



Cannabidivarin (CBDV)

You've likely heard of [tetrahydrocannabinol \(THC\)](#) and know that it's the psychoactive compound in marijuana. Likewise, you may have recently heard about the health benefits of [cannabidiol \(CBD\)](#) — the non-psychoactive chemical compound found in the marijuana plant. Did you know the possibilities of marijuana as a medicine go beyond [THC and CBD](#)? You can find [at least 85 cannabinoids](#) in the cannabis plant that interact with specific receptors in your body to provide health benefits. One of these cannabinoids is called cannabidivarin.

What Is Cannabidivarin?

Cannabidivarin (CBDV) is a cannabinoid or chemical found in the cannabis plant. CBDV has a similar molecular structure to CBD, but instead of having a pentyl chain, it has a propyl chain. This difference means that we consider it a propyl cannabinoid, and it has slightly different properties than CBD.

Like CBD, CBDV doesn't cause any psychoactive effects. In other words, it doesn't make you feel "high" or cause hallucinations. Patients who don't want to experience any mental impairment when they use their medication can take advantage of CBDV's benefits without worry.

Where Does CBDV Come From?

CBDV is most commonly found in landrace [indica strains](#) from India, Pakistan and Mexico, and it occurs more often in plants that have higher levels of CBD than THC in them. Landrace means that the marijuana plant developed over time in its natural habitat and was not crossbred with other plants of the same species.

Landrace cannabis plants have developed unique characteristics as a result of isolation from other marijuana strains. Also, because landrace strains are specific to a geographical area, they're named after their home. Landrace strains have been found all over the world, but they're becoming rarer for a variety of reasons, from political programs eradicating crops to the natural loss of land.

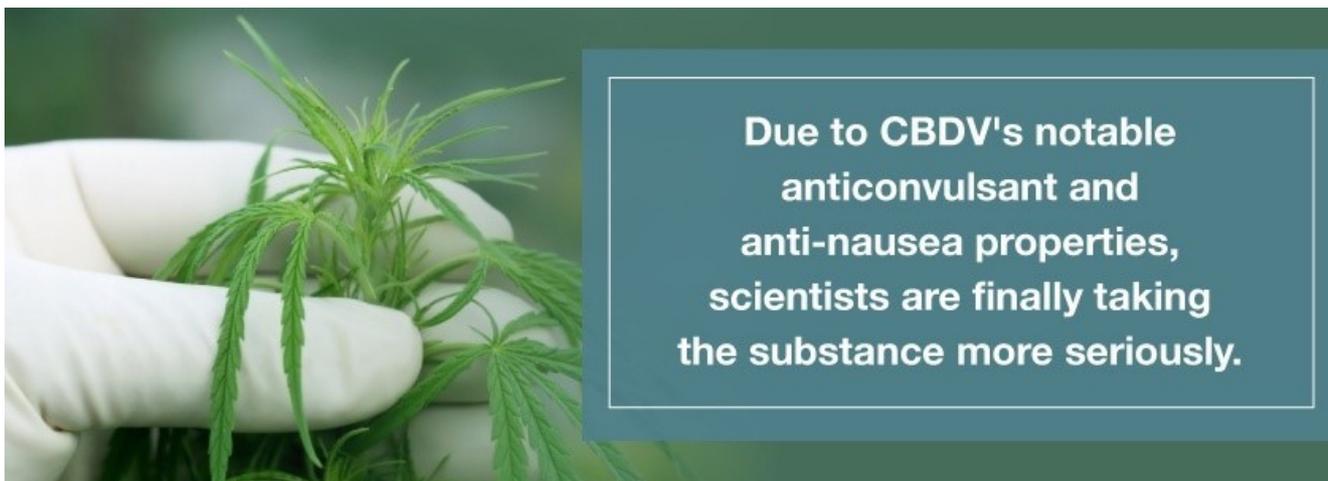
No one knows how long marijuana has been growing on the planet, but there's evidence that humans have been using marijuana for thousands of years. The origins of indigenous cannabis have [been traced back to Asia](#).

Different climates produce different plants, and indica strains of cannabis have evolved to withstand dry climates. The thick leaves and stems of an indica plant help conserve water. The Hindu Kush cannabis plant is an example of a pure indica landrace from the mountains of northern Afghanistan. Other examples of landrace indica strains include:

- Afghani
- Moroccan

It's not common to find CBDV in strains available at dispensaries, because most strains of marijuana are bred to be high in THC.

However, due to CBDV's notable anticonvulsant and anti-nausea properties, scientists are finally taking the substance more seriously.



Various techniques are used to extract cannabinoids, like CBDV, from the plant. Some methods [involve the use of dried plants](#) while others employ advanced techniques to extract chemicals from a fresh crop. Extracts allow users to consume marijuana for the desired effect without inhaling dangerous smoke from excessive plant material.

Because CBDV occurs in small amounts in pure strains, traditional farming methods would not produce enough CBDV for medicinal purposes. Therefore, scientists are turning to cellular agriculture to produce CBDV or creating it synthetically.

What Makes Cannabidiarin Unique?

THC has a counterpart called [THCV](#), and the two cannabinoids have a relationship like the one CBDV and CBD have. But, while THCV and THC have very distinct effects, CBDV and CBD are much more similar.

However, that doesn't mean CBDV doesn't have any unique properties at all. In fact, research shows that CBDV could eventually transform into THCV when exposed to acidic conditions. Since THCV could have some effects that set it apart from other cannabinoids, we could use CBDV to develop THCV.

How Does CBDV Work?

Unfortunately, marijuana laws have prevented scientists and researchers from learning about the healing properties and complexities of [the marijuana plant, including all of its cannabinoids. Although medical marijuana is legal in many U.S. states, the Drug Enforcement Agency \(DEA\) still classifies cannabis as a Schedule I drug, meaning it has a potential for abuse, and marijuana is still illegal on a federal level.](#)

So, although progress has been made in the medical marijuana community, certain factors may continue to hinder scientific research. There's still a lot to learn about CBDV and its effects on the human body.

[We do know that our bodies have an endocannabinoid \(EC\) system. The EC system is a communication system that sends messages throughout our brains and bodies. The body naturally produces cannabinoids that interact with receptors in the EC system to regulate functions such as sleep, bone growth, blood pressure and more.](#)

We have cannabinoid receptors on most parts of the brain, the immune system and other organs. Cannabinoids from marijuana can bind to these receptors like the natural cannabinoids produced by our bodies and create responses we usually regulate with our EC system.

There are [many cannabinoid receptors in the parts of the brain](#) that controls coordination, memory, movement, judgment and pleasure.

Cannabinoids from the marijuana plant might affect the following parts of the brain:

- ✦ **Hypothalamus:** Affects hunger and sexual behavior
- ✦ **Basal ganglia:** Involves motor control
- ✦ **Ventral striatum:** Involves feelings of reward
- ✦ **Amygdala:** Controls fear, emotion and anxiety
- ✦ **Brainstem and spinal cord:** Involves feelings of pain and the urge to vomit
- ✦ **Neocortex:** Incorporates sensory information and involves higher cognitive functions
- ✦ **Hippocampus:** Involves memory and learning
- ✦ **Cerebellum:** Involves motor control and coordination

THC attaches to cannabinoid receptors and creates a “high” sensation. On the other hand, cannabinoids like CBD and CBDV encourage the body to use more [of its natural cannabinoids](#) and do not make the user feel high.

What Are CBDV’s Medical Benefits?

Although CBDV seems to have similar health benefits to CBD, it especially shines in specific areas. It could work as an anticonvulsant, meaning that it could reduce seizure activity. Researchers also think it has the potential to relieve nausea. CBDV could even help your stem cells rebuild bones when they break or fracture.

For example, a 2013 study reported the [anticonvulsant effects of CBDV](#) in animal models of seizure by greatly decreasing pentylenetetrazole (PTZ)-induced seizure severity. Pentylenetetrazole is a central nervous system stimulant used to study seizures.

A 2014 study suggests further investigation of [CBDV and its anticonvulsant properties](#), having found evidence that CBDV and CBD may both work as a treatment for neuronal hyperexcitability. Regarding nausea, another evaluation which [studied nausea in rats](#) concluded that CBDV “may have therapeutic potential in reducing nausea.”

Researchers and pharmaceutical companies are currently focusing on CBDV’s anticonvulsant properties. GW Pharmaceuticals, a company that develops cannabis-based medicine, has a patent for CBDV medicine for epilepsy. While the patent doesn’t yet fully confirm CBDV’s benefits for epilepsy patients, it demonstrates that the company has enough evidence to begin using it in development.

Currently, GW Pharmaceuticals is researching CBDV as an effective treatment for [epilepsy and autism spectrum disorders](#).

According to the Centers for Disease Control and Prevention (CDC), the number of Americans [suffering from epilepsy is increasing](#). Adults with active epilepsy rose from 2.3 million in 2010 to three million in 2015, and the number of children with epilepsy rose from 450,000 in 2007 to 470,000 in 2015. At least 30 different types of seizures exist, and it’s not always easy to tell if a person is experiencing a seizure. More research needs to be done to find out how CBDV can help the millions who suffer from seizures.

Conditions Treatable With CBDV

As we mentioned earlier, CBDV has similar medical applications to CBD. But we can take advantage of its unique strengths by using it to treat conditions like:

• **Epilepsy:** CBDV [may improve seizure symptoms](#) by lowering severity and frequency.

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Severe nausea: CBDV [may reduce severity and frequency](#) of nausea. Nausea is a common symptom of many different conditions from gallbladder disease to emotional stress.

Cancer: CBDV may relieve nausea [caused by chemotherapy treatment](#). Some forms of cancer may also cause nausea.

HIV/AIDS: CBDV may reduce nausea [caused by antiretroviral therapy](#).

Seizures: CBDV [may lower seizure activity](#). Many conditions can cause seizures, such as head injuries, heart disease, drug abuse and alcohol withdrawal. CBDV could be used in treating patients recovering from alcohol or opiate abuse.

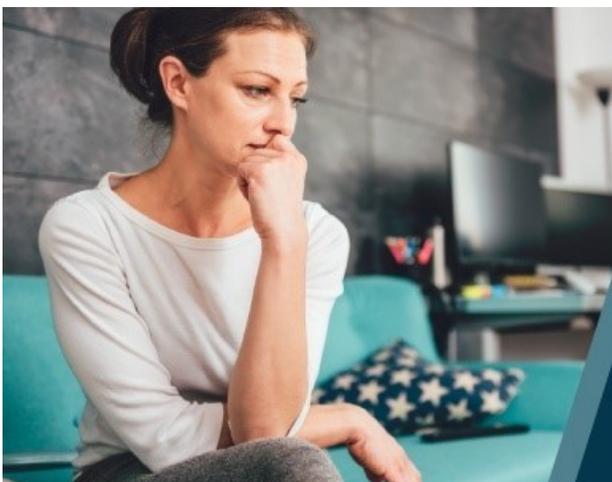
Motion sickness: CBDV could reduce nausea [resulting from motion sickness](#). Motion sickness can happen to anyone, but it's most commonly experienced by children, pregnant women and individuals on certain medications. It often results from travel in cars, planes and especially boats and causes dizziness, nausea and vomiting.

✚ **Anxiety disorders:** CBDV could be used to soothe [nausea from panic attacks](#). Because CBDV is not psychoactive, it might be better than consuming high levels of THC for patients who are prone to panic attacks.

Cystic fibrosis: CBDV may relieve nausea and [help bones repair themselves](#). Cystic fibrosis is a genetic disorder that damages the lungs, digestive system and other organs in the body. Sufferers might experience nausea associated with constipation, medication and other digestive issues. Unfortunately, there is no known cure for this disease, only daily management of symptoms.

✚ **Nail-patella syndrome:** CBDV may assist with [bone regeneration and nausea](#). [Nail-patella syndrome is a rare disease caused by genetic changes. A person with Nail-patella syndrome experiences changes in nails, elbows, kneecaps and hip bones. They might](#) also experience gastrointestinal problems, such as constipation or irritable bowel syndrome.

✚ **Autism:** Studies are underway to discover how [CBD may effectively treat autism](#). As CBD and CBDV share similar qualities, CBDV may also be used to treat the disorder. There is currently [no known cure or treatment](#) for autism spectrum disorder (ASD), and cannabis medicines are providing hope. The University of California San Diego is studying CBD and its effects on 30 children between the ages of eight and 12 with moderate to severe ASD.



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CBDV may also reduce other symptoms related to neurological activity. If it can affect the central nervous system, it could even treat health problems like [neuropathy](#) and [multiple sclerosis](#).

How Is CBDV Taken?

CBDV, like CBD, is extracted from the marijuana plant. In its extracted form, it can be administered in the same way as any medical marijuana product. Popular methods for non-psychoactive cannabinoid consumption include:

- 1. **Tinctures:** Tinctures are a liquid form mostly made of raw hemp oil containing the cannabinoids. It's the easiest method of administration. All you need to do with a tincture is place a few drops under your tongue when needed. You can also add tinctures to food and drinks. If you take the tincture sublingually, it will reach your bloodstream faster than if you consume it in food. **Gel capsules:** Gel capsules are the same as tinctures but are packaged in a dissolvable shell. Some patients prefer capsules because they look more like traditional pills and because each capsule contains a specific dose.
- 2. **Dabbing:** Dabbing involves inhaling the vapors from a concentrated form of CBDV or CBD. Cannabis dabs are typically inhaled after they're heated.
- 3. **Vaping:** Vaping cannabinoids involves inhaling heated oil forms of the substance. Vaping might be a great option for someone who is looking to replace nicotine vaping with something healing and non-addictive.
- 4. **Topical lotions:** Topical applications may work faster than other forms but typically don't last as long. Many patients choose topical forms in combination with other methods for long-lasting effects. Topical use is ideal for people who suffer from aches and pains associated with arthritis, fibromyalgia and other disorders.

The healthiest [ways to consume cannabis products](#) include:

- 1. As a vapor
- 2. In food or beverages
- 3. By applying medical marijuana lotions

Topical application is the healthiest form of medical marijuana consumption while smoking the medicine is least recommended.

What Are the Side Effects of CBDV?

There is still a lot to be discovered about CBDV and its side effects. In 2014, GW Pharmaceuticals did not find any significant side effects in a trial which [studied 66 healthy subjects](#), even when they administered the highest dose. In general, no serious side effects were observed, and subjects did not experience symptoms of withdrawal from CBDV.



In 2014, GW Pharmaceuticals did not find any significant side effects in a trial which studied 66 healthy subjects, even when they administered the highest dose.

Although not much else is currently known about the potential side effects of CBDV, there's no record of the marijuana plant causing an overdose death, despite it being classified as a Schedule I drug. Considering the molecular similarities of CBD and CBDV, we might assume that CBDV has similar side effects. Based on current research, we know that CBD is typically tolerated well and considered safe. However, some potential side effects of CBD, which might be expected of CBDV, include:

- ✦ Dry mouth
- ✦ Low blood pressure
- ✦ Lightheadedness
- ✦ Drowsiness

Is CBDV Legal?

Whether or not CBDV is legal depends on different state laws. In 2016, the DEA classified CBD oil as a Schedule I drug, making it illegal from a federal standpoint. CBDV is also part of the marijuana plant and is therefore illegal on a federal level. However, if medical marijuana is legal in your state, you'll be able to obtain other medical marijuana products like CBD and CBDV thanks to the Rohrabacher-Blumenauer Amendment, which [prevents the Justice Department](#) from using federal funds to override state medical marijuana laws.

Even though CBD and CBDV do not get the user high, they're still considered illegal simply because they're extracted from the marijuana plant, which contains THC. In other words, if a product contains as little as around one percent THC, you'll need a certified doctor's recommendation and a medical marijuana card to obtain the product if medical marijuana is legal in your state.



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If the cannabinoid is derived from hemp, which contains tiny amounts of THC, then it's legal in any state. The Food and Drug Administration (FDA) considers hemp oil and related products a dietary supplement, not a drug.

Hemp contains [less than 0.3 percent](#) THC, while the cannabis plant can contain as much as 30 percent THC. Hemp has been grown for centuries in the United States to make clothing, rope, food, cosmetics, animal feed and more. It's estimated that the plant is used in [more than 25,000 products](#). Medical marijuana, on the other hand, is cross-bred from different strains to contain THC. Although hemp is non-psychoactive, there are still restrictions regarding hemp production.

Some states have CBD laws even if medical marijuana is not legal in the state. Other states, like Missouri, require patients to show that [other treatment options have been unsuccessful](#) before using CBD oil as a medicine for epilepsy. Make sure to check your state laws regarding marijuana, CBD and CBDV before assuming it's legal. Laws are always changing, so if CBD is not legal in your state today, it could be different tomorrow.

Get More Information on CBDV Medication

Little is yet known about the healing properties of CBDV, yet researchers have high hopes for its abilities to effectively treat conditions like epilepsy and autism. Until further research has been done, medical marijuana patients will have to wait for CBDV medication to become readily available at local dispensaries.

In the meantime, talk with your [cannabis-certified physician](#) or [dispensary employee](#) about CBD-based medication for similar effects. CBD has been shown to relieve inflammation, pain and anxiety among other common symptoms. Rather than reach for an opiate-based prescription painkiller, contact a certified medical marijuana doctor instead.

Not sure if you're eligible for medical marijuana? Use our site as a guide to finding out everything you need to know about becoming a patient as well as medical cannabis laws in your state. We keep our website up-to-date with the latest medical marijuana news and research. Explore our network of qualified doctors to connect with a physician today, or sign up for our free monthly newsletter to stay informed about CBDV.