

DOSING MEDICAL CANNABIS

Understanding how to dose medical cannabis is difficult. We are not talking about a single active ingredient, but rather a complex of chemical compounds that modulate each other. Up to now, most attention in dose determination has focused on the psychoactive effect of THC. It is now obvious that the other (non-psychoactive) cannabinoids may be of greater therapeutic importance, depending on the ailment to be treated. Unfortunately, scientific research in dosing of these cannabinoids is still in its infancy.

Since the psychoactive effects of THC remain the main determinant of normal or “altered” daily functioning for most people, it is wise to continue to refer to the THC content of a strain when discussing dose of medicine. Some patients will want and need a high percentage of THC effect, while others will want and need a low percentage of THC effect. Determining the therapeutic dose of medical cannabis remains a very personal determination. The patient has the final say as to how much is enough. In addition, one person may react differently than another person to the same strain. Also keep in mind that THC in amounts in excess of 25 mg may sporadically cause THC toxicity.

In this regard, route of administration will also be an important consideration in determining dose. For example, due to liver metabolism, cooked edibles may be 3-5 times more psychoactive than inhaled cannabis.

In trying to understand dosage, there are a few helpful **rules-of-thumb**:

1. Normal adult dosage of THC for:
 - beginners:** 2.5-5 mg
 - more experienced patients:** 10-20 mg
 - heavy users:** 25 mg or more.
2. To convert percentage to milligrams:
 - move decimal one place over to the right. For example, 21.23% THC = 212.3 mg of THC per gram of cannabis. The same conversion can be done for other cannabinoids and terpenoids (e.g., 0.39% β -caryophyllene = 3.9 mg per gram of cannabis).
3. Under ideal conditions, only about 63% of the cannabinoids will get absorbed when smoked. Multiplying the milligrams of THC by 0.63 will result in a more accurate calculation of dose.

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2.5-5 mg

More Experienced Patients
10-20 mg

Heavy Users
25 mg

21.23 % = **212.3** mg

0.39 % = **3.9** mg per gram of cannabis

β -caryophyllene