



ORAL CANNABIS History & Science

Over its last 10,000 years as a medicine, cannabis has nearly always been taken orally. In fact, cannabis has only been smoked since the 17th century. Cannabis flowers were rarely smoked until the 20th century; prior to that only cannabis resin was smoked. Nearly the entire history of medical cannabis has been centered on its use as an oral medication.

One reason that oral cannabis medications fell out of favor may be because cannabis was outlawed before science discovered how cannabis works. Cannabis was removed from the US Pharmacopeia in 1942, but THC wasn't discovered until 1964, and the cannabinoid receptors within the human body with which cannabis interacts weren't discovered until 1990! In fact, some scientists believe that there are more types of cannabinoid receptors that haven't even been discovered.

Individuals typically react differently to the same oral dose of medical cannabis. A precise oral dose of 25mg of THC given to twenty people can produce blood levels ranging from 2 to 11ng of THC. On top of this variation in cannabis absorption, is the different sensitivity of each person's cannabinoid receptors (tolerance level). Add these two together and it becomes quite apparent why oral cannabis dosage must be tuned to the individual patient's needs. And it completely destroys the myth that there is an "X" for dosage (2x, 5x, etc.) that could possibly work for all medical cannabis patients.

The reason that oral cannabis feels different than smoked or vaporized cannabis, is because the body metabolizes oral cannabis into a different drug. The liver metabolizes delta-9-THC into delta-11-hydroxy THC, which is more potent than delta-9-THC.

Fresh, raw cannabis is not psychoactive, because the THC on raw cannabis exists in the form of an acid: THCA. Heating THCA, by cooking, vaping or smoking frees a carbon dioxide molecule and the THCA is converted to THC, which is highly psychoactive. For years, it was thought that this conversion had to take place to make THC medicinally active, but there is increasing evidence that THCA may be medicinally useful, just not psychoactive.

Just as different individuals respond to different dosages of oral cannabis, different medical conditions respond to specific ranges of dose. This means that patients should dose based on their individual sensitivity to oral cannabis, and then adjust that dose for the medical condition that they are addressing. Some conditions such as chronic migraine may benefit from very small, sub-psychoactive oral doses taken daily like a supplement. Appetite stimulation is another condition for which small doses seem to be most effective. Note that the "munchies" typically strike a few hours after cannabis ingestion. This is because the body has metabolized off most of the dose. A small initial dose would be more effective for appetite stimulation. Pain has a sweet spot of dosage. Studies show that if the sweet spot is exceeded, the patient will actually feel more pain. Nausea from chemotherapy typically require the highest doses. MS patients often require high doses as the disease progresses.