Dear Alice,

What is, overall, safer for your body: alcohol or marijuana?

Answer

Dear Reader,

The health impact of any drug can depend on how it's used, who's using it, how much is used, and under what circumstances. Marijuana and alcohol are no exception, so comparing their level of safety directly is difficult — each possesses the potential for unique risks and benefits. If you're curious or concerned about how your body might react to either alcohol or marijuana, it may be wise to speak with a health care provider first.

While this may come as a surprise, both marijuana and alcohol could have some beneficial effects for some users. For instance, there's some research that indicates that for some types of alcohol, a moderate amount could provide protective effects against heart disease for some folks. Similarly, for certain medical conditions such as glaucoma or for those undergoing chemotherapy, marijuana can possess therapeutic properties. These positive effects, however, aren't necessarily generalizable to everyone who use either substance, nor is it recommended to start using either to reap potential benefits without medical guidance or advice.

Before getting into more about safety, it may be helpful to understand some of the key differences between alcohol and marijuana relating to this discussion. To begin, the alcohol that can be purchased in stores is highly regulated, with a measurement of alcohol by volume printed on each container. Marijuana, on the other hand, has only more recently started to be regulated. A few states have legalized both recreational and medicinal marijuana, while others have only legalized medicinal strains. Although research thus far looks promising regarding the effects of legalizing marijuana (decrease in youth usage and increase in revenue from purchases), more research needs to be done before consistent regulation is enacted. There are also more ways to consume marijuana, such as ingesting and inhaling, while alcohol is typically consumed by ingestion via a beverage.

One caveat to this difference, however, is that synthetic cannabinoids (sometimes erroneously
referred to as “synthetic marijuana” or “fake weed”) carry no therapeutic benefit and have been associated with serious health consequences and overdosing. Its use can even be fatal. Although these drugs are advertised as containing natural ingredients, the ingredients that mimic the effects of marijuana are completely manufactured in laboratories. These new psychoactive substances (NPSs) can be addictive and are unregulated, so it’s wise to be on the lookout for products such as Black Mamba, Joker, and K2.

While both alcohol and marijuana may have some positive effects, both have the potential to be harmful. People using either with the intention of getting high or drunk (intoxicated) are more likely to experience the more commonly recognized harmful effects of these drugs.

Cognition:

- Alcohol use may contribute to memory loss, impaired judgment, and academic, relationship, or work problems, along with long-term impacts such as liver disease, heart disease, peptic ulcers, and dependency.
- Marijuana use could contribute to problems thinking clearly, memory loss, cognitive deficiencies, and dependency as well. This is primarily due to how the main chemical in marijuana, tetrahydrocannabinol (THC), changes the way the hippocampus, the part of the brain responsible for memory formation and processing, functions. Continual THC consumption may lead to increased loss of neurons in the hippocampus at a faster rate than typical aging.
- Marijuana and alcohol have both been shown to significantly reduce reaction ability, focus, and motor coordination — skills that are essential to safely operate a motor vehicle. In fact, many activities, such as playing a sport or even riding the subway, could become dangerous when drunk or high.

Physical and mental health:

- Overdosing from smoking or eating marijuana doesn’t seem to be a concern. On the flip side, consuming a lot of alcohol in a brief period of time can lead to alcohol poisoning, an emergency medical condition that can be fatal.
- Further, if smoked, marijuana may contribute to smoking-related health conditions, such as throat and lung cancer and respiratory issues. In terms of mental health, alcohol is thought to impact mental health, being associated with depression and anxiety, while marijuana’s connection to mental health concerns [3] is less clear.
- Alcohol use is the third leading cause of preventable death in the United States, while marijuana isn’t listed.

Dependence:

- There is a risk when using either substance. The risk tends to be higher for alcohol than for marijuana. However, some research suggests that marijuana use increases the likelihood of developing dependencies on other substances, such as alcohol and cigarettes, though these results are not fully understood.

Aside from direct impacts on health effects and dependency, it’s also key to point out that getting behind the wheel while intoxicated by either substance poses significant risks to the user and
others. Studies examining the effects of marijuana legalization in different states have also identified trends such as increases in violence in some areas, increases in substance abuse, and increases in deaths and suicides in those with psychotic disorders. In general, being intoxicated compromises sound judgment and may lead to unhealthy or risky decisions that a person might not make when sober.

Finally, an increasingly popular way of consuming cannabis in the past few years is through edibles, which are treats such as gummies or popcorn infused with cannabis. These edibles allow THC to be taken up directly into the body rather than inhaled through the lungs. They tend to be looked upon more favorably by consumers, since you don’t have to smoke them, and they’re not as noticeable as marijuana. As with many treats, a bit of caution is advised. Due to the production of edibles and how they’re presented, it can be difficult to understand dosage. Similar to alcohol, it’s possible to consume too much too quickly. Some people who use edibles experience a delayed reaction to the products. This can lead to consuming more edibles to make up for the delay, resulting in getting higher than they bargained for. Should you decide that edibles are your choice, you may want to do some research on recommended dosages for whichever edible you choose.

The list of facts and comparisons goes on and on, so it might be helpful to check out the other Q&As in the Go Ask Alice! Alcohol, Nicotine, and Other Drugs [4] archive for more information. In short, used moderately (in the case of alcohol) or under the direction of a health care provider (in places where medical marijuana is legal), these substances may have positive health effects. However, they may vary based on who is using either substance, how much they are using, and in what ways they’re using it. But as is often the case, it’s clear that heavy use of either drug may lead to serious health risks.

Hope this helps satiate your thirst for knowledge on these substances!

Alice!
Category: Alcohol & Other Drugs [5]
Alcohol [6]
Marijuana, Hash, & Other Cannabis [7]

Related questions

Alcohol poisoning [8]
Marijuana and driving [9]
Alcohol and liver damage [10]
Moderate marijuana use and health effects? [12]

Resources

Counseling and Psychological Services (CPS) (Morningside) [13]
Medical Services (Morningside) [14]
Mental Health Services (CUIMC) [15]