Marijuana and Its Effects on the Body

Faiz Ashraf, Matthew McGough, Stephen Zheng, Torri Brewer
Department of Chemistry, Indiana University, Bloomington, IN 47405

Background

Marijuana’s history began in the ancient cultures of 500 BC Asia before the hemp (or cannabis sativa) plant was introduced to Afro-Europe, and the Americas to be used for rope, cloth, sails, and more. Along with discovering the useful plants of the plant, people have used it recreationally and for medicinal purposes. In the 1970s, a full-scale war on drugs was declared that resulted in marijuana prohibition. With the use of marijuana and its derivatives, there has been a modern-day push to legalize it as a recreational drug. Today, marijuana is legal for medical purposes in 32 states. Legalization (recreational and medicinal) is slowly becoming more prominent because millennials make up over 33% of those who have smoked marijuana. It has also gotten more popular with the THC content rising from four percent in the 1980s to as high as 37 percent by 2014.

Marijuana contains a variety of chemicals other than THC (tetrahydrocannabinol), the main active chemical that gives cannabis its psychoactive effects. Cannabidiol (CBD) is another important chemical of marijuana, which does not have psychoactive effects. CBD is a non-psychoactive chemical, which makes it a popular choice among consumers. The Food and Drug Administration (FDA) has approved the use of CBD to treat seizures in children and it is currently in trials for other conditions as well.

Marijuana contains several other important chemicals such as cannabinol (CBN), cannabigerol (CBG), and terpenes. The terpenes are the compounds that give marijuana its smell, and they can affect the high people experience after smoking the female cannabis flowers. In recent years marijuana has become more widely accepted for medical use, and it use for medicinal purposes has increased. This has become more common as science has also proven that pot can be used in its many forms. Science has also proven that marijuana can be beneficial for various ailments. Science has also proven that marijuana can be beneficial for various ailments.

Current Events and Real World Impact

What are the health benefits and risks of cannabis? Why is marijuana legal? What are the health benefits and risks of cannabis? The answers to these questions are still being studied, but the science is clear: marijuana has both health benefits and risks. These benefits and risks are important to consider when making an educated decision when it comes time to vote on the issues.

Pros:

• Medical use to relieve chronic pain
• No harm to lung capacity, can actually increase capacity
• Can be used to treat various health issues
  • Glaucoma
  • Epileptic seizures
  • Alzheimer’s
  • Parkinson’s
  • Multiple sclerosis
  • Various inflammatory bowel diseases
  • Stops the spread of cancer
  • Decrease anxiety
  • Users are known not to be obese and handle sugar better than nonusers
  • Proven to spur creativity
  • Veterans can use it to minimize suffering of PTSD

Cons:

• Addiction
• Breathing problems
• Increased heart rate
• Problems to a developing child during and after pregnancy
• Nausea and vomiting (cannabinoid hyperemesis syndrome)
• Hallucinations
• Paranoia
• Worsening of symptoms for patients with schizophrenia
• Users overall feel
• Lower life satisfaction
• Poorer mental and physical health
• More relationship problems

In the United States, ten states and the District of Columbia allow the use of marijuana recreationally, and thirty states allow the drug to be used for medical purposes. With the spreading legalization of the substance it is important to be aware of its contents and the effects they have on our bodies. As voters, it is our responsibility to be informed on the subject as many of us will be required to vote on marijuana’s legalization soon, in Indiana and our home states. Researching for ourselves and teaching friends, family, and others about the pros and cons of, and chemistry behind marijuana is crucial to making an educated decision when it comes time to vote on the issue. It is also beneficial to be well educated on the drug if you choose to use it as it becomes more widely accepted.

Future Directions

In today’s society, marijuana is becoming more commonly accepted. People of all types congregate and consume marijuana in its many forms. Science has also proven that pot can be used for medicinal purposes to relieve pain. Aside from its legalization as a medication, states around the country are legalizing the use of recreational marijuana. Below is a list of the many pros and cons that can be associated with the use of marijuana.