

# **CBD Oil – A Comprehensive Guide To Cannabidiol**

Cannabis, marijuana, weed, pot – no matter what you call it – it contains CBD. Although it won't get you high, this plant compound can take your health to the next level.

## **What is CBD and CBD Oil?**

Cannabidiol, commonly referred to as CBD, is one of over 60 compounds called cannabinoids that are most commonly found in the cannabis plant. Most cannabis plants contain less than 4% CBD, so the only way to get a good amount of this cannabinoid is from pure CBD oil. Most CBD oil is extracted from industrial hemp, which usually has a higher CBD content than marijuana. After extraction, the CBD is added to a carrier oil and sold at many different potencies to be used in a variety of different ways.

However, before we go deeper into the uses of CBD oil, we need a better understanding of what sets it apart from other cannabinoids. For example, you might already be familiar with another popular cannabinoid found in cannabis called THC. THC is infamous for being the reason why we get high when we smoke or consume “edibles,” but it also has a non-psychoactive form called THCA that is present when cannabis is in its raw form. CBD, on the other hand, plays many different roles in the body and never gets you high regardless of how much you smoke it.

## **The Difference Between THCA, THC, and CBD**

Industrial hemp (a popular variety of the cannabis plant) tests out at less than 0.3% THC. THC rich cannabis in its raw form is non-psychoactive. “Raw” THC is actually THCA. What we

call “Marijuana” is cannabis that tests out with THCA between 5 and 35%.

THCA is beginning to demonstrate immense therapeutic qualities. Some people add THCA-rich cannabis leaves and flowers to their salads and smoothies, others consume with a tincture.

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THCA becomes the psychoactive THC through a chemical process called decarboxylation, which occurs with heat and time. The delivery methods for THC are smoking, vaporizing, and consuming “edibles.” Drying and curing cannabis will cause some decarboxylation to occur. Cured cannabis flowers will often test for small amounts of THC along with THCA. THC is fat soluble (and not water soluble). THC infused cooking, from pesto to chocolate, is made by heating ground up THCA rich cannabis with oil at 220 degrees Fahrenheit (104 Celsius) for 30 to 45 minutes. THC rich treats are commonly referred to as “edibles,” and they typically have massive amounts of sugar btw!

## **THCA’s Therapeutic Properties**

THCA is the most abundant cannabinoid in a plant, depending on the time at when it is tested. THCA has been seen to have many benefits in a limited number of studies. Studies have found THCA to be anti-inflammatory, neuro-protective, anti-emetic, and anti-proliferative. There is plenty more this compound can do, and there are other cannabinoids, like the many varieties of terpenes and THCV, all proving to have some similar and some very different effects, and many of which are proving to be medical viable in very different ways.

The science on all of these other cannabinoids is in its infancy. The cannabinoids that we know most about, however, are CBD and THC.

# The Relationship Between CBD and THC

In particular, the effect that CBD can have when ingested with THC has garnered significant interest. What research has found so far is fascinating.

For example, when active THC is ingested alone, it increases pulse rate, disturbs time tasks, and induces strong psychological reactions in some people, but when CBD is ingested with the THC, it blocks most of these adverse effects.

CBD also has been found to decrease the anxiety component of a THC "high" in such a way that the study subjects reported more pleasurable effects when CBD was included with the THC. This evidence suggests that it is better for our health to have a higher percentage of CBD in or with our cannabis if we decide to ingest the plant in any form.

## The Dark Side of Cannabis

It is an even better idea, however, to rarely consume THC unless you have a medical condition that has been proven to be helped by a combination of THC and CBD. When we look through the research, you will see why I am making such a cautionary statement about THC.

In a scientific paper on the current state of cannabinoid research, the authors found that the current trend for preferring higher THC content in cannabis carries significant health risks, particularly to those who are susceptible to its harmful effects. For example, Morgan and colleagues carried out a study on 120 current cannabis users, which included 66 daily and 54 recreational users, whose hair analyses revealed their THC and CBD amounts. The study found that higher THC levels in the hair of the daily users were associated with

increased depression and anxiety, as well as weaker performance on memory tasks. On the other hand, higher CBD levels in the hair were associated with lower psychosis-like symptoms and better memory.

Epidemiological studies also point toward an association between the use of cannabis and the increased risk of developing a psychotic illness, in a dose-dependent manner. In other words, what this study found is that you are more likely to develop a mental disorder as your THC consumption increases. On top of that, they also found that increased cannabis use is often accompanied by symptoms of depression and anxiety.

However, this is only epidemiological evidence, so it should only be used to inform further experimentation on THC's effects. The truth is that only a small minority develop a full-blown psychotic illness in the form of schizophrenia or bipolar disorder. The majority of cannabis users, ranging from 15% to 50%, will only experience transient psychotic symptoms of brief duration, for a couple of hours to up to a week, and will usually recover without requiring any intervention.

These "transient psychotic symptoms" may be experienced in the form of an auditory hallucination like hearing voices or by having increased anxiety or paranoia for hours to days after the THC high wears off.

Whether you experience unpleasant side effects from THC use or not, it is best for anyone who has a family history of psychosis or anyone who has had symptoms of psychosis in the past to avoid THC altogether. On the other hand, CBD rarely causes side effects, and when it does, they are relatively minor.

# The Side Effects of CBD oil

CBD oil is well tolerated by most people, but there are some potential side effects – especially at higher doses. According to a review in *Cannabis and Cannabinoid Research*, the most common side effects include:

- tiredness
- diarrhea
- changes in appetite
- weight gain or weight loss

Another review of the potential side effects in humans found that CBD rarely causes issues with dosages of up to 1500 mg/day (orally). The good news is that most people won't even need to take half that dose to reap the benefits of CBD.

# The Benefits of CBD Oil

Although the research regarding CBD's effects on the body is in its early stages, it has already been found to affect the body in various ways.

Preliminary evidence suggests that CBD oil:

- modulates the immune system
- reduces inflammation
- decreases seizures
- relieves muscle tension and stress
- improves mental health
- protects brain cells from damage and inflammation
- prevents nausea and vomiting
- regulates bowel motility
- lowers heart rate
- decreases blood pressure
- has anti-cancer properties against gliomas and lung cancer

To follow up on these promising effects, researchers conducted more studies. As a result, we now have relatively convincing data that backs up these following benefits of CBD oil:

## **Anxiety Reduction**

Both animal and human studies indicate that CBD has anti-anxiety properties. In fact, in a recent double-blind study carried out on patients with generalized social anxiety disorder, it was found that CBD significantly reduced their anxiety.

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## **Anti-psychotic effects**

As we discovered earlier, CBD can actually decrease the psychotic effects that THC can have on the body. Without the presence of THC, CBD can further help reduce symptoms of psychosis.

## **Decreased Inflammation**

CBD has potent anti-inflammatory properties throughout the body and brain. In fact, it is such a powerful inflammation reducing agent that one study suggests that CBD may decrease inflammation too much in some people. This could put the body at a higher risk of illness and infection. However, when CBD is used at lower doses or in people who have chronic inflammation, it can be highly effective at improving immune system function.

## **Cancer Growth Inhibitor**

CBD has been found to slow the growth of lung cancer, as well as trigger apoptosis (cell death) in brain and spinal cord tumors. This makes CBD oil a promising supplementary treatment for certain types of cancer. Hopefully, it will garner enough

evidence to become the first line of treatment for cancer.

## **Helps Reduce Seizures**

Both THC and CBD have been found to reduce the severity and frequency of seizures, but CBD is clearly a better option. This because it has shown better results than THC, and it doesn't seem to negatively influence the brain in any way.

## **Arthritis Pain Reduction**

A study in the *European Journal of Pain* used an animal model to see if CBD could help people with arthritis manage their pain. Researchers applied a topical gel containing CBD to rats with arthritis for four days.

Their research found a significant drop in inflammation and signs of pain, without additional side effects. This indicates that people using CBD oil for arthritis may find relief from their pain, but more human studies need to be done to confirm these findings.

## **Improved Quality of Life for People with Multiple Sclerosis**

Multiple sclerosis is an autoimmune disease that affects the entire body through the nerves and brain.

Muscle spasms are one of the most common symptoms of Multiple Sclerosis. Studies have found that short-term use of CBD oil can reduce the spasms.

The results are modest, but many people reported a reduction in symptoms. More human studies are needed to verify these results.

## **Pain Relief**

CBD can also be used for general chronic pain. After compiling the results of dozens of trials and studies, researchers concluded that there is substantial evidence that cannabis is an effective treatment for chronic pain in adults.

**Related: *What Causes Chronic Inflammation, and How To Stop It For Good***

## **Improved Sleep Quality**

Research has found CBD to be more effective than a common insomnia drug at improving the length of sleep. This finding suggests that CBD can be helpful for people with sleep disorders like insomnia.

## **How CBD Works – The Endocannabinoid System**

At this point, you may be thinking that CBD sounds too good to be true. How could a random little plant compound have all of these seemingly unrelated effects on the body? Well – you can thank your endocannabinoid system for that.

Each one of us has an endocannabinoid system that receives and translates signals it receives from cannabinoids in the body. Unfortunately for many cannabis consumers out there, we do not have this system because we've evolved to smoke weed every day. The purpose of the endocannabinoid system is to regulate various systems throughout your body with the cannabinoids that your body manufactures.

Even though our knowledge about the role of the endocannabinoid system is still evolving, the available evidence indicates that this system has multiple regulatory roles in neuronal, vascular, metabolic, immune and reproductive systems. Because of its involvement these

systems, endocannabinoids affect functions such as cognition, memory, motor movements, pain perception, inflammation, body weight regulation, cardiovascular health, stress response, appetite, and sleep.

## **How CBD and THC Interact with Our Endocannabinoid System**

Cannabinoids from plants like THC and CBD have such a massive impact on our bodies because they mimic the cannabinoids that we make inside our bodies. For example, when we get “high” from THC it is because that cannabinoid is interacting directly with cannabinoid receptors in our cells that end up triggering the experience of feeling “high.”

As you might have already assumed, CBD interacts a bit differently with our endocannabinoid system than THC. Instead of acting directly on the receptors, CBD activates or inhibits other compounds in the endocannabinoid system.

For example, CBD stops the body from absorbing anandamide, an endocannabinoid in our body that is associated with regulating pain. Increased levels of anandamide in the bloodstream may reduce the amount of pain a person feels.

The distribution of the endocannabinoid system in the brain is also something to take note of. If you look closely at the brain cells in areas of the brain that go awry in various mental disorders, you will find endocannabinoid receptors. This points us in the direction of a mechanism that explains why THC is linked with psychosis and why CBD mitigates these effects. Perhaps CBD prevents THC or our own cannabinoids from triggering mental health issues.

This is a fascinating hypothesis, but it is beyond the scope of this article. Instead, let's take our discussion to a practical place to find out what dose we need to experience

the benefits of CBD.

## How Much CBD Oil Should You Take?

Below are some general CBD dosage guidelines:

- General Health: start small at 2.5-15mg CBD by mouth daily and increase until you feel positive effects
- To treat anxiety disorders: oral doses ranging from 300 to 600 mg (supported by multiple studies)
- To treat chronic pain: 2.5-20 mg CBD by mouth daily (anecdotal suggestion)
- To treat epilepsy: 200-300 mg CBD by mouth daily with antiepileptic medication (backed by research)
- To treat sleep disorders like insomnia: 160 mg CBD by mouth daily (supported by multiple studies)

The right dose of CBD varies from person to person. Generally speaking, larger individuals may prefer a higher dose of CBD than smaller people.

If you are not sure how much to take, then start with a smaller dose and scale it up a few milligrams at a time to meet your personal needs. Also, those that have a medical condition should always consult with their healthcare professional before consuming CBD.

## Other Considerations When Taking CBD Oil

Using CBD oil can make the medications that you may be taking more or less effective. For example, CBD may improve the effectiveness of antiepileptic drugs such as valproate and clobazam, while being negatively impacted by other antiepileptic drugs like carbamazepine and phenytoin. For this reason and because of how little we know about how CBD interacts with different medications, it is crucial that you

discuss CBD oil supplementation with your healthcare professional and make adjustments to your dosages in small increments.

Another thing to consider is the long-term effects that CBD has on hormones and other aspects of health. To this day, there are no studies that examine how CBD oil supplementation impacts the body over extended periods of time. However, current studies suggest that CBD oil is safe at the dosages recommended above in the short and long term.

It should also be noted that all of the studies we explored in this article were performed using either adults or animals. The safety of CBD oil in children and pregnant women is not well understood. We do know, however, that the endocannabinoid system is an active player in the placenta, impacting fetal development. Future research may find that CBD oil can help improve the health of the mother and the fetus during pregnancy, but at this point, there is no evidence to back up that assumption.

## **Key Takeaways & Recommended CBD Oil Sources**

Although the research on CBD oil is scarce, there is plenty of evidence to suggest that it can help a wide range of people with a variety conditions.

Research indicates that CBD can help people with:

- anxiety disorders
- insomnia
- psychosis
- chronic pain
- arthritis
- epilepsy
- chronic inflammation

- cancer
- multiple sclerosis

Even if you don't have one of these conditions, CBD can be helpful for improving general health by reducing stress, pain, and inflammation. Just make sure you get your CBD oil from a trustworthy source because CBD oil – like every other supplement – is not well-regulated.

### **Related Products:**

- CBD Oil – Green Lifestyle Market

### **Recommended Reading:**

- *How to Cure Lyme Disease and Virtually Any Other Bacterial Infection, Naturally*
- *Candida, Gut Flora, Allergies, and Disease*
- *Gluten, Candida, Leaky Gut Syndrome, and Autoimmune Diseases*
- *Hypothyroidism – Natural Remedies, Causes, and How To Heal the Thyroid*

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