Finding an optimal dosing schedule for specific CBD needs can be challenging, especially since there aren’t many definitive guides on how much to take and when. Each method of consumption delivers CBD in different ways. That means it’s going to affect people in a different manner depending upon how and when it’s used. Read our dosing guide to help you in understanding this better.

Written by Diana Rangaves, PharmD, Clinical Consultant, Google Scholar
Last Updated: Mar 22, 2020

Medically reviewed by Leonard Haberman, Physician & Chemist
What is CBD?

CBD is all over the media right now, and it might seem like there isn’t a product that it doesn’t touch. Cannabidiol (CBD) is the second most prevalent active ingredient in marijuana. CBD is derived directly from the hemp plant, but it doesn’t contain the phytochemicals responsible for making a person feel “high.” The World Health Organization notes that CBD hasn’t shown any potential for abuse or dependence, which is great news for advocates and CBD enthusiasts. Research is still scant, which leaves both advocates and the scientific community wondering how CBD affects the body.

CBD doesn’t contain THC

THC is the psychoactive compound that makes a person feel differently than before they consumed it. Both CBD and THC have the same molecular structure. The atoms are arranged differently, so they affect the body in different ways.

CBD is thought to play a role in regulating the endocannabinoid system (ECS). The ECS is present in all humans and is named for the cannabis-like substances that humans naturally produce. The ECS is crucial for internal balance or homeostasis. Homeostasis helps keep everything in the body, from temperature to heart rate, running in an optimal manner.

If the ECS is disturbed for any reason, by stress, illness, fatigue, or through other means, it signals other parts of the body to help regulate the functions of these systems. The ECS works on a cellular level, to stimulate C1 and/or C2 receptors.

CBD might help assist with the maintenance of desirable homeostasis within the body. It does this by mirroring the cellular systems already in place. This process occurs by inhibiting the activity of fatty acid amide hydrolase (FAAH), which breaks down the natural human cannabinoid, anandamide.

Anandamide is one of the body’s naturally occurring cannabinoids that bind to receptors found in the ECS. Anandamide is rapidly broken down by FAAH. CBD regulates FAAH. CBD is partly responsible for maintaining anandamide levels to help increase its beneficial effects within the ECS. If the body is deficient in cannabinoids, the ECS might not work correctly. This is one of the major appeals of CBD products because it allows a person to remedy ECS imbalances.

Differences between CBD and Hemp Oil

Since THC is chemically different from CBD, it affects the brain differently. That means it’s
important to understand product labeling when making CBD purchases.

For a product to qualify as hemp, it needs to meet the following criteria.

- For legal sales the finished product has to have to be less than 0.3% THC
- Harvesting hemp creates a product that’s at least 20% CBD
- Stalks can be used for rope, clothing, paper, etc.

Hemp oil has 0% THC, with only trace amounts of CBD. It’s used to produce beauty and skin care products, along with food products.

If CBD is on a label, it means that the oil has been extracted from the leaves, stalk, and flowers of a specifically selected hemp plant.

CBD will be listed as

- Cannabidiol
- Full spectrum hemp
- PCR (phytocannabinoid rich)
- PCR extract

Is CBD legal?

Confusion about the legality of CBD goes back decades. With the recent emergence of the CBD market, there are more questions than ever. A 2018 Farm Bill lifted a federal ban on hemp production, removing its controlled substance label, confusing both advocates and naysayers alike. However, most states haven’t changed their laws to reflect the 2018 Farm Bill. As with most laws in the US, different jurisdictions assign different levels of criminality to cannabis and CBD.

Purchasing CBD products in the US is technically legal, provided they contain 0.3% THC or less. Some state laws have restrictions on buying CBD and purchases can only be made with a prescription.

Currently, all laws in the US are in flux, so it’s essential to perform research concerning local jurisdiction laws and remain vigilant against committing any illegal acts.

Potential Benefits

Why people use it

Advocates of CBD claim it can help with everything from depression to mood swings. Many
people use CBD for a wide variety of health and wellness reasons, but there isn’t a lot of research to back up these claims. These benefits sought include everything from improved mood, to an immunity boost, and cardiovascular benefits.

The truth is, science hasn’t wholly uncovered how the ECS interacts with CBD. One thing for sure is that it doesn’t bind to CB1 and CB2 receptors in the same manner as THC. The prevailing theory is that CBD prevents endocannabinoids from being broken down, allowing them to be more effective in the body.

CBD is thought to be beneficial in treating anxiety related disorders. Clinical trials show early promise, but more research is needed. Most people who have PTSD and anxiety related disorders find great relief in taking CBD before entering settings that make them feel anxious

Some people use CBD to help treat different types of pain, ranging from post-workout muscle soreness to chronic pain conditions. Others use it to help with insomnia related conditions as well.

**Science-backed research**

One of the most widely researched benefits of CBD relates to the treatment of pediatric epilepsy. The FDA has recently approved a drug made with a purified form of CBD oil to help with the treatment of seizures.

Over a decade worth of research indicates chronic inflammatory conditions like IBS and fibromyalgia are the result of endocannabinoid deficiency. Clinical data from most studies show that CBD has positive effects decreasing pain, improved sleep and reducing PTSD-related symptoms.

However, other studies show taking CBD can have a wide array of adverse effects, including liver damage, diarrhea, vomiting, and generalized fatigue.

**CBD Side effects**

Some studies show that the half-life of CBD might be as long as four days. That means that after ingesting, it takes four days for it to be removed from the body. Ultimately, the study concluded that the length of time CBD remains in the body will depend on age, weight, and the amount of CBD that has been consumed.

**Potential CBD side effects and safety concerns**

Side effects of using CBD are generally minimal, in part because everyone has an endocannabinoid system which helps to prevent disastrous negative effects.
However, there has been some research which indicates users might experience side effects. These include the following:

- Abdominal upset – nausea, vomiting, diarrhea, or constipation
- Anxiety
- Appetite changes
- Changes in mood
- Dizziness
- Drowsiness
- Dry mouth

Some research has shown that users of CBD have elevated liver enzyme levels, which might indicate a correlation between use and liver damage.

New CBD enthusiasts should also be aware of its potential to interact with several pharmaceutical medications.

**Consumption methods**

There are four main ways to consume CBD, either as a tincture, an edible, a salve, or in vapor form.

Finding an optimal dosing schedule for specific CBD needs can be challenging, especially since there aren’t many definitive guides on how much to take and when. Each method of consumption delivers CBD in different ways. That means it’s going to affect people in a different manner depending upon how and when it’s used. Everyone responds to and metabolizes CBD differently, so there’s no one recommended dosage for everyone.

For most newcomers to the world of CBD, it might feel like an overwhelming task to understand how much to take and when. Most experts suggest being clear on the goals one hopes to achieve from taking CBD. CBD can target 65 different areas of the body, which means its therapeutic effects are almost limitless.

Many CBD enthusiasts benefit from keeping a log of their use and recording their progress. That could be anything from a long form journal entry to just a few notes on overall feelings about the effects. Tracking progress provides a metric to measure against when tinkering with dosages.

**How to set CBD Dosage**

How long CBD takes to work is a combination of how it’s been ingested and how quickly it will be expelled. It’s important to remember that everyone is going to tolerate CBD in different ways. This is because of individual body chemistry and everyone’s ECS functions slightly differently. For a thorough conversation about CBD, it’s a good idea to speak with a
physician or naturopath who has experience with CBD.

As with all medications, it’s possible to build a tolerance to CBD. Begin with the lowest possible dose and work up from there only when you need to do so. Another essential thing to keep in mind when setting dosing schedules is the strength of the CBD that’s being used. Concentration levels vary widely between products and ultimately relate to how the CBD was extracted. It’s imperative to consult with a retailer to best understand concentration levels.

Remember, when it comes to CBD product strength, all specific products are different. Therefore, it is impossible to provide a framework for CBD strength. The same goes for calculating the dosage, which is why everything in the content is described in broad strokes. All CBD products are different, so finding one that works for you requires a health care provider’s approval, then self-titration of dose, and time.

Some methods like tinctures or vaping provide an immediate influx of CBD, while others like salves, balms, and edibles take a little longer to become effective. Immediate relief is going to be easily achieved with inhaled products.

Edibles maintain consistent CBD levels for a longer period of time compared to vape products. Some advocates report a combination of delivery methods has been most successful in reaching their treatment goals. Here are some examples of how to set a potential dosing schedule based on individual objectives and needs. Serving sizes for tinctures, edibles, and salves are all different based on the dosage of the CBD product that’s being used. As with all homeopathic remedies, it’s important to consult with a physician before beginning any treatment.

Anxiety – Oral supplement 1-3x daily + vape pen as needed

Muscle fatigue – Oral supplement 1-3x daily + topical salve as needed

PMS related symptoms – Vaginal suppository as needed + oral supplement 1x daily

Sleeping disorders – Oral supplement 1-3 hours before bedtime

**Taking too much CBD**

Though it is rare, CBD overdosing can occur when a person has taken more than the prescribed amount. There are no known reports of a person overdosing on CBD. With that in mind, it would be almost impossible to take too much CBD. A person would need to ingest nearly 20,000 mg of oil in a very short amount of time to produce any toxic effects.

The most important thing to keep in mind is that every person will tolerate CBD in different ways. To be safe, it is a good idea to speak with a physician before beginning a
CBD regimen. This will ensure there are no contraindications with any other medications and to establish guidelines for dosing.

**How to set dosing for pets**

Just as in humans, animals have their endocannabinoid systems. In addition, just like products for humans containing CBD are showing up everywhere, so too are products aimed at giving your pet their best lives possible.

**Research is lacking**

Some emerging studies show that there are benefits to be had, ranging from pain management to calming anxious pets and the potential to treat epilepsy in dogs. More research is still needed.

It has been established that THC is exceptionally harmful to pets. Therefore, depending on the specific product, the CBD in question might contain high levels of THC. This is one of the many reasons to be selective about your source of CBD.

The responsible thing to do is to first speak with your vet about any potential benefits and side effects. This is essential if the animal is taking any pharmaceutical medications.

**Possible benefits**

There is a wealth of anecdotal research and testimonials from pet owners. Advocates cite its use for everything from minimizing pain to helping with the control of seizures.

CBD is known to be an anti-inflammatory agent in humans, so it makes sense that it would do the same for pets as well. Other possible benefits might include:

- Anti-cancer benefits
- Anti-nausea effects
- Managing anxiety related issues
- Appetite stimulation
- Cardiac benefits

The American Kennel Club recently funded a study through the Colorado State University College of Veterinary Medicine. In this research, CBD was used in dogs who have seizures. The study will undoubtedly offer precise data on some of the possible uses of CBD for pets.

**Summary**
The natural pain relief that CBD seems to offer is promising. It might be able to help as an anti-inflammatory as well. In the future, CBD might be the only treatment needed to help manage a variety of conditions.

However, it is important to remember that CBD research is still in its earliest stages. That means that much of the science is not yet available to back up the claims of advocates. More research, especially human research with carefully planned studies, is needed to offer definitive health claims.

CBD oil and CBD infused products do show promising early results for pain relief. It might be instrumental in managing chronic conditions, both physical and mental. For those who experience chronic pain and are seeking assistance, remember slow and steady wins the race. Studying the available research and having a clear understanding of the expectations regarding taking CBD is paramount to any homeopathic treatment success.

References


Diana Rangaves
PharmD, Clinical Consultant, Google Scholar
Dr. Diana Rangaves is Doctor of Pharmacy (Pharm D). She graduated from the University of California, San Francisco and specializes in pharmacotherapy management. Diana has a broad range of acute clinical background and ambulatory care. She was an academic college professor; teaching critical thinking, ethics, pharmacology, addiction, behavior patterns, pharmacy, and nursing. As a Clinical Pharmacist she is focused on chronic or disease state management.

Leonard Haberman
Physician & Chemist

Dr. Leonard Haberman is a physician and chemist who has been involved in solving chemical and medical problems for 43 years. He graduated from New York University as a dual major in chemistry and biology and went on to obtain a PhD in chemistry from the University of Minnesota where his focus was synthetic methods. He returned to the university in 2005, graduating with an MD degree in 2009. He has published in the open literature. He holds two patents and currently works as a consultant, assisting clients with projects within the disciplines of medicine and chemistry that have potential business applications.

Read More

Important Disclaimer
All contents of the LeafReport Site, such as text, graphics, images, and other material contained on the LeafReport Site are for informational purposes only. The Content is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition. Never disregard professional medical advice or delay in seeking it because of something you have