

Marijuana vs tobacco essay



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Marijuana Vs Tobacco Nowadays there is a big dilemma to whether legalize marijuana or not and whether marijuana is really a lot more dangerous than tobacco.

There are big differences between the two of them, but there is, without any doubt, one that has a lot more negative effects on the human body and the human brain than the other. Due to research we can compare them and conclude which one is worse. Marijuana is a green, brown, or gray mixture of dried, shredded leaves, stems, seeds, and flowers of the hemp plant (*Cannabis sativa*). Cannabis is a term that refers to marijuana and other drugs made from the same plant. Other forms of cannabis include hashish, and hash oil.

All forms of cannabis are mind-altering drugs (Zimmer and Morgan 1). The main active chemical in marijuana is THC (delta-9-tetrahydrocannabinol). Short-term effects of marijuana use include problems with memory and learning, distorted perception, difficulty in thinking and problem solving, loss of coordination, increased heart rate, and anxiety (Zimmer and Morgan 1-2). Marijuana is usually smoked as a cigarette (called a joint) or in a pipe or “bong”.

Marijuana has also appeared in blunts, which are cigars that have been emptied of tobacco and refilled with marijuana, sometimes in combination with another drug, such as crack. It can also be mixed into foods or used to brew a tea (Zimmer and Morgan 2). According to the Palo Alto Medical Foundation tobacco is an agricultural crop that is used to make cigarettes. It is grown all over the world and supports a billion-dollar industry. Tobacco is

dried and processed, then either placed into cigarettes and processed, or manufactured for chewing tobacco. The psychoactive ingredient is nicotine, a stimulant, but more than 4, 000 other chemicals (2, 000 of which are known to be poisonous) are present in cigarettes (Health).

Tobacco is a nervous system stimulant that triggers complex biochemical and neurotransmitter disruptions. It elevates heart rate and blood pressure, constricts blood vessels, irritates lung tissue, and diminishes your ability to taste and smell (Health). Many people think smoking marijuana is just as harmful as smoking tobacco, but this is not true. Those who hold that marijuana is equivalent to tobacco are misinformed. Due to the efforts of various federal agencies to discourage the use of marijuana in the 1970's the government conducted several biased studies designed to return results that would equate marijuana smoking with tobacco smoking, or worse.

For example the Berkeley carcinogenic tar studies of the late 1970's concluded that " marijuana is one-and-a-half times as carcinogenic as tobacco. " This finding was based solely on the tar content of cannabis leaves compared to that of tobacco, and did not take radioactivity into consideration. Cannabis tars do not contain radioactive materials.) In addition, it was not considered that: 1) Most marijuana smokers smoke the bud, not the leaf, of the plant. The bud contains only 33% as much tar as tobacco. 2) Marijuana smokers do not smoke anywhere near as much as tobacco smokers, due to the psychoactive effects of cannabis.

3) Not one case of lung cancer has ever been successfully linked to marijuana use. 4) Cannabis, unlike tobacco, does not cause any narrowing of

the small air passageways in the lungs (Howard). In fact, marijuana has been shown to be an expectorant and actually dilates the air channels it comes in contact with. This is why many asthma sufferers look to marijuana to provide relief.

Doctors have postulated that marijuana may, in this respect, be more effective than all of the prescription drugs on the market (Howard). Studies even show that due to marijuana's ability to clear the lungs of smog, pollutants, and cigarette smoke, it may actually reduce your risk of emphysema, bronchitis, and lung cancer. Smokers of cannabis have been shown to outlive non-smokers in some areas by up to two years. Medium to heavy tobacco smokers will live seven to ten years longer if they also smoke marijuana. Cannabis is also radically different from tobacco in that it does not contain nicotine and is not addictive whatsoever.

The psychoactive ingredient in marijuana, THC, has been accused of causing brain and genetic damage, but these studies have all been disproven. In fact, the DEA's own Administrative Law Judge has declared that "marijuana in its natural form is far safer than many foods we commonly consume" (Young). Heavy marijuana smokers show less evidence of lung injury from smoking marijuana than heavy tobacco smokers, and it may be cannabinoids that are protecting them from developing a condition like emphysema. That's according to the principal investigator of a study done at the University of California at Los Angeles (Young). Speaking at the third annual meeting of the International Cannabis Research Society a pulmonologist and UCLA professor of medicine, concluded: "heavy marijuana use did not cause the same degree of lung injury from smoking marijuana as tobacco smoke"

(Tashkin). My own feeling is that marijuana smokers probably will not develop emphysema as a consequence of smoking marijuana,” he said, but cautioned that does not rule out the development of other conditions like respiratory carcinoma.

“ It may be that the THC (delta-9-tetrahydrocannabinol) in marijuana could have different effects on inflammatory cells, which may mediate injury in the lung. ” (Gagnon) His study, which aimed to measure the pulmonary effects of habitual marijuana use, followed nine tobacco smokers, 10 marijuana smokers, 10 nonsmokers and four smokers of both marijuana and tobacco. He gave both quantitative and qualitative explanations for his finding. Marijuana users in the study smoked three or four joints daily for 15 years on average, while tobacco smokers in the study smoked 25 cigarettes daily over a period of 20 years, indicating a marked difference in exposure to smoke. “ There is a seven-fold difference in the amount of smoke to which marijuana and tobacco smokers are exposed,” he said.

“ It’s the quantitative difference in smoke exposure that might explain the difference in the degree of lung injury as assessed by these physiologic indices. Moreover, the phagocytes gathered from the lungs of marijuana smokers do not have the same properties as those gathered from the lungs of tobacco smokers. “ We have previously shown that the macrophages that are harvested from the rinse-out of the lungs of marijuana smokers seem not to be activated,” he said. “ They do not release toxic oxygen species, either under basal conditions or under stimulated conditions nearly to the extent that tobacco macrophages do. If anything, basal secretion of superoxide seems to be reduced in the marijuana smokers. “ The clearance of the

molecule diethylene triamine penta acetate (DTPA) from the lung, believed to be a more sensitive indicator of lung injury than measuring the lung's diffusing capacity" (Tashkin).

If DTPA clearance is accelerated, then it implies an increase in the leakiness of the alveolar epithelial membrane, which implies injury to the membrane, he said. Dr. Tashkin noted DTPA clearance is accelerated in tobacco smoke-related lung injury. Initially, the chronic effects of marijuana smoke were measured in comparison to those of tobacco smoke: DTPA clearance was measured at about 12 hours after the last marijuana or tobacco cigarette smoked.

To determine the acute effects of marijuana and tobacco smoking, Dr. Tashkin restudied these smokers a week or two later, giving them a single joint of marijuana or a single tobacco cigarette or both, and then measuring DTPA clearance 15 minutes subsequently. "What we found was the clearance of DTPA was abnormally rapid from the lung in the tobacco smokers," he said. "It was about twice the rate of non-smokers. In the marijuana smokers, there was a tendency toward a much less rapid rate of clearance. There was no acute effect in either tobacco or marijuana, and there was no added effect of marijuana or tobacco.

"(Tashkin) As with the lungs to tobacco smokers, when the lungs of marijuana smokers are "washed out", a marked increase in the number of alveolar macrophages is witnessed. But whereas tobacco smoke has a concomitant effect of activating the macrophages, leading to the subsequent release of certain toxic substances, marijuana smoke fails to activate the

macrophages, Dr. Tashkin said. He noted this difference could be attributed to differential regulation of cytokins. “ It may be that the macrophages from marijuana smokers release certain suppressive cytokins, like transforming growth factor- beta, which is known to suppress the inflammatory activity of nearly all of the site populations,” he said.

In an editorial called Comparing Cannabis with Tobacco posted by Dr. Dean Edell in September 22, 2003, he says that two large studies reported no increase in death associated with the use of cannabis. Even diseases that might be related to long term cannabis use are unlikely to have a sizeable public health impact because, unlike users of tobacco and alcohol, most people who try cannabis quit relatively early in their adult lives” (Edell 635-6). “ Exposure to smoke is generally much lower in cannabis than in tobacco cigarette smokers, even taking into account the larger exposure per puff. Existing studies do not support a link between the use of cannabis and heart disease, the leading cause of death in many Western countries” (Edell 635-6).

Furthermore, cannabis does not contain nicotine, a chemical contained in tobacco that is addicting and contributes to the risk of heart disease. However, two caveats must be noted regarding available data, warns Dr. Edell. Firstly, the studies to date have not followed cannabis smokers into later adult life so it might be too early to detect an increase risk of chronic diseases that are potentially associated with the use of cannabis. Secondly, the low rate of regular cannabis use and the high rate of discontinuation during young adulthood may reflect the illegality and social disapproval of the use of cannabis.

This means that we cannot assume that smoking cannabis would continue to have the same small impact on mortality if its use were to be decriminalized or legalized. While the use of cannabis is not harmless, our current knowledge does not support the assertion that it has an adverse impact on death rates, says the author. ANNUAL AMERICAN DEATHS CAUSED BY DRUGS TOBACCO ...

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National Institute on Drug Abuse, Bureau of Mortality Statistics Marijuana does not cause serious health problems like those caused by tobacco or alcohol (e. g. , strong addiction, cancer, heart problems, birth defects, emphysema, liver damage, etc.).

It is not more dangerous. Smoked tobacco, with a 90% addiction rate, is the most addictive of all drugs while marijuana is less addictive than caffeine. Cigarettes kill more than 400, 000 people a year and there has never been a death reported from smoking marijuana. One would have to consume 40, 000 times as much marijuana as you need to get stoned.

Death from a marijuana overdose is impossible. Works Cited Edell, Dean. " Comparing cannabis with tobacco". 22 September 2003. BMJ Volume 327, pp 635-6. ; [http://www.](http://www.healthcentral.com/drdean/408/60640.html)

[healthcentral.com/drdean/408/60640.html](http://www.healthcentral.com/drdean/408/60640.html); Howard, Geese. " Cigarettes vs Marijuana. " Digg 23 September 2006 ; http://digg.com/health/Cigarettes_vs_Marijuana; Legalization of Marijuana.

10 February 2008. It; <http://www.legalizationofmarijuana.com>; Tashkin, Donald, Francis Young and Louis Gagnon. Marijuana less harmful to lungs than Cigarettes. Medical Post.

6 September 1994. ; <http://uncletaz.com/marijuana/potcig.html>; What is Tobacco? Health Promotion Services, Vaden Health Center, Stanford University. February 2004. ; [http://www.](http://www.https://assignbuster.com/marijuana-vs-tobacco-essay/)

<https://assignbuster.com/marijuana-vs-tobacco-essay/>

pamf. org/teen/risk/smoking/whatis. html; Zimmer, Lynn and John P. Morgan.

Marijuana myths & Marijuana Facts: A Review of the Scientific Evidence.

August 1997. ; <http://www. medicalmarihuana. ca/ books. html>.

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