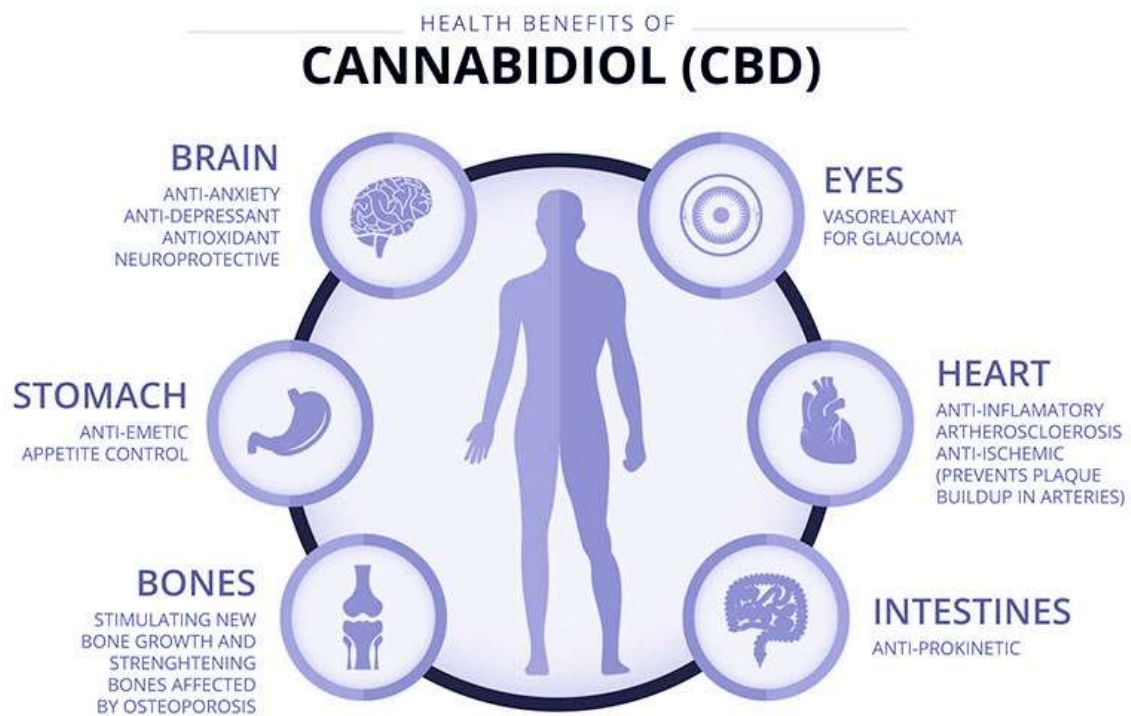




Apexxx CBD Learning centre



Common usage & doseages

Even with the recent wave of countries and states legalising medical marijuana, many physicians/doctors are still reluctant to prescribe cannabinoids. Whats the reason behind this you ask? This is because they are not sure what dosages to prescribe. After all, most medical schools wouldn't have covered Cannabidiol in their pharmacology courses. Medical scientists are only just developing dosing schedules for medical marijuana, medicinal hemp and their extracts, including CBD.



CBD-rich hemp oil comes in various concentrations and forms, including liquid hemp oil, hemp oil as a thick paste, oil in capsules, sublingual tincture drops or sprays. As well as salves for topical use, edibles as in candy or gum and CBD vapor from vaporizers similar to e-cigarettes. The easiest way for your body to process CBD is using nano technology. Nano CBD technology allows your receptors to immediately uptake the benefits of CBD; This is more often used in cases where instant relief is needed e.g seizures, fits, palpitations, anxiety attacks etc. Other forms of CBD can also reap health benefits on a long term basis. This is the main factor when pricing CBD. Nano technology is far more superior and thus prices are slightly higher.

What you will find on this page is meant to be a guideline, a starting point of reference. The fact remains that everyone is different and will react differently to their CBD dosage. As serving size or dosage of CBD differs for each person, it is best to start small and gradually increase until you experience the desired result.

CBD oil brands create a lot of confusion for consumers because they all have different standards. Many of them recommend way too much as a “serving” and others recommend too little. Because of this, Apexxx CBD created a standard serving to make things simple:



Standard serving is 25mg of CBD taken twice a day.

It is also recommended that you try increasing dosage every 3-4 weeks by 25mg until desired symptom relief. And to decrease amount of CBD with any worsening of symptoms.

Common doseages in America

To increase appetite in cancer patients: 2.5 milligrams of THC by mouth, with or without 1 mg of CBD for six weeks

To treat chronic pain: 2.5-20 mg CBD by mouth for an average of 25 days.

To treat epilepsy: 200-300 mg of CBD by mouth daily.



To treat movement problems associated with Huntington's disease: 10 mg per Kg of CBD by mouth daily for six weeks.

To treat sleep disorders: 40-160 mg CBD by mouth.

To treat multiple sclerosis symptoms: Cannabis plant extracts containing 2.5-120 milligrams of a THC-CBD combination by mouth daily for 2-15 weeks. A mouth spray might contain 2.7 milligrams of THC and 2.5 milligrams of CBD at doses of 2.5-120 milligram for up to eight weeks. Patients typically use eight sprays within any three hours, with a maximum of 48 sprays in any 24-hour period.

To treat schizophrenia: 40-1,280 mg CBD by mouth daily.

To treat glaucoma: a single CBD dose of 20-40 mg under the tongue. Doses greater than 40 mg may actually increase eye pressure.

According to CannLabs, the U.S.A's top full-service testing lab for cannabis products, there is no established lethal CBD dose. Consumers should read product inserts carefully to ensure they are taking the right amount of CBD, and talk to the prescribing physician about any questions or concerns.





An introduction to CBD

In the 1940s, a group of researchers at the University of Illinois were able to isolate a primary chemical compound in the cannabis plant for the very first time. The chemical compound that was isolated is known as cannabidiol but today, we more commonly know this particular compound by its abbreviation, which is CBD.

Although the isolation of this cannabis chemical compound was a breakthrough in natural medicine, the researchers behind the discovery classified the cannabidiol compound as toxic. At the time of the discovery they did not have enough significant evidence behind its medicinal properties.

As noted, cannabidiol is one of the primary chemical compounds that make up the cannabis plant. In fact, approximately 40% of cannabis extracts consists of Cannabidiol. In addition to cannabidiol, tetrahydrocannabinol, more commonly known as THC, is another primary chemical compound. It is the cannabidiol content of the cannabis plant that possesses numerous medicinal properties, which is now used to treat* a variety of health concerns and even some of the more common ailments that people complain about.

The History Of Cannabidiol



While we have already talked about the first isolation of cannabidiol in the cannabis plant, we should take a deeper look at the history of this particularly famous compound of cannabis. We mentioned that



the chemical compound was first isolated in the 1940s by the University of Illinois, but at the time, cannabidiol was classified as toxic due to inadequate evidence to prove otherwise.

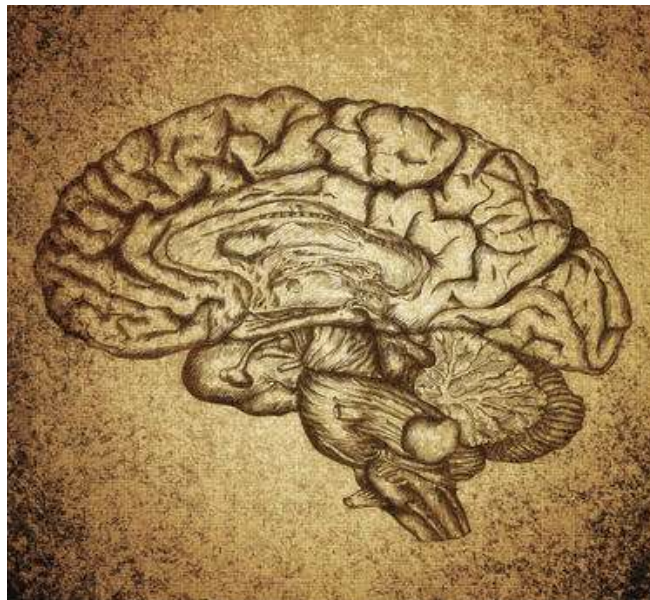
After being discovered, there was no particular interest in the cannabidiol compound for at least 20 years. Later on, in 1963 the Hebrew University of Jerusalem took interest in finding out more about what cannabidiol really is, how it works and what it does to the body.

The research was led by Raphael Mechoulam, a chemist that attended the Hebrew University of Jerusalem. Raphael went on to do more research and was able to identify the structure of the cannabidiol chemical compound in the cannabis plant. Raphael and his team spent approximately one year analysing and studying the cannabis plant, specifically the cannabidiol compound that was isolated by the University of Illinois.

During this time, they were also able to isolate the other major compound in cannabis, THC. The scientists were able to synthesis both of these compounds by the end of the study period

While the isolation of cannabidiol brought forward a breakthrough in the research on cannabis, this particular study sparked a lot of interest in this field. From here, a lot of researchers started to investigate the potential effects that cannabidiol has on the human body. A team of scientists in Brazil started a study to identify the potential benefits of cannabidiol for patients with epilepsy in 1973.

They were able to prove that the chemical compound has the ability to assist with the treatment of convulsions that are caused by epilepsy. The study started out by looking the effects of cannabidiol in animal subjects.



One year later, it was discovered that cannabidiol has a similar function to anxiolytic, which can assist with treating the symptoms that epilepsy causes. After scientists identified the potential benefits cannabidiol has for patients that suffered from epilepsy, further research was conducted to identify other benefits that cannabidiol may have for similar conditions and on other areas of human health.

After the discovery of the endocannabinoid system, research in the area of cannabidiol and its potential health benefits increased significantly. By the end of the 19th century, researchers had proven that cannabidiol has the ability to act as a cellular antioxidant and that it had several neuro



protective functions that are beneficial for the user's brain health. This also opened up new doors toward potentially using cannabidiol to treat* and prevent certain neurological diseases, such as Parkinson's disease and Alzheimer's disease.

At the same time, GW Pharmaceuticals, a company that produced different types of medicine, obtained a license to legally produce medicine that contained both cannabidiol and tetrahydrocannabinol, which was developed to assist with the treatment of spasms, as well as pain amongst patients who had been diagnosed with Multiple Sclerosis.

Early in the 20th century, researchers discovered that cannabidiol is not only effective for treating neurological conditions and for reducing* pain, but is also a powerful substance to use for treating certain kinds of autoimmune diseases

Research on cannabidiol's effect on autoimmune diseases begun as a result of the already-knowing effects of this particular chemical on the immune system of the human body, as well as its ability to provide anti-inflammatory effects in the body.

The first studies focused on treating the symptoms of rheumatoid arthritis with cannabidiol, but later studies started to focus on more autoimmune diseases and later on, even other diseases that are not classified as "autoimmune", such as cancer and cardiovascular disease.

How Are CBD Used Today?

After years of research on the cannabidiol compounds found in the cannabis plant, the compounds are now infused into oils and used to treat* quite a large number of health concerns. There are many different uses for CBD oil today and the oil is used by millions of people.

Even though many uses for the oil has been discovered, research is also constantly being conducted to identify further potential health effects of CBD oil and to provide more accurate information on the existing information that is available regarding the use and benefits.

Cannabidiol is most popular for its ability to act as a pain reliever, as well as its anti-inflammatory properties. Since over-the-counter drugs and those that can be purchased with a prescription from a doctor can cause many side-effects, such as an upset stomach and even damage to the liver in some cases, the use of cannabidiol is considered more beneficial due to the lower risk of side-effects when compared to using over-the-counter drugs and prescription drugs for pain and inflammation.

The chemical compound is also used in an oil form to treat* a variety of illnesses today, with epilepsy, as mentioned earlier, being one of the earliest disorders treated CBD.

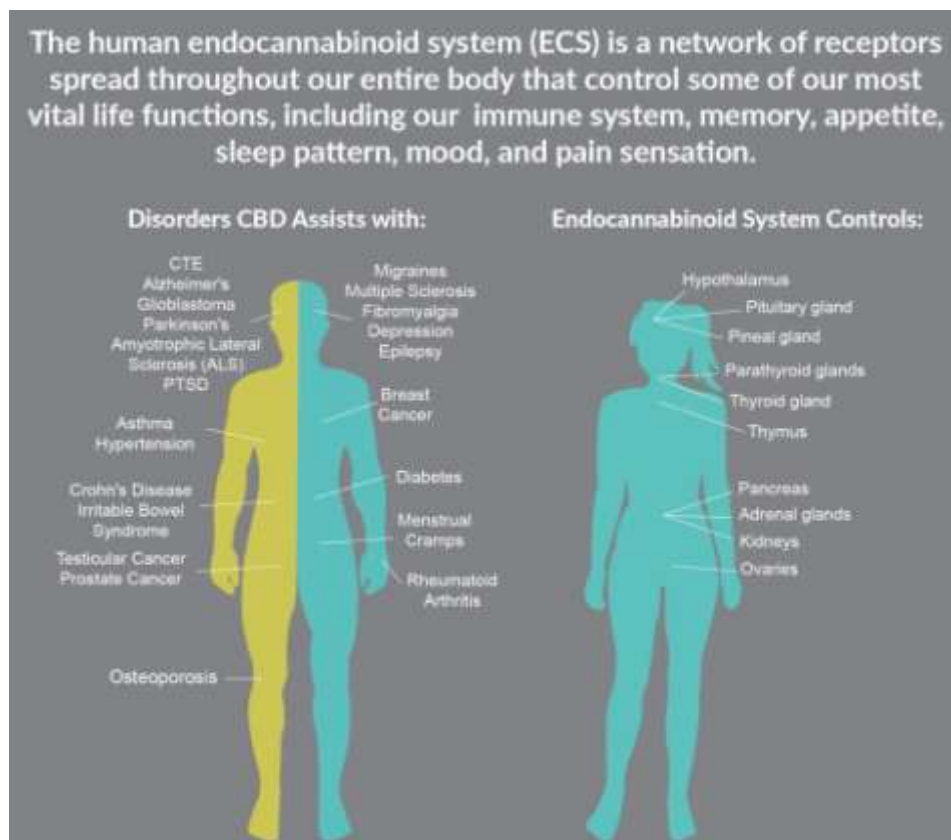
Anxiety disorders are also treated with CBD oil today.

Furthermore, some people use CBD oil to help them overcome smoking and drug addictions – the oil may be of assistance when used to reduce* the withdrawal symptoms that may develop when a person stops smoking or stops using recreational drugs.



Many other health concerns are treated with cannabidiol oil today, including type 1 diabetes, acne, Alzheimer's disease and even cancer.

How Does Cannabidiol Work?



Before we look at how cannabidiol works, we first need to discuss the particular system in the human body that is affected by this chemical compound – the endocannabinoid system. The endocannabinoid system is found in the human body, as well as the bodies of animals.

Dr. Ralph Mechoulam, a researcher in Israel, first identified this system in the human body in the 1990s. The same researcher was behind the discovery of tetrahydrocannabinol in the cannabis plant. Ralph found that the endocannabinoid system in the human body contained numerous receptors that only reacts toward the presence of cannabinoids. The two particular cannabinoids that the endocannabinoid system reacted to best included cannabidiol and tetrahydrocannabinol.

Further research is currently being conducted to identify specifically how the system reacts to two other particular cannabinoids, including cannabigerol and cannabinol. The human body naturally produces endocannabinoids, to which the primary receptors of the endocannabinoid system respond to. In addition to the naturally produced endocannabinoids, it was also discovered that the



endocannabinoid system responds to phytocannabinoids, which include the ones previously mentioned, which can be obtained from plant sources.

The two particular receptors that the scientists discovered to be most important for reactions to cannabidiol and tetrahydrocannabinol includes:

- Cannabinoid 1, also simply called CB1.
- Cannabinoid 2, also simply called CB2.

News Medical explains that these cannabinoid receptors are mostly found within the central nervous system. Cannabinoid 1 receptors are more abundant than Cannabinoid 2 receptors. These receptors are found in large numbers within the brain. They inhabit the nerve cells that are found in the spinal cord and the brain. Some of the body's peripheral organs also contain Cannabinoid 1 receptors.

In addition to these, tissues in the body also contain Cannabinoid 1 receptors, such as white blood cells, certain parts of the human body's reproductive system and the spleen. Scientists have also discovered some Cannabinoid 1 receptors in the urinary tract and the gastrointestinal tract of the human body.

Cannabinoid 2 receptors are not as prevalent in the human body as Cannabinoid 1 receptors, but is still of significant importance. These receptors are found within white blood cells. There are also some Cannabinoid 2 receptors in the spleen and the tonsils. While Cannabinoid 1 receptors are also found within white blood cells, there is a much larger quantity of Cannabinoid 2 receptors to be found in white blood cells. The receptors in the immune system plays a crucial part in regulating the release of cytokine.

According to scientists, the endocannabinoid system has a vital role to play in many bodily functions. They continue to report that this particular system has an effect on our mood and memory, as well as our motor control.

The system is involved in the function of the immune system and the reproductive system, and also plays a part in the perception of pain; Bone development, sleep and appetite are also particular functions in the human body that are affected by the endocannabinoid system.