



# THE HEALTH BENEFITS OF CBD

Because hemp products have previously been banned, there is a lack of definitive research on CBD, especially in human trials and especially in the U.S.. While we expect to see this body of evidence grow rapidly in the coming months and years, we as an industry focus equally on what we don't know, as what we do.

You can keep track of the clinical trials focused on CBD here: [clinicaltrials.gov/ct2/results?cond=&term=cannabinoid](https://clinicaltrials.gov/ct2/results?cond=&term=cannabinoid)

## HOW IT WORKS: AN INTRODUCTION TO YOUR ENDOCANNABINOID SYSTEM

CBD's health benefits are related to their ability to manipulate the body's endocannabinoid system (ECS).<sup>1</sup> When something throws us out of homeostasis, or a state of balance, the ECS helps course-correct so that we can operate at the best possible level.<sup>2</sup>

Our endocannabinoid system relies on three pieces to help our system maintain homeostasis.

It starts with the **cannabinoid receptors**, which live on the surface of cells. CB1 (abundant in the brain and central nervous system) and CB2 (concentrated in the peripheral nervous system, immune system and many of our body's organs) are the most studied receptors, though there are likely more. These neurotransmitter receptors essentially function as little sensing devices, picking up on biochemical cues throughout the body. When it senses an imbalance, the receptors trigger a chain of biochemical changes that helps regulate other systems and return you to homeostasis.

**Endocannabinoids**, such as Anandamide and 2-AG, bind to cannabinoid receptors and help balance our systems and return us to homeostasis.<sup>2</sup> These endocannabinoids are called "short-order" neurotransmitters, which means they are only synthesized when the body signals that they are required. Cannabinoids such as CBD, THC or CBG are considered exocannabinoids, meaning they are produced outside of the body.

The final piece of the ECS are the **metabolic enzymes** that rapidly break down cannabinoids once they've been used. The two major enzymes of the ECS are FAAH (breaks down anandamide) and MAGL (breaks down 2-AG). While this is an important function, studies have shown that if you can interfere with FAAH's breakdown of anandamide, the increased levels of endocannabinoids in the brain potentially has a neuroprotective function.

A good example is your body's response to something you perceive as dangerous, what we perceive as stress or anxiety. That feeling of stress comes from an imbalance of hormones in the brain that increases cortisol levels. The ECS helps by regulating how your brain responds to stress signals and balancing your cortisol levels, in essence, helping other neurotransmitters to chill out when they're firing too fast.

Generally, our bodies are very good at managing this process. However, in some cases, scientists believe there are not enough cannabinoids created for the endocannabinoid system to work effectively. The introduction of external, non-psychoactive cannabinoids like CBD to interact with the CB2 receptors could be found to help counteract that deficit and be useful in treating certain ailments, and we hope that ongoing research and present and future clinical trials will further our collective understanding of the benefits of hemp-derived products.<sup>3</sup>

In the meantime, we sincerely hope that you find our products soothing and restorative.





## THERE ARE TWO COMMON WAYS IN WHICH CBD IS ADMINISTERED.

### Localized, External – (creams, lotions, salves)

Localized products are often topicals, such as creams, lotions, or salves. Because of their ability to penetrate transdermally where they are applied, the goal is to achieve quick relief for any specific ailment. In other words, if your goal is targeted relief in a specific location, then a localized application is likely the most effective route.

However, studies have discovered that with consistent use of a localized application, long-term effects such as reducing skin inflammation and visible signs of aging, can be achieved.<sup>5,4</sup>

*NOTE: To-date, there are no studies on the effects of topical CBD gel, creams, or lotions in people.<sup>6</sup>*

### Direct-to-system, Internal – (tinctures, vaporizers, capsules)

The other method by which CBD can be administered is directly to the system. This means that rather than passing through a skin membrane, the CBD is ingested in such a way that it is introduced to the bloodstream.

Common methods include sublingual (tinctures), vaporized (vaporizers), and oral consumption (capsules).

While preference often comes down to the individual, sublingual consumption via tinctures is considered to impact the body quicker and maintains higher availability, or effect, because it doesn't pass through your digestive system.<sup>7</sup>

## EACH METHOD PLAYS ITS PART IN RESTORING BALANCE IN BODY AND MIND.

*“There is real medicine here. We’re talking about something that can really help people.”*

— *Dr. Sanja Gupta*

## SOURCES

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1. [ncbi.nlm.nih.gov/pmc/articles/PMC2931550/](https://ncbi.nlm.nih.gov/pmc/articles/PMC2931550/)
  2. [ncbi.nlm.nih.gov/pubmed/18782018](https://ncbi.nlm.nih.gov/pubmed/18782018)
  3. [ncbi.nlm.nih.gov/pmc/articles/PMC4164977/](https://ncbi.nlm.nih.gov/pmc/articles/PMC4164977/)
  4. [ncbi.nlm.nih.gov/pmc/articles/PMC4240254/](https://ncbi.nlm.nih.gov/pmc/articles/PMC4240254/)
  5. [sciencedaily.com/releases/2017/05/170508112400.htm](https://sciencedaily.com/releases/2017/05/170508112400.htm)
  6. [consumerlab.com/reviews/cbd-oil-hemp-review/cbd-oil/?login=success](https://consumerlab.com/reviews/cbd-oil-hemp-review/cbd-oil/?login=success)
  7. [ncbi.nlm.nih.gov/pubmed/22716155](https://ncbi.nlm.nih.gov/pubmed/22716155)
  8. [jci.org/articles/view/64628](https://jci.org/articles/view/64628)



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