

April 2022 Health Notes Cannabis, Cannabinoids (CBD) and Medication

“Cannabis” refers to all products derived from the plant *Cannabis sativa*. *Cannabis sativa* contains substantial amounts of tetrahydrocannabinol (THC), the substance primarily responsible for the effects on a person’s mental state. Some cannabis plants contain very little THC. Under U.S. law, these plants are considered “industrial hemp” rather than marijuana. The FDA has not approved the cannabis plant for any medical uses. But it has approved several drugs that contain individual cannabinoids such as CBD. CBD is readily obtainable in most parts of the United States, though its exact legal status has been in flux. All 50 states have laws legalizing CBD with varying degrees of restriction. In December 2015, the FDA eased the regulatory requirements to allow researchers to conduct CBD trials. In 2018, the Farm Bill made hemp legal in the United States, making it impossible to keep CBD illegal. This is like making oranges legal but keeping orange juice illegal.

Approved medical uses of CBD include Epidiolex. It contains a purified form of CBD derived from cannabis. It was approved for treatment of seizures associated with Lennox-Gastaut syndrome or Dravet syndrome, rare/severe forms of epilepsy. FDA approved Marinol and Syndros. They contain dronabinol (synthetic THC) and Cesamet (contains nabilone, a synthetic substance similar to THC). Dronabinol and nabilone are used to treat nausea and vomiting caused by chemotherapy. Dronabinol is used to treat loss of appetite and weight loss in people with HIV/AIDS.

Are cannabis and cannabinoids helpful in treating health conditions?

Pain: past reviews of studies assessing chronic pain generally showed improvements in pain measures in people taking cannabinoids but no statistical significance. The number of patients who reported at least a 30 percent reduction in pain was greater with cannabinoids than with placebo. Chronic pain. Further human studies are needed to substantiate claims that CBD helps control pain. One animal study from the European Journal of Pain suggests CBD, when applied to the skin, could help lower pain and inflammation due to arthritis.

Glaucoma: Early reports suggested using CBD (and THC) to treat glaucoma. Currently, limitations are suggested because cannabis-based products only affect pressure in the eye for a brief period of time. A recent animal study showed that CBD, applied directly to the eye, may cause an undesirable increase in pressure in the eye.

Nausea and vomiting during chemotherapy: studies on the use of cannabinoids for treating nausea and vomiting showed they were more helpful than a placebo and similar in effectiveness to other medicines used for this purpose. More people had side effects such as dizziness or sleepiness when taking the cannabinoid medicines. Currently, other drugs are used.

Addiction. Some studies in humans have shown CBD can help lower cravings for tobacco and heroin under certain conditions. Animal models of addiction suggest it may help lessen cravings for alcohol, cannabis, opiates, and stimulants.

CBD comes in many forms, including oils, extracts, capsules, patches, vapes, and topical preparations for use on skin. CBD patch or a tincture or spray that is designed to be placed under the tongue allows CBD to directly enter the bloodstream.

Is CBD safe? Side effects of CBD include nausea, fatigue, and irritability. CBD can increase the level of blood thinning and other medicines in the blood by competing for the liver enzymes that break down these drugs. Grapefruit has a similar effect with certain medicines. A significant safety concern with CBD is that it is primarily marketed and sold as a supplement, not a medication. Recall that the FDA does not regulate the safety and purity of supplements. It is buyer beware. Buyers cannot be

sure that the product has the active ingredients at the dose listed on the label. Products may contain other unknown elements. Also, it has not been determined what the most effective therapeutic dose of CBD is for any particular medical condition.

Sources: <https://www.nccih.nih.gov/health/cannabis-marijuana-and-cannabinoids-what-you-need-to-know> <https://www.health.harvard.edu/blog/cannabidiol-cbd-what-we-know-and-what-we-dont-2018082414476>