



Awaken
Unlimited

Let's Learn About
CANNABIDIOL



What is CBD (Cannabidiol)?



Cannabidiol (CBD) is one of over 80 chemical compounds found in the cannabis plant called cannabinoids. Cannabinoids bind to receptors in the brain and body and are responsible for the effects of cannabis, like feeling high, relaxed, or euphoric.

Tetrahydrocannabinol (THC) is the most widely studied cannabinoid, known for its psychoactive effects and the reason you feel high.

Cannabidiol or CBD is a non-intoxicating component of the cannabis plant. Ongoing research is continuing to discover its enormous therapeutic potential.

Scientists refer to CBD as a “promiscuous” compound because it confers therapeutic benefits in many different ways by tapping into how we function physiologically and biologically on a deep level. The reason is now known to be how cannabinoids react with a newly discovered biological system present in all vertebrates and invertebrates called the endocannabinoid system.

The Endocannabinoid System



Doctors know very little about the endocannabinoid system (ECS) so talking with your doctor about the ECS can be frustrating.

Biochemists now know that the ECS helps fine-tune most of our vital physiological functions by promoting homeostasis (a property of cells, tissues, and organisms that provides the stability and constancy needed for proper function.) This affects everything from sleep, appetite, pain, inflammation, memory, mood, and even reproduction. So in basic terms, the ECS helps all major body systems to work in concert with one another.

Because the ECS helps bring balance to the body it is no surprise that scientists have observed changes in ECS activity in a large

number of diseases. Everything from neurodegenerative disorders to rheumatoid arthritis and cancer show changes in endocannabinoid levels. That is why the ECS may be an effective target for restoring balance in the body and promoting good health.

MEDICAL CONDITIONS

General	Depression	Neurodegeneration
Acne	Diabetes	Chronic Pain
ADD and ADHD	Endocrine Disorders	Obesity
Addiction	Epilepsy and Seizures	OCD
AIDS	Fibromyalgia	Osteoporosis/Bone Health
ALS	Glaucoma	Parkinson's Disease
Alzheimer's Disease	Heart Disease	Prion/Mad Cow disease
Anorexia	Huntington's Disease	PTSD
Antibiotic Resistance	Inflammation	Rheumatism
Anxiety	Kidney Disease	Schizophrenia
Atherosclerosis	Liver Disease	Sickle Cell Anemia
Arthritis	Metabolic Syndrome	Skin Conditions
Asthma	Migraine	Sleep Disorders
Autism	Mood Disorders	Spinal Cord Injury
Bipolar	Motion Sickness	Stress
Cancer	Multiple Sclerosis (MS)	Stroke and TBI
Digestive Issues	Nausea	

Before cannabis prohibition, hemp and marijuana had been used for thousands of years to treat a number of ailments, including epilepsy, headaches, arthritis, pain, depression, and nausea. Traditional healers may not have known why the plant was effective but their experience demonstrated its effectiveness and provided the basis for later scientific inquiry.

The discovery of the ECS reveals a biological basis for the therapeutic effects of plant cannabinoids and has sparked intense interest in cannabis as medicine.

Benefits of CBD Hemp Oil

For your mind:

CBD Hemp Oil helps relieve:

- Anxiety
- Depression
- Panic disorder
- OCD
- PTSD
- Neurological disorders such as schizophrenia

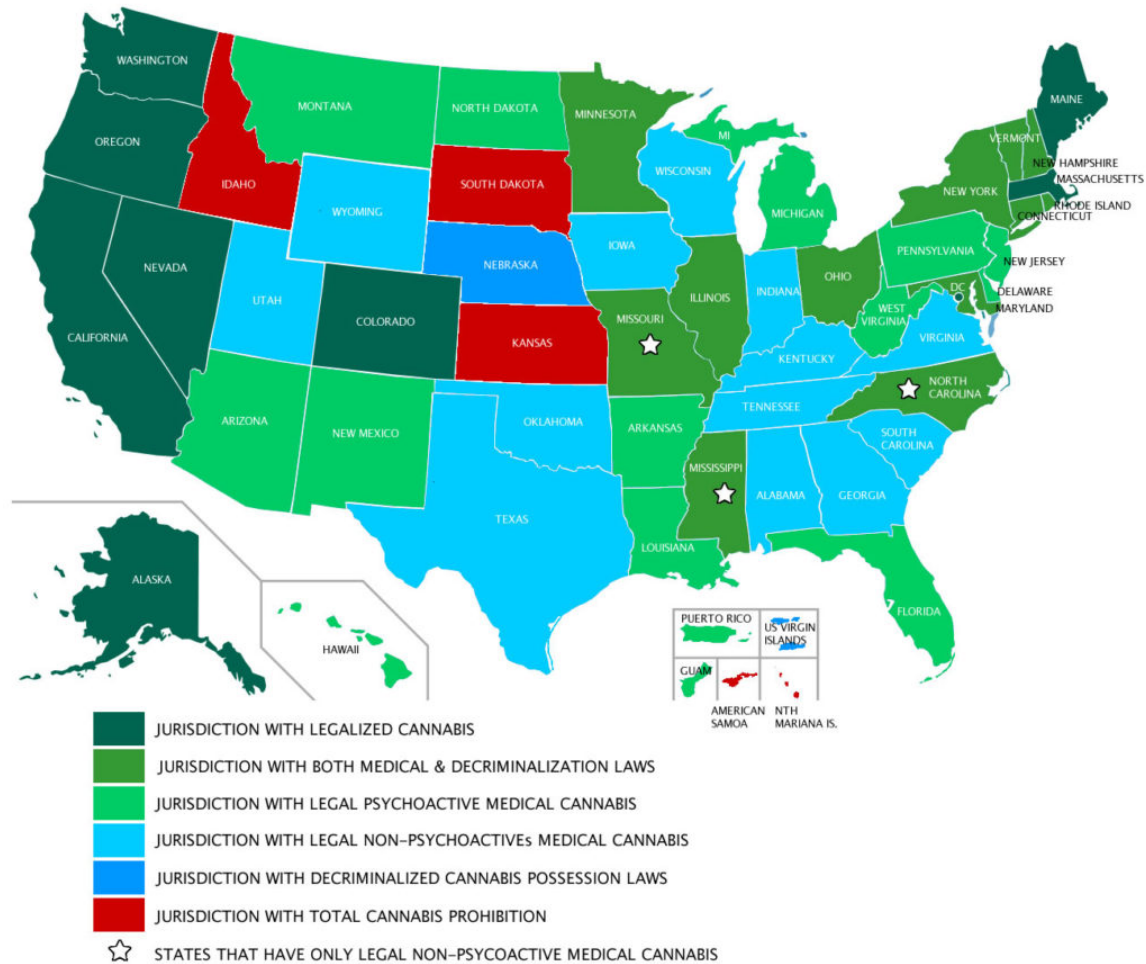
For your body:

- Pain relief & inflammation
- Helps fight cancer
- Relieve nausea
- Promotes cardiovascular health
- Lower risk of diabetes
- Treat seizures
- Reduce acne

Research has shown that small doses of natural cannabinoids support the ECS and enhance its signaling. This helps to explain why CBD has strong anti-oxidant, anti-inflammatory, anticonvulsant, anti-depressant, anti-psychotic, anti-tumoral, and neuroprotective qualities. Exciting new research shows that cannabidiol can even change gene expression and remove beta amyloid plaque, the hallmark of Alzheimer's, from brain cells. It also explains why CBD provides relief from an array of maladies including inflammation, anxiety, pain, seizures, spasms, cancer, nausea, PTSD, depression, and infections.

Is Cannabidiol legal?

CBD is readily obtainable in most parts of the United States, though its exact legal status is in flux. All 50 states have laws legalizing CBD with varying degrees of restriction, and while the federal government still considers CBD in the same class as marijuana, it doesn't enforce it.



Hemp and marijuana are the same species of plant known as cannabis. Hemp is a name for low THC varieties widely used in the manufacture of paper, fiber, and other industrial commodities. Marijuana is a name widely used to denote a high THC variety. Medical marijuana is the same variety of plants legally sold to specially licensed patients.

It is illegal to grow hemp without a DEA permit. Several states, including Kentucky and Colorado, have legalized the cultivation with permission from the DEA but supplies of domestic oils are very limited. Because of this, the vast bulk of raw CBD oil (>90%) comes from foreign sources like China and India.

This can be a problem because hemp is a bioaccumulator, meaning it is capable of absorbing toxins from the air, water, and soil in which it's grown. That is why it is so important to know that your CBD oil comes from organically grown hemp that can be tracked to its US-grown source. The last thing you should want is for your CBD oil to have accumulated toxic substances such as pesticides, herbicides, or heavy metals like arsenic. These contaminants are widely found in foreign sourced raw oil.

KEY FACTOR #1: Use only CBD products that are known to be organically grown in the United States. All AU products are produced from raw oil manufactured by Folium Biosciences from plants grown on their organic farms located in LaJunta Colorado.

How CBD is made is important.

CBD oils derived from certain strains of hemp are far more beneficial than others. The best products come from strains that are specifically bred for their medicinal qualities and ratio of CBD to other cannabinoids.

There are also different extraction methods for pulling CBD from the plant. Using solvents like petroleum or naphtha can produce residuals that could be harmful to your health, especially in patients with compromised immune systems. Ethanol and olive oil can be used as a safe extraction method, although these oils retain the chlorophyll from the plant producing an unpleasant taste and dark color. The chlorophyll can be filtered out of the extract, but cannabinoids are lost in the process reducing the potency of the oil.

Supercritical CO2 extraction produces high quality oil without toxic solvents. This method uses carbon dioxide under high pressure and extremely low temperatures to extract the highest purity cannabinoids. While this method is more expensive and requires complex machinery operated by people with a high degree of professional expertise, it ensures the highest quality oil.



There is also a significant difference between CBD isolate and full-spectrum oils. Full spectrum oils preserve all the cannabinoids, terpenes and plant lipids, while eliminating unwanted waxes and chlorophyll. The synergy of these different compounds work together to produce therapeutic effects on the body that are not achieved by the compounds individually. This is known as the “entourage effect” and the reason that full-spectrum oils are superior than CBD products made from isolates.

KEY FACTOR #2: Use only products properly stored after harvest containing full spectrum CBD oil made using supercritical CO2 extraction processes. The raw oil used in AU products is extracted from plants that:

- Are not genetically modified and bred to produce high levels of phytochannibinoids and terpenes with naturally low levels of THC;
- Stored after harvest in a temperature and humidity controlled environment to prevent the growth of molds, fungus, or bacteria.

Finding the right product.

Once you are assured of the source and extraction technique, in order to get the CBD oil that best suits your needs the three most important things to consider are its purity, strength, and concentration. While products that contain THC (the cannabinoids that produces the “high” associated with marijuana have their use, the benefits of CBD with less than 0.3% THC are:

- No failed drug tests (if zero THC as in AU products);
- No fear of mind-altering affects;
- Complies with the guidelines of the Substance Abuse Act.

What’s the concentration of CBD in the product?

Unfortunately, recent studies have determined that most CBD products contain far less CBD than reported on their labels. In fact, many have no CBD at all. That is why you cannot rely on labels. You must look for a reliable Certificate of Analysis (COA) in order to ensure you’re getting what you’re paying for. Quality manufacturers will publish their COA’s along with contact information for both the manufacturer and the labs used for testing.

Once you find a suitable product, you will find that concentrations of CBD can vary dramatically. A quality product for human consumption will start off having somewhere between 250mg to 1,000mg per fluid ounce. Since one fluid ounce contains approximately 500 drops, 1 drop will contain about 2 mg of CBD. The average person needs 20 mg – 40 mg or a dose of 10 to 15 drops or more of 1,000 mg per ounce to be effective. If instead of 1,000 mg. per ounce concentration you were to purchase a 2 ounce bottle that contained 250mg of CBD, your concentration would be a mere .25 mg of CBD per drop or 5 mg. per 20 drops – hardly enough to reap a benefit. For that reason it is usually most economical to buy the highest concentration of CBD per ounce that you can find.

What is the purity of CBD in the product?

Because the hemp plant is a bioaccumulator, it will pick up any contaminant in its environment whether that contaminant comes from the air, the soil, or water. China, one of the largest providers of raw CBD oil to the U.S. market, uses hemp to detoxify soils contaminated with industrial waste. They then refine the plants and sell the oil to U.S. manufacturers of CBD products. These oils can contain high levels of toxic heavy metals, pesticides, and herbicides. Avoid them.

Insist on seeing a reliable Certificate of Analysis and valid contact information for the lab as well as the manufacturer.

The only way to assure quality is to use products accompanied by a Certificate of Analysis from a United States laboratory. Certificates of Analysis are documents that report the product's potency and purity. Do not rely on Certificates of Analysis provided by labs outside of the United States. Labs in foreign countries like China are notoriously unreliable. Also avoid products that make it hard to find contact information for the manufacturer.

What is the nature and purity of any other carrier oil or ingredient besides CBD?

The vast majority of CBD products use some sort of carrier oil in which pure CBD extract (called raw oil) is diluted. This carrier oil usually forms the bulk of the product so its purity is critical. That being said, bioavailability is the biggest concern when determining the best carrier oil. Bioavailability, in this case, refers to the proportion of CBD your body can process compared to what it takes in. CBD's bioavailability is largely determined by the types of fat molecules contained in the carrier oil. There are many different types of fat, and the way they vary on a molecular level affects how well it can transport CBD into your system.

Besides bioavailability, individual differences between oils such as flavor, consistency, and cost may affect their viability as carrier oils.

Carrier oils include fractionated coconut oil, palm oil, hempseed oil, olive oil, and avocado oil. Other chemical-based carriers like propylene glycol are also used and should be avoided.

Coconut oil naturally excels as a carrier oil in a number of categories. Coconut oil has little to no flavor, which makes it a great choice for making tinctures. Additionally, it is thinner than most oils, making it easy to dispense and measure, and it has natural antifungal, anti-inflammatory, and antibacterial properties.

However, the best part about coconut oil is its abundance of medium chain triglycerides (MCT). Medium chain triglycerides are smaller fat molecules, which are easily absorbed by the body directly through the liver. Fractionated coconut oil is simply just coconut oil which has had the longer fat molecules removed to isolate the medium chain triglycerides. For this reason, fractionated coconut oil is also known as MCT oil. It is widely considered the best carrier oil for CBD.

Finally, the best manufacturers have a long history of producing other quality products besides those containing CBD. Such companies are less likely to jeopardize their reputation to make a quick buck on the latest hot product.

KEY FACTOR #3: Use only products accompanied by a valid certificate of analysis from a U.S. lab, and whose labels provide contact information for the manufacturer. Best are products made by manufacturers who have a long history of making high-quality supplements besides CBD products, and manufacturers who use fractionated coconut oil as a carrier:

- AU uses only raw CBD oil provided by organic U.S. growers, and whose products are accompanied by COA's from U.S. labs. Our contact information and copies of each COA are available on our website.
- AU's products are formulated by highly trained biochemists and include a wide variety of products with reputations for quality, potency and purity. All our CBD oils use fractionated coconut oil that is organic, as well as tested for purity.

What is the optimal dosage of CBD?

When it comes to an effective dose of CBD oil, everyone is unique. Trillions of cannabinoid receptors are present in your body, and how much CBD you need for any given purpose will depend on how these receptors are being utilized in your body. For example, opioid drugs can occupy these receptors. So can THC from marijuana. Many pharmaceuticals can also occupy these receptors.

In practice, what that means is that people who smoke a lot of cannabis or people with opioid addictions or a dependence on psychotropic pharmaceuticals may need to ingest a lot more CBD over a longer period of time than people who don't use these drugs.

That means an effective dose of CBD can range from as little as 10 milligrams to as much as 500 milligrams or more. Begin with a loading dose for a couple of days (100 mg or more) then follow with lower daily doses and work up. Another good practice is to take a few smaller doses over the course of the day rather than one big dose. Use the same dose and ratio for several days. Observe the effects and if necessary adjust the ratio or amount. Don't overdo it. CBD has no known adverse side effects, but an excessive amount of CBD could be less effective therapeutically than a moderate dose. "Less is more" is often the case with respect to cannabis therapy.

CBD for pets

CBD is gaining popularity among our four-legged friends. More companies are producing pet-specific products to address pain, seizures, inflammation, and appetite issues in cats and dogs, and even horses. The American Veterinary Medical Association does not have an official position on cannabis and pets, for it is still illegal for veterinarians to recommend cannabis to treat patients. This has not stopped pet owners across the country from giving hemp-derived CBD treats to treat pain and cancer symptoms in their animal companions.

In our experience, CBD is a miracle medicine for sick or injured pets. We have worked with animal rescue clinics who use it on animals that have been hit by cars or injured severely in some other kind of accident. It is clear that CBD is highly effective as a pain-reliever in such injured animals, and many pull through that would have otherwise died, just from the stress of the pain.

Is it safe to inhale hemp CBD oil fumes from a vape pen?

Many cannabis and hemp-derived CBD vape oil products include a thinning agent, which dilutes the oil that is heated and inhaled by vape pen users.

Beware of vape pen oil that contains propylene glycol. When heated, this chemical additive produces formaldehyde - a carcinogen - as a byproduct. Look for products that entail a safer method of extraction like supercritical CO₂.

Other additives to avoid: polyethylene glycol (another thinning agent) and, in general, flavoring agents, especially cream and cinnamon flavors as these are very toxic and should never be heated and inhaled.

Look for cartridges that contain only natural, cannabis-derived terpenes. That means that the flavor of your vape cartridge came directly from the cannabis flower from which it was extracted.

Does CBD have any adverse side effects? What about drug interactions?

CBD is a very safe substance, but it can interact with many common pharmaceuticals. At sufficient dosages, CBD will deactivate cytochrome P450enzymes, thereby altering how we metabolize painkillers, statins, blood thinners, insulin & more. CBD-drug interactions can be dangerous, but they can also help mitigate side effects while synergistically improving a patient's quality of life. Cannabinoid-opioid interactions show great therapeutic potential. THC enhances the painkilling effects of opiates, while CBD is can reduce withdrawal and dependence. Patients taking Big Pharma meds should monitor changes in blood levels and, if need be, adjust dosage. Problematic interactions are more likely when consuming high doses of CBD isolate products.

AU PRODUCT INFORMATION

85%+ Pure Full Spectrum Hemp Oil

A complete plant profile is reflected in our full-spectrum oil, containing all cannabinoids and terpenes naturally found in hemp.

Our extraction & purification process uses a proprietary and patented technology that preserves all the phytocannabinoids, terpenes and plant lipids, while eliminating unwanted waxes and chlorophyll.

A rigorous testing scheme is followed to ensure that the critical attributes; taste, color, potency, and purity consistently meet our customer's expectations in our finished products.

Active Ingredients:

Cannabidiol (CBD)
Cannabinol (CBN)
Cannabigerol (CBG)
Cannabichromene (CBC)
Cannabidivarin (CBDv)
Cannabidiolic Acid (CBDA)
Naturally Present Terpenes

Contaminant Analysis:

Heavy Metals: Not Detected (ND)
Lead: ND
Arsenic: ND
Residual Solvents: ND

Microbial Analysis:

Total Aerobic Count < 2,000 cfu/g
Total Yeast and Mold < 200 cfu/g
E. Coli = Negative
Salmonella = Negative
Aflatoxins = Negative

A catalog of CBD products is available. New products are being added frequently so check our website at www.au-now.com for our latest offerings.



Awaken
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The Gold Standard in Total Well-Being

**Body Chemistry Balancing Protocols
Natural Medicines • Healthy Water
719-687-2978 www.au-now.com**