

## **Medical Cannabis and Cannabidiol**

### **What is medical cannabis?**

Cannabis, commonly known as marijuana, is a group of plants that produce biologically active compounds. There are 2 main strains of the Cannabis plant used for recreational and medicinal purposes – sativa and indica. Cannabis can be used to help manage symptoms like pain, fatigue, and sleep disturbance in chronic conditions like Spondyloarthritis (SpA). Medical cannabis specifically refers to the use of cannabis for medicinal purposes. It is made from sativa, indica or a mixture of both strains so that it contains specific amounts of cannabinoid molecules like tetrahydrocannabinol (THC) and cannabidiol (CBD). They can be used whole or in extract form. Cannabis has a long history of use as a medication all over the world and in many cultures. In the United States, CBD is primarily derived from the hemp plant, which is closely related to the Cannabis plant, and which contains much lower concentrations of THC (less than 0.3%) than the cannabis plant.

THC has psychoactive (mind-altering) and pain-relieving properties. It is legal in Canada and for recreational and medicinal use in Alaska, California, Colorado, Maine, Massachusetts, Michigan, Nevada, Oregon, Vermont, Washington State and Washington D.C. THC is legal for medicinal use only, meaning with a medical marijuana card or doctor's prescription, in Arizona, Arkansas, Connecticut, Delaware, Florida, Hawaii, Illinois, Louisiana, Maryland, Minnesota, Missouri, Montana, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, Utah and West Virginia. Remember, because THC and CBD are not legal under federal law, it is illegal to possess them on U.S. government property even in states or the District of Columbia where they are legal.

CBD may also reduce pain while having no known psychoactive side-effects. The strongest scientific evidence for CBD effectiveness is in treating severe childhood epilepsy syndromes which may not respond to antiseizure medications. The FDA has approved a CBD-containing medication for these conditions called Epidiolex.

CBD oil is legal in all but three states (Idaho, Nebraska, and South Dakota). Unlike THC, the central nervous system effects of CBD are not associated with a "high", and the likelihood of dependence (addiction) is very low, however, some patients may experience drowsiness with CBD.

For medicinal purposes, CBD is used as a cream, as pills and as CBD oil or spray. The problem with taking CBD orally, either in pills or in food items, is that the gastrointestinal absorption is very irregular, in other words, you do not know how much you are actually taking in. Similarly, with the CBD creams and ointments applied to the skin, it is not clear

how much is actually being absorbed. CBD sprays are also used that can be inhaled and have a much higher absorption rate, however, the sprays have significant respiratory side effects and are not recommended. Smoking cannabis is not recommended. The most reliable and safest way to use CBD is CBD oil used as drops under the tongue. CBD is not approved or regulated by the U.S. Food and Drug Administration, therefore there is not good quality control on much of what is available commercially. Shops have been opened all over the country selling CBD (and where legal) THC containing products. However, there may be no assurance that you are getting what you are paying for. When you are buying CBD oil product, it is highly recommended that you check if it has a Certificate of Analysis (COA), which is a document from an accredited laboratory that shows the quantity of various cannabinoids in a product. If what you are considering buying does not have this, you should look elsewhere. Also remember that using CBD oil will cause you to have a positive urine drug screen for marijuana, and if your job requires drug screening, particularly if you have a Federal job (THC and CBD are NOT legal federally), this may cause problems. If you are using CBD oil and have a job that requires periodic drug screens you should clear this with your employer. The World Health Organization issued a detailed report of the pharmacology, safety and effectiveness of CBD in November 2017:

[https://www.who.int/medicines/access/controlled-substances/5.2\\_CBD.pdf](https://www.who.int/medicines/access/controlled-substances/5.2_CBD.pdf)).

On the other hand, cannabis derived from the cannabis plant (herbal cannabis), is generally not pharmaceutically manufactured and is available as whole dried plant, or plant extracts in oil or capsule format. These can be ingested or inhaled. To date, research and clinical trials of herbal cannabis are very limited and, as a result, both positive and negative effects have not been clearly determined.

THC and CBD have been recommended for a variety of medical conditions, including some for which there is little evidence of effectiveness (including cancer and the inflammation associated with arthritis) but in fact much more study is necessary before its best and most effective use can be established.

Although CBD is generally regarded as safe to use, there are some medication interactions that can occur with its concomitant administration. Most notably certain antihypertensive and anticoagulants. It is therefore important to discuss CBD and THC products with your physician prior to beginning their use.

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