

ACCESSING 0.5 to 2.0 GRAMS CBD

FRACTIONATING THE PHYTOCANNABINOIDS BY THEIR VAPORIZATION POINTS

Patients can use heat to fractionate or separate the active ingredients in cannabis by their vaporization or boiling points. In particular for those patients that need relief from pain, inflammation, muscle spasm and or anxiety during the daytime CBD or Cannabidiol is a non-psychoactive cannabinoid that once separated from THC. CBD is a uniquely potent antioxidant that can cross the blood-brain barrier in addition to CBD's ability to reduce anxiety, pain and inflammation outside the CNS (Central Nervous System). Interestingly, CBD is claimed in United States Patent 6,630,507, which notably has been assigned to the United States of America Dept of Health and Human Services. In particular note the definitions of Oxidative Associated Diseases for which CBD is ideally suited. Once convinced of the utility of this non-psychoactive phyto-cannabinoid, the challenge is how to extract it from cannabis. Of the strains in this county Northern Lights has the highest CBD concentration at 1.0%. Since a pound of cannabis weighs 454 grams, there is 4.5 grams of CBD available. Another strain, White Russian has 2.0% CBD. White Russian is reportedly sensitive to mold but if compatible with your environment, it would be a 100% improvement in CBD concentration. While some might raise their eyebrows at the low amount of CBD present per pound of cannabis, it is important to know that there is 10 to 100 times more CBD per pound of cannabis than Vit C per pound of fresh oranges, for oranges 3 months old it would require 20 to 200 times as much raw material to produce an equivalent 500 mg daily dose.

An article in The Journal of Autoimmunity showed that at particular mouse strain that develops diabetes 86% of the time and is the animal model on which oral and injectable anti-diabetic medications are tested, when given 5 mg/kg body weight per day, 60% DID NOT GO ON TO DEVELOP DIABETES. This would have to be the greatest demonstration of an 'ounce' of prevention is worth a pound of cure. There was poster presented at the International Cannabinoid Research Society meeting this last summer that used a dose of 10 mg/ kg which would be equivalent to 1,000 mg / day for 190 pound patient.

Specifically, since Delta 9 THC vaporizes at 157 degrees centigrade and CBD vaporizes at 188 degrees centigrade, this difference can be used to separate these components. Given the predominance of THC (94% of all cannabinoids present) it is necessary to lower the THC content before collecting the CBD or the level of intoxication is so prohibitive as to prevent access to an adequate amount of CBD. The most efficient approach is to use a variable temperature heat gun. This can be calibrated the heat gun to 166 degree centigrade with the Fluke Digital Thermometer available in the waiting room. At this temperature THC is converted into a vapor and removed. Now you have pre-heated low THC cannabis which can be placed in a collection vaporizer such as a Volcano set at the 6 position or if you have a digital at 190 degrees centigrade to convert CBD from a liquid to a vapor. If there is too much residual THC effect you can raise the preheat temperature to 176 degrees centigrade because a few strains do have some Delta 8 THC, which vaporizes at 175 degrees compared to Delta 9, which vaporizes at 157 degrees centigrade. Please note that I carry a Fluke digital thermometer with which you can calibrate your variable temperature heat gun.

Alternatively the high CBD cannabis created by stripping out the THC can be used by any means if you do have access to a collecting vaporizer. The amount of THC removed is a function of how finely the cannabis was ground to increase the surface area and how long it is heated. It requires a shift in thinking in that there can be powerful medical benefits without the familiar THC effect, for many older patients this can be comforting information. Once again to develop an appreciation for the breadth of medical utility attributed to CBD please review the patent currently held by the United States a copy of which is available at www.LeavesOfGrass.info.