States Drug Czar, from saying many times in his public addresses that marijuana caused AIDS and homosexuality. His claims were so ridiculous that the Washington Post and Newsweek Magazine made fun of him, and he was forced to resign. Today, AIDS patients use marijuana to treat their symptoms without any apparent problems. Some studies suggest that marijuana may actually stimulate certain forms of immunity. Researchers have tried to show major effects on the healthy human's immune system, but if marijuana does have any substantial effects, good or bad, they are either too subtle or too small to notice.

PART FOUR

WHY IS IT STILL ILLEGAL?

1) Why is it STILL illegal?:

The official answer: Because you shouldn't use it. You can't use it because it is illegal, and it is illegal so you can't use it. You should not use it. It is illegal. It is illegal so you should not use it.

The manic-depressive answer: It'll never happen. People are too unorganized/stupid/disempowered. It's just futility. Try, but don't expect to get anywhere. I won't get my hopes up.

The paranoid-schizophrenic answer: Don't you SEE?!?!? The guys at the top have it SEWN!! They own everything. They'll never let it happen. I shouldn't even be talking to you, but let me give you some advice!! listen... you shouldn't mess with THEM, THEY know everything. THEY are practically psychic, see? And the only way to get it to happen is to become one of THEM. You'd better watch it, or THEY will come and take you away -- THEY do that, you know. It's all a CONSPIRACY!!!

The neurotic answer: Marijuana? Eeek! Don't you know that stuff is dangerous? People don't make laws for no good reason, you know! Where did you hear about marijuana? Wait! Don't tell

me, I don't want to know. If anybody even knew you thought it should be legal -- well -- they'd never talk to you again! Don't you know that marijuana this... marijuana that... ..

THE REAL ANSWER: Marijuana is still illegal because enough people have not yet stood up together and said:

`` THIS IS STUPID!!

I WANT CANNABIS HEMP LEGAL!!!

FOR PRODUCTS;

FOR MEDICINE;

FOR FOOD;

FOR FUN; FOR GOODNESS'S SAKE! ISN'T THAT WHAT LIFE'S ALL ABOUT ?!"

Without large-scale grass roots support, marijuana will never be legal. Every person that stands up for marijuana/hemp legalization makes us that much stronger, and our voices that much louder. Believe me, we appreciate all the support we get. Almost as importantly, it makes it that much harder for people to say ``that's a stupid idea" or ``nobody really believes that."

If you aren't convinced yet, Or if you are having trouble swallowing any of the answers given, I encourage you to learn more about the issues. Try the sources listed at the end.

If you're with us, let us know! Let everybody know, unless it will get you canned or arrested, but most importantly, keep an eye on what's going on, and try to lend a hand when you can. Also, know your stuff, so if you have to, you can convince a friend or loved one that *you* are not nuts -- the rest of the world is.

2) What can I do to bring some sense into our marijuana laws?

There are many things you can do. Activists are working right now at all levels to reform marijuana laws. If you cannot afford to be an activist, there are many ways you can help -- activists find themselves short of money, time, and occasionally even friendly company. Get to know a hemp or marijuana legalization activists in your area, and just keep up to date on what they are planning. Odds are you will find something that you can easily do which will help them out a whole lot. There is a list available called the Liberty Activist's List which will give you the phone numbers or address of groups near you. Also, you may call the National Office of NORML (The National Organization for the Reform of Marijuana Laws) at 1-202-483-5500. The most important thing you can do on your own, though, is to keep tabs on your state and local legislators, and let them know that this is an issue to be taken seriously.

Many activist groups offer `memberships.' These usually involve a fee for joining the group, and a newsletter that keeps you up to date on the group's activities. This way you know when and why to write your legislators, and thought provoking information which you normally would not get is delivered to you. If and when you need to, most importantly, you will be able to contact the group and seek or give advice.

3a) Where can I get more information?

Many places. One of the best is by using electronic communications. The Information Superhighway has been a tremendous leap forwards for our movement, and there is a lot of information available. Start by sending e-mail to "({{readme}})". There is an e-mail file-server set up at this address, and just about anyone with Internet e-mail can use it. The server contains many files about marijuana, and more importantly directories and pointers on how to get more information by WWW, GOPHER, FTP, IRC, and TELNET. For a overview list of these resources send mail to "({{netlinks}})". If you have trouble making this work, send a note asking for help to "verdant@twain.ucs.umass.edu" A copy of the Liberty Activist's List is also available through this server, by mailing to "({{groups}})." This will help you get in touch with activists near you. If you are interested, there is an excellent mailing list devoted to Drug War issues. It is called DRCnet and you may send mail to "borden@netcom.com" for information on becoming involved.

3b) Umm, I'm computer illiterate, so that just went way over my head. Are there any good books I could go get instead?

Here is a list of some of the must-read books and articles about marijuana and legalization. Check the source section of this FAQ for more information about these and other sources.

``The Emperor Wears No Clothes" by Jack Herer pub. Queen of Clubs/HEMP, 1993/1994

``Hemp, Life-Line to the Future" by Chris Conrad pub. data pending ``Marihuana Reconsidered" by Lester Grinspoon pub. 1977. Harvard University Press. pub. 1993 data pending.

``**Marihuana the Forbidden Medicine" by Lester Grinspoon**

pub. Yale University Press 1993.

***** Journal Articles of General Interest *****

``Marijuana Laws: A Need for Reform" by Roger Allan Glasgow in ``Arkansas Law Review" Vol. 22(340) pp. 359-375.

***** Government commissions recommending legalization ***** The Panama Canal Zone Report of 1925, pub. United States Government.

Mayor LaGuardia's Committee on Marijuana (New York) Report issued 1944. (Initiated 1938 -- an extensive study of marijuana) pub. New York City Government

The Final Report of the Le Dain Commission on Marijuana Legalization, pub. Canadian Gov't

Final Report if the National Commission on Marijuana, 1972, pub. United States Government entitled ``Marijuana -- a Signal of Misunderstanding"

***** Court Rulings *****

``In the Matter of Marijuana Rescheduling Petition" by Hon. Francis L. Young Docket# 86-22 1989.

4) Do you have any advice for people who want to organize their own group?

There are some very good books that will help new organizers hit the ground running. Here are two titles you should try to locate: Si Kahn ``Organizing: A Guide For Grassroots Leaders" McGraw-Hill 1982 0-07-033215-0 (0-07-033199-5 paperback) Ed Hedemann ``The War Resisters League Organizers Manual" 1981 0-940862-00-X

The War Resisters League

339 Lafayette St., New York, NY

PART FIVE

SOURCES BY QUESTION NUMBER

(Sorry for the pathetic bibliography. As soon as time and software permits it will be cleaned up, cross referenced, and expanded.)

1a) What Is Hemp?

``Hemp" by Lyster H. Dewey pp. 283-346. pub. United States Department of Agriculture, 1913.

``The Emperor Wears No Clothes: The Authoritative Historical Record of the Cannabis Plant, Marijuana Prohibition, & How Hemp Can Still Save the World" by Jack Herer pub. Queen of Clubs HEMP Publishing, 1993.

``The Marijuana Farmers" by Jack Frazier pub. Solar Age Press New Orleans, 1972.

1b) What is cannabis?

``Hemp, Life-line to the Future" by Chris Conrad pub data pending.

(Mexican slang term)

``The Emperor Wears No Clothes The Authoritative Historical Record of the Cannabis Plant, Marijuana Prohibition, & How Hemp Can Still Save the World" by Jack Herer pub. Queen of Clubs HEMP Publishing, 1993.

(hemp can be grown legally)

``Hemp, Life-line to the Future" by Chris Conrad pub data pending.

John Birrenbach's legal hemp FAQ pub. Institute for Hemp 1993.

(number one cash crop)

``Drugs, Crime and the Justice System" pub. United States Government Printing Office Washington, DC. December, 1992.

``Information Please Almanac" pub. Simon and Schuster New York, 1993.

2a) How can hemp be used as a food?

(protein)

A. J. St. Angelo, E. J. Conkerton, J. M. Dechary, A. M. Altschul in ``Biochimica et Biophysica Acta" Vol. 121 pp. 181. 1966.

A. J. St. Angelo, L. Y. Yatsu, A. M. Altschul in ``Archives of Biochemistry and Biophysics" Vol. 124 pp. 199-205. 1966.

``Chromatography of Edestine at 50 Degrees" by D. M. Stockwell, J. M. Dechary, A. M. Altschul in ``Biochimica et Biophysica Acta" Vol. 82 pp. 221. 1964.

(essential fatty acid oils)

``Fats that Heal, Fats that Kill" by Udo Erasmus pub.

``Hemp-seed Oil Compared with Other Common Vegetable Oils" by Gerald X. Diamond in ``Cannabis Hemp Information Kit" pub.

``Therapeutic Hemp Oil" by Andrew Weil M.D. in ``Natural Health" March/April, 1993.

2b) What are the benefits of hemp compared to other food crops?

``Hemp" by Lyster H. Dewey pp. 283-346. pub. United States Department of Agriculture, 1913.

``The Emperor Wears No Clothes: The Authoritative Historical Record of the Cannabis Plant, Marijuana Prohibition, & How Hemp Can Still Save the World" by Jack Herer pub. Queen of Clubs HEMP Publishing, 1993.

2c) How about soy? Is hemp competitive as a world source of protein?

(hemp vs. soy)

``Hemp" by Lyster H. Dewey pp. 283-346. pub. United States Department of Agriculture, 1913.

``Chromatography of Edestine at 50 Degrees" by D. M. Stockwell, J. M. Dechary, A. M. Altschul in ``Biochimica et Biophysica Acta" Vol. 82 pp. 221. ed. pub., 1964.

(resistance to UV-B sunlight)

``UV-B Effects on Terrestrial Plants" by Manfred Tevinie, Alan H. Teremura in ``Photochemistry and Photobiology" Vol. 50 Iss. 4 pp. 479-487. pub. Pergamon Press Oxford, New York, 1989.

(agricultural consequences of drug policy in underdeveloped nations)

cites pending

3a) How can hemp be used for cloth?

``Hemp, Flax, Jute, Ramie, Kenaf and Other Industrial Fibers a Comparison of Properties and

Applications " by Gerald X. Diamond in "Cannabis Hemp Information Kit" pub Washington Citizens for Drug Policy Reform.

"Hemp" by Lyster H. Dewey pp. 283-346. pub. United States Department of Agriculture, 1913.

"The Emperor Wears No Clothes The Authoritative Historical Record of the Cannabis Plant, Marijuana Prohibition, & How Hemp Can Still Save the World" by Jack Herer pub. Queen of Clubs HEMP Publishing, 1993.

"The Marijuana Farmers" by Jack Frazier pub. Solar Age Press New Orleans, 1972.

3b) Why is it better than cotton?

"Hemp, Flax, Jute, Ramie, Kenaf and Other Industrial Fibers a Comparison of Properties and Applications " by Gerald X. Diamond in "Cannabis Hemp Information Kit" pub. Washington Citizens for Drug Policy Reform.

4a) How can hemp be used to make paper?

"It's Time to Reconsider Hemp" by Jim Young in "Pulp & Paper" pp. 7. June, 1991.

"Hemp Variations as Pulp Source Researched in the Netherlands" by E. P. M. de Meijer in "Pulp & Paper" pp. 41-42. July, 1993.

"The Manufacture of Paper from Hemp Hurds" by Jason L. Merrill in "USDA Bulletin/Yearbook of the United States Department of Agriculture" Iss. 404 pp. 7-25. pub. United States Department of Agriculture

4b) Why can't we just keep using trees?

"The Production and Handling of Hemp Hurds" by Lyster H. Dewey in "USDA Bulletin" Iss. 404 pp. 1-6. pub. United States Department of Agriculture.

"Hemp" by Lyster H. Dewey pp. 283-346. pub. United States Department of Agriculture, 1913.

5a) How can hemp be used as a fuel?

"Farming For Fuel]" by Folke Dovring pub data pending.

"Pretreatment Research Overview" by K. Grohmann, R. Torget, M. Himmel in "The DOE SERI Ethanol From Biomass Program" pub. The United States Department of Energy.

"Overview: The DOE SERI Ethanol From Biomass Program " by C. E. Wyman pub. The United States Department of Energy.

5b) Why is it better than petroleum?

"Towards a Green Economy" by Lynn Osburn (pamphlet)

other cites pending

6a) How can hemp be used as a medicine?

``Marijuana, The Forbidden Medicine" by Lester Grinspoon M.D. and James B. Bakalar pub. Yale University Press New Haven, 1993.

``Therapeutic Issues of Marijuana and THC (Tetrahydrocannabinol)" by J. Thomas Ungerieder, Therese Andrysiak in ``The International Journal of the Addictions" Vol. 20 pp. 691-699. ed. pub. M. Dekker New York, 1985.

6b) What's wrong with all the prescription drugs we have?

``Marijuana, The Forbidden Medicine" by Lester Grinspoon M.D. and James B. Bakalar pub. Yale University Press New Haven, 1993.

7) What other uses for hemp are there?

``The Emperor Wears No Clothes The Authoritative Historical Record of the Cannabis Plant, Marijuana Prohibition, & How Hemp Can Still Save the World" by Jack Herer pub. Queen of Clubs HEMP Publishing, 1993.

Note: 93/94 edition of the Emperor only.

WELL WHY AREN'T WE USING HEMP, THEN?

1) How and why was hemp made illegal?

``Drugs and minority oppression" by John Helmer pub. Seabury Press New York, 1975.

``The Emperor Wears No Clothes The Authoritative Historical Record of the Cannabis Plant, Marijuana Prohibition, & How Hemp Can Still Save the World" by Jack Herer pub. Queen of Clubs HEMP Publishing, 1993.

2) OK, so what the heck does all this other stuff...

``The Manufacture of Paper from Hemp Hurds" by Jason L. Merrill in ``USDA Bulletin/Yearbook of the United States Department of Agriculture" Iss. 404 pp. 7-25. pub. United States Department of Agriculture

``New Billion-Dollar Crop" in ``Popular Mechanics" February, 1938.

``Flax and Hemp From the Seed to the Loom " by George A. Lower in ``Mechanical Engineering" February, 1937.

3) Now wait, just hold on. You expect me to believe....

``Hemp, Life-line to the Future" by Chris Conrad pub data pending.

``The Emperor Wears No Clothes The Authoritative Historical Record of the Cannabis Plant, Marijuana Prohibition, & How Hemp Can Still Save the World" by Jack Herer pub. Queen of Clubs HEMP Publishing, 1993.

``New Billion-Dollar Crop" in ``Popular Mechanics" pub. February, 1938.

``Flax and Hemp From the Seed to the Loom " by George A. Lower in ``Mechanical

Engineering" February, 1937.

4) Is there a lesson to be learned from all this?

``Manufacturing Consent" by Noam Chomsky pub data pending.

``Marijuana Laws: A Need for Reform" by Roger Allan Glasgow in ``Arkansas Law review" Vol. 22 Iss. 340 pp. 359-375.

DOES IT? DOESN'T IT? IS IT TRUE?

1) Doesn't marijuana stay in your fat cells and keep you high ...

``Marijuana Chemistry Genetics, Processing, and Potency" by Michael Starks pub. Ronin Inc., 1990.

``Marijuana Cannabinoids Neurobiology and Neurophysiology" ed. Laura Murphy, Andrzej Bartke ed. pub. CRC Press Boca Raton, FL, 1992.

2) But ... isn't today's marijuana much more potent than it was...

``Cannabis 1988. Old Drug, New Dangers The Potency Debate " by Todd H. Mikuriya M.D., Michael R. Aldrich Ph.D. in ``Journal of Psychoactive Drugs" Vol. 20 Iss. 1 pp. 47-55 pub. Haight-Ashbury Publications in association with the Haight-Ashbury Free Medical Clinic San Francisco, Calif. : January March, 1988.

3a) Doesn't Marijuana cause brain damage?

``The Chronic Cerebral Effects of Cannabis Use I Methodological Issues and Neurological Findings " by Renee C. Wert Ph.D., Michael L. Raulin Ph.D Vol. 21 Iss. 6 pp. 605-628. 1986.

``The Chronic Cerebral Effects of Cannabis Use II Psychological Findings and Conclusions " by Renee C. Wert Ph.D., Michael L. Raulin Ph.D Vol. 21 Iss. 6 pp. 629-642. 1986.

``Neurotoxicity of Cannabis and THC A Review of Chronic Exposure Studies in Animals " by Andrew C. Scallet in ``Pharmacology, Biochemistry & Behavior" Vol. 40 pp. 671-676. 1991.

``Chronic Marijuana Smoke Exposure in the Rhesus Monkey IV Neurochemical Effects and Comparison to Acute and Chronic Exposure to Delta-9-Tetrahydrocannabinol (THC) in Rats" by Syed F. Ali, Glenn D. Newport, Andrew C. Scallet, Merle G. Paule, John R. Bailey, William Slikker Jr in ``Pharmacology, Biochemistry & Behavior" Vol. 40 pp. 677-682. 1991.

``Behavioral, Neurochemical, and Neurohistological Effects of Chronic Marijuana Smoke Exposure in the Nonhuman Primate" by William Slikker Jr. et al. in ``Marijuana Cannabinoids Neurobiology and Neurophysiology" Laura Murphy, Andrzej Bartke ed. pub. CRC Press Boca Raton, FL, 1992.

(the following are the studies which were found to be flawed)

``Effects of Cannabis Sativa on Ultrastructure of the Synapse in Monkey Brain" by J. W. Harper, R. G. Heath, W. A. Myers in ``Journal of Neuroscience Research" Vol. 3 pp. 87-93. 1977.

``Chronic Marijuana Smoking Its Effects on Function and Structure of the Primate Brain " by R. G. Heath, A. T. Fitzjarrell, R. E. Garey, W. A. Myers in ``Marihuana: Biological Effects Analysis, Metabolism, Cellular Responses, Reproduction and Brain " Gabriel G. Nahas, W. D. M. Paton ed. pub. Pergamon Press Oxford, 1979.

``Cannabis Sativa Effects on Brain Function and Ultrastructure in Rhesus Monkeys " by R. G. Heath, A. T. Fitzjarrell, C. J. Fontana, R. E. Garey in ``Biological Psychiatry" Vol. 15 pp. 657-690. 1980.

(D.A.R.E. says pot kills brain cells)

DARE Officers training manual section T page 5.

3b) If it doesn't kill brain cells....

``Structure of a Cannabinoid Receptor" by L. A. Matsuda , S. J. Lolait , M. J. Browstein, A. C. Young, T. I. Bonner in ``Nature" Vol. 346 Iss. 6824 pp. 561-564. August, 1990.

(marijuana does not wear out it's receptors)

``Chronic Exposure to Delta-9-Tetrahydrocannabinol Fails to Irreversibly Alter Brain Cannabinoid Receptors" by Tracy M. Westlake, Allyn C. Howlett, Syed F. Ali, Merle G. Paule, Andrew C. Scallet, William Slikker Jr. in ``Brain Research" Vol. 544 pp. 145-149. 1991.

4) Don't people die from smoking pot?

Bureau of Mortality Statistics, 1988.

``In the Matter of Marijuana Rescheduling Petition: Opinion and Recommended Ruling, Findings of Fact, Conclusions of Law and Decision of Administrative Law Judge Francis L. Young " by Hon. Francis L. Young September, 1988.

(allergic reaction is rare)

``Marijuana and Immunity" by Leo E. Hollister M.D. in ``Journal of Psychoactive Drugs" Vol. 24 Iss. 2 pp. 159-164. pub. Haight-Ashbury Publications in association with the Haight-Ashbury Free Medical Clinic San Francisco, Calif. : April,June, 1992.

5) I forgot, does marijuana cause short-term memory impairment?

cites pending

6a) Is marijuana going to make my boyfriend go psycho?

``A Brief, Critical Look at Cannabis Psychosis" by Amit Basu in ``The International Journal on Drug Policy" Vol. 3 pp. 126-127. 1992.

6b) Don't users of marijuana withdraw from society?

``Adolescent Drug Use and Psychological Health" by Jonathan Shedler, Jack Block in ``American Psychologist" Vol. 45 Iss. 5 pp. 612-630.

``Substance Use and Abuse Among Teenagers" by Michael D. Newcomb, Peter M. Bentler in ``American Psychologist" Vol. 44 Iss. 2 pp. 242-248. 1989.

``Cognitive Motivations for Drug Use Among Adolescents Longitudinal Tests of Gender Differences and Predictors of Change in Drug Use " by Michael D. Newcomb, Chih Ping Chou, P. M. Bentler, G. J. Huba in ``Journal of Counseling Psychology" Vol. 35 Iss. 4 pp. 426-438. pub. American Psychological Association Washington,DC, 1988.

``Personality Characteristics of Adolescent Marijuana Users" by John E. Mayer, Jeffrey D. Ligman in ``Adolescence" Vol. 24 Iss. 96 pp. 965-976. 1989.

``Cannabis Use and Sensation Seeking Orientation" by K. Paul Satinder, Alexander Black in ``The Journal of Psychology" Vol. 166 pp. 101-105. pub. Journal Press Provincetown, MA, 1984.

7) Is it true that marijuana makes you lazy and unmotivated?

``Behavioral and Biological Concomitants of Chronic Marijuana Use" by Dr. Jack H. Mendelson 1974. (US Army study)

(adolescent amotivational-like syndrome)

``Chronic Marijuana Smoke Exposure in the Rhesus Monkey II Effects on Progressive Ratio and Conditioned Position Responding " by Merle G. Paule, Richard R. Allen, John R. Bailey, Andrew C. Scallet, Syed F. Ali, Roger M. Brown, William Slikker Jr. in ``The Journal of Pharmacology and Experimental Therapeutics." Vol. 260 pp. 210-222. ed. pub.

``Up in Smoke Arkansas Study Raises Doubts About Marijuana Risks " by Mara Leveritt in ``Arkansas Times" pp. 11-12. September 16, 1993.

(use of marijuana and other drugs in a positive role in work)

``Working Men and Ganja Marijuana Use in Rural Jamaica Melanie Creagan Dreher " by Melanie Creagan Dreher pub. Institute for the Study of Human Issues Philadelphia, 1982.

``The working addict David Caplovitz " by David Caplovitz pub. M. E. Sharpe, White Plains, NY, 1976.

8) Isn't marijuana a gateway drug? Doesn't it lead to use of ...

``Who Says Marijuana Use Leads to Heroin Addiction?" by Jerry Mandel in ``Journal of Secondary Education" Vol. 43 Iss. 5 pp. 211-217. pub. California Association of Secondary School Administrators Burlingame, CA May

``Marihuana reconsidered Lester Grinspoon. " by Lester Grinspoon M.D. 1928- pub. Harvard University Press, Cambridge, MA, 1977.

(emergency room admissions)

cites pending

9a) I don't want children (minors) to be able to smoke ...

(a good book about drugs for parents and children)

``From Chocolate To Morphine" by Andrew Weil pub. data pending (a new edition will be coming out very soon!)

9b) Won't children be able to steal marijuana plants that people...

(industrial hemp has very low THC content)

``Hemp Variations as Pulp Source Researched in the Netherlands" by E. P. M. de Meijer in ``Pulp & Paper" pp. 41-42. pub. July, 1993.

10a) Hey, don't you know that marijuana drops testosterone levels...

``Behavioral, Neurochemical, and Neurohistological Effects of Chronic Marijuana Smoke Exposure in the Nonhuman Primate" by William Slikker Jr. et al. in ``Marijuana Cannabinoids Neurobiology and Neurophysiology" pp. . Laura Murphy, Andrzej Bartke ed. pub. CRC Press Boca Raton, FL, 1992.

10b) Doesn't heavy marijuana use lower the sperm count in males?

``Marihuana A Signal of Misunderstanding " pub. U.S. Government Printing Office Washington, 1972.

10c) I heard marijuana use by teenage girls may impair hormone...

``Marihuana A Signal of Misunderstanding " pub. U.S. Government Printing Office Washington, 1972.

11) I forgot, does marijuana cause short-term memory impairment?

Go away.

12) Isn't smoking marijuana worse for you than smoking cigarettes?

(more tar in smoked marijuana, but claims exaggerated)

``Pulmonary Hazards of Smoking Marijuana as Compared with Tobacco" by Tzu Chin Wu, Donald P. Tashkin , Behnam Djahed , Jed E. Rose in ``New England Journal of Medicine" Vol. 318 Iss. 6 pp. 347-351. pub., 1988.

(low-tar cigarettes just as carcinogenic)

``The Association of Lung Cancer with Tar Content of Cigarettes" by Franz P. Reichsman pub., 1980. (Thesis)

(lung damage from smoking)

``Marijuana Exposure and Pulmonary Alterations in Primates" by Suzanne E. G. Fligiel, Ted F. Beals, Donald P. Tashkin, Merle G. Paule, Andrew C. Scallet, Syed F. Ali, John R. Bailey, William Slikker Jr. in ``Pharmacology, Biochemistry & Behavior" Vol. 40 Iss. 3 pp. 637-642. ed. pub., 1991.

"Chronic Marijuana Smoke Alters Alveolar Macrophage Morphology and Protein Expression" by Guy A. Cabral, Amy L. Stinnet, John Bailey, Syed F. Ali, Merle G. Paul, Andrew C. Scallet, William Slikker Jr. in "Physiology, Biochemistry and Behavior" Vol. 40 pp. 643-649. ed. pub., 1991.

(Lead 210 and N Nitrosamines in tobacco)

Joseph DiFranza in NEJM Vol. 306 Iss. 6 pub. February, 1982. and responses in Vol. 307 Iss. 5 pub. July, 1982.

13) Don't children born to pot-smoking mothers suffer from Fetal

"Effects of Prenatal Exposure to Cannabinoids" by Ernest L. Abel in "Current Research on the Consequences of Maternal Drug Abuse" Theodore M. Pinkert ed. NIDA Research monograph # 59

"The Effects of Early Marijuana Exposure" by Ernest L. Abel, Gary A. Rockwood, Edward P. Riley in "Handbook of teratology" pp. 267-288.

(Jamaican studies)

"Prenatal Marijuana Exposure and Neonatal Outcomes in Jamaica An Ethnographic Study " by Melanie C. Dreher , Kevin Nugent, Rebekah Hudgins in "Pediatrics" Vol. 93 Iss. 2 pp. 254-260. pub. February, 1994.

(THC fetal exposure)

"Placental Transfer and Fetal Disposition of Delta-9-Tetrahydrocannabinol (THC) During Late Pregnancy in the Rhesus Monkey" by William Slikker Jr, H. C. Cunny, J. R. Bailey, M. G. Paule in "" pp. 97-102.

"The Influence of Anesthesia, Pregnancy, and Sex on the Plasma Disposition of Delta-9-Tetrahydrocannabinol and 11-nor-9-carboxy-delta-9-Tetrahydrocannabinol in the Rhesus Monkey" by Merle G. Paule, John R. Bailey, William Slikker Jr. in "" pp. 315-320. ed. pub.

14) Doesn't marijuana cause a lot of automobile accidents?

NHTSA statistical study pub. 1992, data pending

NHTSA Amsterdam study pub. 1994, data pending

Australian statistical survey pub 1993, data pending

15) Aren't you afraid everyone will get hooked?

"Behavioral, Neurochemical, and Neurohistological Effects of Chronic Marijuana Smoke Exposure in the Nonhuman Primate" by William Slikker Jr. et al. in "Marijuana Cannabinoids Neurobiology and Neurophysiology" Laura Murphy, Andrzej Bartke ed. pub. CRC Press Boca Raton, FL, 1992.

"Marihuana A Signal of Misunderstanding " pub. U.S. Government Printing Office Washington,

1972.

``The Marijuana Problem in the City of New York" (Mayor LaGuardia's Commission on Marijuana. The text of the decision can be found in a three volume set entitled ``The Marijuana Papers") more pub. data pending.

``Marihuana reconsidered Lester Grinspoon." by Lester Grinspoon M.D. 1928- pub. Harvard University Press Cambridge, MA, 1977.

16a) Is urine testing for marijuana use as a terms of employment...

``Applicant Testing For Drug Use A Policy and Legal Inquiry " by Jonathan V. Holtzman in ``William and Mary Law Review" Vol. 33 pp. 47-93. pub., 1991.

16b) Isn't all this worth the trouble, though, in order to reduce...

``Social Behavior, Public Policy, and Non-harmful Drug Use" by Charles Winick in ``The Milbank Quarterly" Vol. 69 Iss. 3 pp. 437-459. ed. published for the Milbank Memorial Fund Cambridge University Press New York, NY, 1991.

other cites pending (mail the faq maintainer)

17) Wouldn't it be best to just lock the users all up?

``Drugs, Crime and the Justice System" pub. United States Government Printing Office Washington, DC December, 1992.

``The State of Criminal Justice, an annual report" by the American Bar Association, 1993 pub. U.S. Government Printing office.

``Social Behavior, Public Policy, and Non-harmful Drug Use" by Charles Winick in ``The Milbank Quarterly" Vol. 69 Iss. 3 pp. 437-459. pub. published for the Milbank Memorial Fund Cambridge University Press New York, NY, 1991.

18) I heard that there are over 400 chemicals in marijuana...

(800 chemicals in coffee)

``Too Many Rodent Carcinogens Mitogenesis Increases Mutagenesis " by B. N. Ames, L. S. Gold in ``Science" Vol. 149 pp. 971. ed. pub., 1990.

(other cannabinoids)

``Marijuana Chemistry Genetics, Processing, and Potency " by Michael Starks pub. Ronin Inc., 1990.

``Marijuana, The Forbidden Medicine" by Lester Grinspoon M.D. and James B. Bakalar pub. Yale University Press New Haven, 1993.

19) Doesn't that stuff mess up your immune system...

(liver macrophages)

``Delta-9-tetrahydrocannabinol A Novel Treatment for Experimental Autoimmune Encephalitis " by W. D. Lyman , J. R. Sonett , C. F. Brosnan , R. Elkin , M. B. Bornstein in ``Journal of Neuroimmunology" Vol. 23 pp. 73-81. 1989.

(lung macrophages and other cells)

``Chronic Marijuana Smoke Alters Alveolar Macrophage Morphology and Protein Expression" by Guy A. Cabral, Amy L. Stinnet, John Bailey, Syed F. Ali, Merle G. Paul, Andrew C. Scallet, William Slikker Jr, 1991.

(general overview)

``Marijuana and Immunity" by Leo E. Hollister M.D. in ``Journal of Psychoactive Drugs" Vol. 24 Iss. 2 pp. 159-164. pub. Haight-Ashbury Publications in association with the Haight-Ashbury Free Medical Clinic San Francisco, Calif. : April,June, 1992.

(Carlton Turner)

``Official Corruption Carton Turner" by Jack HererJack Herer in ``The Emperor Wears No Clothes The Authoritative Historical Record of the Cannabis Plant, Marijuana Prohibition, & How Hemp Can Still Save the World" pub. Queen of Clubs HEMP Publishing, 1993.