The CBD Education Medical Professionals Need

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CBD 101

PLUS IMPORTANT SAFETY GUIDELINES FOR THIS STILL UNREGULATED NATURAL SUBSTANCE

While CBD has gained popularity as a treatment for a number of medical conditions, including anxiety, chronic pain, depression, epilepsy, arthritis, sleep disorders, and skin disorders, the fact that it remains unregulated is cause for concern.

Cannabis is not legal at the national level in the US, which means the cannabis industry remains in the Wild West insofar as there are no FDA regulations to control product standards and purity. Unfortunately, anything goes, where CBD products are concerned. CBD producers are not held accountable for the quality and safety of what they sell. As such, consumers then have to rely on a company’s honesty and integrity when purchasing a CBD product.

OneCBD is a CBD company whose mission is to provide tested and reliable products to customers. It is not a requirement that CBD companies sell products to any set standard, but some do it anyway. OneCBD operates with integrity and transparency, showing where their product ingredients are sourced and how and where they are tested so that people struggling with health issues might be able to find relief without worrying about their safety consuming an unregulated product.
What is CBD?

The primary active molecules in the cannabis plant are called cannabinoids, of which over 100 have been identified to date. Its two most prominent are 9-tetrahydrocannabinol (THC) and cannabidiol (CBD). Generally, CBD is more heavily concentrated in hemp, one type of cannabis plant, where THC is more heavily concentrated in marijuana, another type of cannabis plant.

CBD can be extracted from either hemp or marijuana plants. Categorically, hemp cannot contain more than .3 percent THC. Marijuana typically contains between five and thirty percent THC. Regardless of its source of extraction, CBD may contain some THC (unless it is specifically extracted), though the amount too minimal to create intoxicating effects.

One of the main differences between CBD and THC is that CBD is non-psychoactive and non-intoxicating (it does not provide the sensation of feeling “high”) while THC is psychoactive and intoxicating.
Why and how CBD works

Anytime we put a substance in our body, it interacts with our body’s receptors to enact a physiological response. CBD interacts with the body’s cannabinoid receptors, a part of our wider endocannabinoid system.

CB1 receptors are primarily found in specific regions of the central nervous system associated with behavior functions like the motor and sensory response, memory, emotional reactions, and making decisions. Most CB2 receptors are found in the peripheral nervous system in regions linked to inflammation and cancer.

THC binds to both CB1 and CB2, unsurprisingly causing a change in our memory, perception, and concentration functions, and ultimately leading to intoxication. CBD’s mechanisms are not as clearly established. Research up to this point indicates that CBD targets more than 65 areas of the body, many of its mechanisms overlapping.

In addition, it seems to bind to vanilloid receptors, which are connected to the perception of pain and inflammation. CBD also interacts with orphan receptors, influencing blood pressure, bone functions, and cancer cell migration. It may reduce neuronal hyper-excitability and the release of glutamate. In addition, to activating 5-HT and two glycine receptors, and concurrently, change the signaling of adenosine, GABA, and norepinephrine, and modulate intra-cell calcium.

Not to mention, CBD may prevent how endocannabinoids break down in the body, a function that potentially affects the way we experience THC, lessening its effects.

This information comes from preliminary research that provides a glimpse into the complex ways CBD works within our bodily systems. There is so much more to learn as studies continue.
CBD’s Healing Potential

CBD interacts with serotonin receptors, which play a role in mood regulation, explaining why it may help treat stress, anxiety, and depression. Scientists have long noted the link between low levels of serotonin and anxiety. These interactions between CBD and the body seem to explain why CBD has such expansive healing potential. The word potential here is used purposely, as much of the following information is based on preliminary data and research. Peer-reviewed clinical, conclusive studies are needed (some of which are already underway) to indisputably provide evidence of CBD’s therapeutic benefits. Both preliminary studies and large-scale anecdotal evidence has found that CBD reduces anxiety levels in many study participants.

CBD may be able to treat sleep disorders because of its interaction with both serotonin and GABA receptors. Serotonin regulates sleep directly, and GABA receptors reduce activity in the brain, leading to relaxation. Note that the fact that anxiety can induce sleep issues may also help to explain CBD’s role in sleep disorder treatment; if CBD helps with anxiety, it may also indirectly treat sleep disorders.
CBD’s Healing Potential

CBD is commonly used to treat pain and chronic pain. While CBD is not known for binding to endocannabinoid receptors, it can interact with some, which seems to explain why CBD may work as an anti-inflammatory and analgesic.

As such, CBD has the potential to treat pain, chronic pain, and inflammatory disorders, such as arthritis, multiple sclerosis, skin diseases, diabetes, and bone diseases effectively.

Studies have also indicated that CBD may have anti-oxidative functions, particularly acting as a receptor agonist. This function, combined with its anti-inflammatory potential, could result in the prevention of neuro-degenerative diseases, such as Alzheimer’s and Parkinson’s disease.

CBD use in the treatment of cancer relates to its ability to control pain and nausea and to help patients gain back their appetite. However, CBD may have further uses as far as cancer is concerned, not for treatment, but prevention. Preclinical studies show CBD to have anti-tumor effects, decreasing cell viability and tumor growth and promoting the death of cancer cells. CBD’s potent antioxidant and anti-inflammatory effects are cited as the potential reasons for why CBD may work in cancer prevention.
CBD’s Healing Potential

CBD may have a role in treating substance abuse, including opioids, and cocaine addiction and withdrawal. Related to opioids specifically, studies found CBD to reduce morphine’s rewarding effects, reducing heroin-seeking behavior, in addition to reducing pain and inflammation, common ailments in opioid withdrawal.

CBD has been used in clinical trials as an anti-psychotic, treating patients with schizophrenia, psychosis related to Parkinson’s, and other psychotic symptoms. All were small studies that elicited positive results.

Conclusive research exists for the therapeutic benefits of CBD to treat epilepsy. CBD notably reduces seizure quantity and strength by preventing the body’s sodium channels from erratic firing. That erratic firing is linked to seizures. In 2018, the FDA approved its first CBD-based drug called Epidolex to treat a rare and severe form of epilepsy.
The side effects and safety of CBD

**DESPITE MYTHS ABOUT CANNABIS, CBD IS NOT ADDICTIVE.**

Clinical and reviewed research has confirmed the safety of CBD use by humans, having minimal side effects and an overall better side-effect profile than other medications.

The most common side effects of CBD are non-serious, including sleepiness, diarrhea, and appetite and weight fluctuations. CBD may interact with other medications (like blood thinners), though more studies are needed to understand CBD’s drug interactions fully.

Thus, it becomes vulnerable to decisions made by CBD manufacturers, which can introduce contaminants, heavy metals, and pesticides as well as dangerous elements into the product. FDA tests on certain CBD products revealed chemical contaminants. Other tests showed CBD products containing no actual CBD or CBD quantities indicated incorrectly on the packaging.

Worse, tests have revealed certain CBD products to contain dangerous synthetic cannabinoids that have led to panic attacks and paranoia. In 2017, multiple patients went to a Salt Lake City emergency room agitated, confused, experiencing seizures, or unconscious as a result of a CBD product which only contained a synthetic cannabinoid called 4-CCB and no CBD.

Additionally, due to being unregulated, CBD does not have known, effective therapeutic doses for specific medical uses, which introduces another...
The side effects and safety of CBD, continued.

Potential risk in using it. Still, anecdotal sources provide guides for how to take CBD, both in terms of dosage and method of consumption. Note that different methods of consumption provide different results. Vaping or smoking CBD will provide nearly immediate, but short-lasting effects. Ingesting CBD by way of oil, edibles, or pills, the onset of effect can be expected between 40 minutes and two hours and can last six hours or more. The effects of topical CBD products will come on within 20 to 40 minutes and should last hours.

Dosage can also influence the intensity and, sometimes, even the length of effects, with higher dosages providing a more intense and longer-lasting impact. It is a good idea to begin with a low dose, gradually increasing the dose to figure out what works for each individual. The same dosage should be taken for several days to determine its impact before increasing the dosage.

While things like weight, tolerance, reasons for taking it, and metabolism come into play, a low dose is considered to be between five and twelve milligrams twice a day. A moderate dose is between 10 and 25 milligrams twice a day. A high dose is 20 to 25 milligrams twice a day.

Some people take CBD on a schedule and others take it as needed. This is often where the different methods of consumption come in. If a person experiences a rapid onset of anxiety or pain where they do not have it regularly, they might use a CBD oil in a vape pen to deal with these issues because of its rapid onset. However, for more chronic issues, generally people take digestible CBD (softgels, edibles, or straight oil) on a schedule, sometimes using a vape pen for emergencies.

In addition, it fails to provide consistent and measurable dosing that clinicians have come to rely on. They also believed that it could potentially damage their hard won reputation and clinical foundations. They had concerns early on that something negative could come out about vaping as inhaling carrier oils and potential solvents has not been well studied and is cause for concern. Therefore, the company does not offer any vaping products and will not do so in the future.

OneCBD chose not to offer any vaping products from Day 1, because the company felt it was not a viable consumption method that was thoroughly and safety investigated.

It’s also important to remember that hemp is known as a hyper-accumulator, which means it pulls elements from the soil far more than other plants.

If the soil is fertile and clean, the hemp will fill up on all the nutrients. But if the hemp is grown in low quality - or even toxic - soil, then you are far more likely to be exposed to toxins and pollutants from the ground.
The safety and efficacy of OneCBD

OneCBD follows the strictest standards in its CBD products, so you know you are always getting a pure, reliable, and safe product. In the world of unregulated CBD, you must choose a CBD company you can trust.

OneCBD products are pure. Pure CBD is free of solvents, pesticides, herbicides, and only includes what is listed on the label. OneCBD products contain zero THC, making them 100 percent free of intoxicating effects and legal across the US. All unnecessary waxes and chlorophyll are also removed.

The hemp used to make OneCBD products is organically farmed. Their organic farming uses no chemical fertilizers, GMOs, or pesticides. Working with these farmers, they select certain hemp strains with high concentrations of CBD and terpenes called phytocannabinoid rich (PCR) hemp, as the presence of terpenes allows for greater absorption of CBD.

The most expensive, environmentally friendly, and purest extraction method is CO2 extraction. The process involved liquid CO2 as a solvent. CO2 extraction is the method OneCBD uses first.

Most commonly, CBD companies will use the ethanol extraction method, where ethanol is used as the solvent. This method is faster and cheaper, but could leave behind traces (or more) of ethanol in the CBD. When you choose OneCBD, it means you are ensuring the highest-quality CBD extraction method has been used, providing a pure product of between 70 and 90 percent CBD, plus minor cannabinoids and terpenes.

One CBD accurately lists the amount of CBD contained in each product on the label.
The safety and efficacy of OneCBD, continued.

Third party testing of CBD provides ultimate transparency. Third party testing refers to the fact that by a third-party laboratory has rigorously tested the product.

OneCBD provides the lab test results for each product, with information regarding cannabinoid potency, manufacture date, color, consistency, pesticides, metals, solvents, microbes, terpenes, moisture content, water activity, foreign material, etc. OneCBD’s partner labs are accredited by A2LA, PJLA or ORELAP for ISO 17025 and TNI/NELAC, both publicly and privately owned accreditation organizations.

Some CBD companies test their products in-house, essentially meaning they can say whatever they want about the purity of their products. Other companies do not offer the security of any testing whatsoever.

Aside from these objective qualifications that OneCBD passes, it also passes the subjective qualification when considering the human element.

Eventually, when traditional medicine was not working, he turned to natural medicine and holistic treatments. It was in these methods that Ty began to heal, and eventually, he developed a passion for natural, holistic healing, leaving his decades-long career in standard healthcare to pursue this alternative path. He sought to help others struggling with health problems through the use of CBD. So began OneCBD. The primary motivation and purpose of the company is to help others; it is not a company driven by profit alone.

OneCBD also gives back one percent of every sale to organizations that help it to achieve its wellness mission, including those related to opioid addiction, holistic health, and ecological sustainability. The charities they support can be found on their website throughout the year. This charitable act provides another level of trust in the company, showing its dedication to health over profit.

Ty Burgess, a man who suffered from an autoimmune disease, chronic pain, and subsequent opioid dependence, founded the company.
They are the thermodynamically stable isotropic system that mixes two un-mixable liquids to form one unit by way of an emulsifying agent. Nanoemulsions are between 20 and 25 nanometers, and their small sizes, as well as their unique shape are what cause increased bioavailability. They have a higher surface area, which causes better absorption (greater than 50 percent) into the bloodstream. In the case of One CBD, the formula they use is water-soluble and patent pending, producing an average size of 25 nanometers per droplet of CBD oil. Typically, CBD oil will measure anywhere from 100 to 5000 nanometers per droplet.

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OneCBD softgels use nanoemulsions of phytocannabinoid-rich (PCR) CBD extracted from hemp plants. It is broad-spectrum CBD, meaning it contains all the other naturally occurring terpenes and phytocannabinoids, except the THC has been completely removed to ensure there are no intoxicating effects. The bioavailability of CBD is further increased by the presence of these other terpenes and phytocannabinoids in the cannabis plant. This heightened bioavailability from the way the whole cannabis plant works together as opposed to isolating its individual components is often referred to as the “entourage effect.”

Taking CBD in softgels also allows for more consistent dosing in comparison to other methods of consuming CBD, including vaping it and ingesting edibles or straight CBD oil.
Nanoemulsion technology, continued.

The use of nanoemulsion technology in OneCBD’s softgels demonstrates its dedication to wellness, and providing top-quality product. Three OneCBD softgel products are available.

OneCBD’s Nanoemulsion Overall Wellness CBD oil softgels are for those looking for the benefits of CBD and nothing else. They come in either 10 or 25-milligram softgels.

CBD + Curcumin Nanoemulsion CBD oil softgels contain CBD with curcumin added, specifically geared to help with inflammation. Curcumin is a substance found naturally in turmeric and has been used since ancient history as an anti-inflammatory. Curcumin is an absorption enhancer of CBD.

CBD + Melatonin Nanoemulsion CBD oil softgels contain CBD with melatonin and a bit of Roman chamomile added, designed for those with trouble resting and sleeping. Melatonin is known to help people get to sleep, stay asleep, and get quality sleep. These last two products come in 25-milligram softgels only.
Final Thoughts

With CBD’s lack of regulation, medical professionals need to find a trustworthy CBD source that will never jeopardize the health of patients or put their safety at risk. OneCBD is a company that passes all the checks, proving its integrity through third-party testing, transparency, innovation, and its heartfelt mission.

While CBD and cannabis at large remain largely without the clinical, peer-reviewed research to prove its efficacy beyond a doubt, the studies out there provide promising results that CBD does indeed have numerous medical benefits. Particularly because of CBD’s lack of serious side effects, those benefits ought to be utilized in the interest of patients’ quality of life.
References


