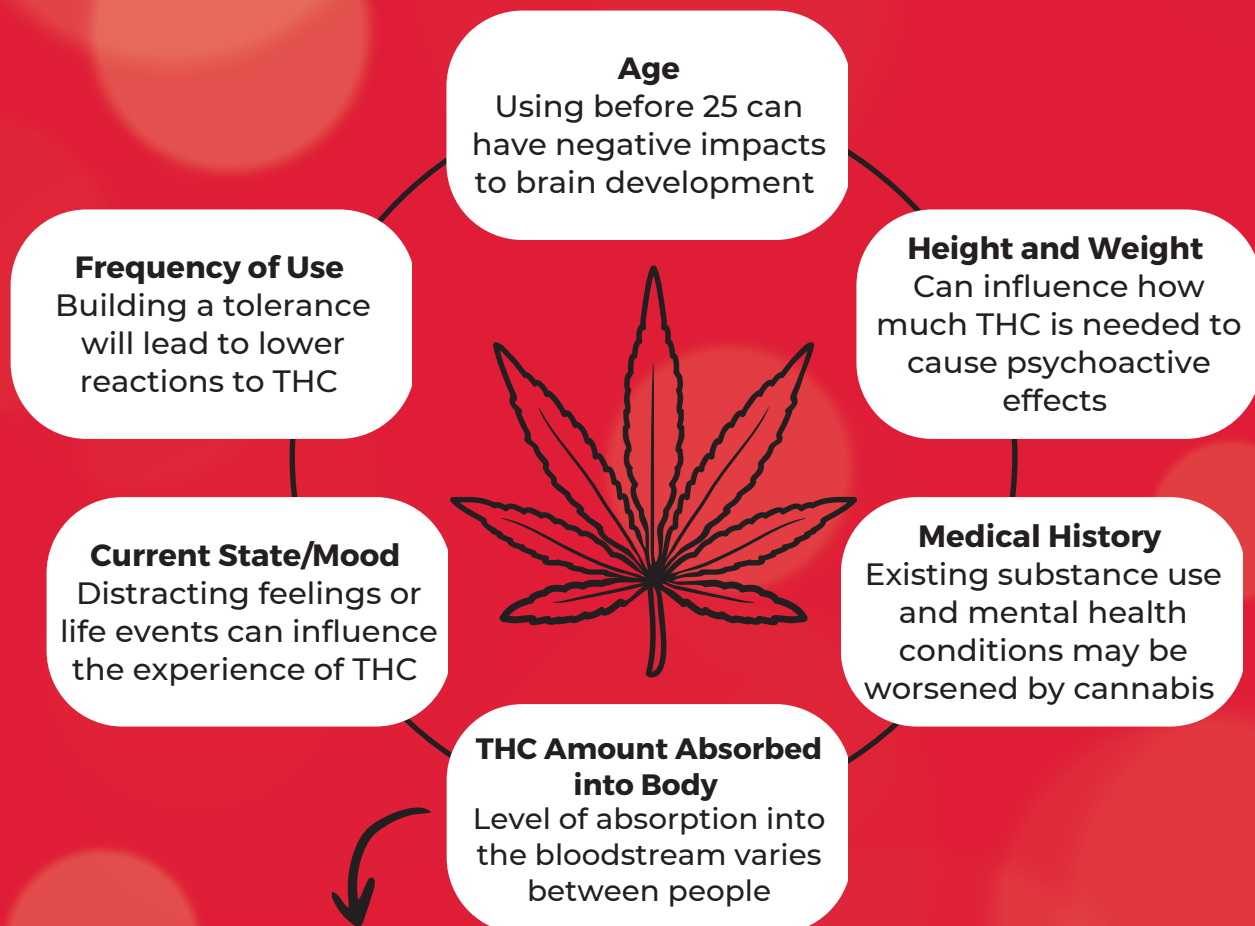




WHY DOES THC AFFECT EVERYONE DIFFERENTLY?

For some people, using cannabis can be a pleasant and euphoric experience. For others, it can be stressful and lead to unwanted negative effects. Why is this? There are numerous individual factors that can influence the effects of THC on the body.

HUMAN FACTORS



WHAT IS BIOAVAILABILITY?

In order to feel the bodily effects of any substance, including THC (the chemical in cannabis known for changing the way we think, feel and act), it must first be absorbed into the bloodstream and delivered to the targeted tissues and organs.³ **Bioavailability refers to the amount of the substance that gets absorbed for your body to use.¹**

Bioavailability is the truest measure of THC potency within products, not just milligrams per dose. Each cannabis product will have a different bioavailability based on how they are delivered into the body.

BIOAVAILABILITY OF CANNABIS PRODUCTS

SMOKING ²

THC absorption occurs within minutes but can vary depending on smoking technique.
Average bioavailability of 25-27%

VAPING ²

THC absorption occurs within minutes, but further research is needed to gain a more accurate estimate.
Average bioavailability of 36-61%

EDIBLES ²

THC absorption is slower (about 1.5-2 hours) and more variable than inhaled products
Average bioavailability of 4-12%

One serving of edible cannabis is 2.5mg. In Canada, the legal limit of THC in an edible is 10mg/package, however illicit products may contain much higher amounts of THC.

★ The higher the bioavailability, the lower quantity of product needed to feel the effects of THC. ¹

MEASURING BIOAVAILABILITY

The amount of THC is clearly labeled on legal cannabis products. However, the package will not tell you how much of that THC will actually be activated in your body. It's important to be aware of the bioavailability and educate yourself about how this product will actually affect you to prevent overconsuming. The amount of THC absorbed by the body can be influenced by multiple factors, some examples include physiological characteristics of the person, consuming cannabis with food or other substances, smoking technique, the device used to smoke.

DO A QUICK CALCULATION!

THC amount in the product (mg)
X
Bioavailability

=

The amount (mg) of
THC that can be
absorbed into the
body

Amount of THC Absorbed by the Body if Entire Product is Consumed

1 gram joint (1000mg) with 30% (300mg) THC 300mg X 0.27 (27%) bioavailability = 81 mg of THC	1 package with 2 edible pieces (9000mg) with 10mg THC 10mg X 0.12 (12%) bioavailability = 1.2 mg of THC*
1 gram vape cartridge (1000mg) with 90% (900mg) THC 900mg X 0.61 (61%) bioavailability = 549 mg of THC	*Even though the bioavailability of edibles is lower, digested THC gets converted in the liver into 11-hydroxy-THC. Its effects are 1.5-7 times more potent and last longer.⁴

**Or click here for a
Cannabis Dose
Calculator**

To reduce the health risks of cannabis, look for legal products with higher CBD (the non-psychoactive ingredient in cannabis) and lower THC (<15%) amounts. Start with a small amount and wait to see how you feel before deciding whether to use more. For inhaled products, wait 10-30 minutes. With edibles, wait 30 minutes - 2 hours.

References

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3. Weed Maps (2022) How many Milligrams of THC are in a Joint? <https://weedmaps.com/learn/products-and-how-to-consume/how-many-mg-thc-in-joint>
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