

# BEGINNERS GUIDE TO CBD

CBD's popularity has reached craze-like proportions in the last few years. Cannabidiol, aka CBD, has a long history, but only recently has it surged as a prominent player in the health and wellness industry.

Most people perhaps know it for its ability to reduce anxiety and help with insomnia, but CBD's benefits are seemingly endless! By now, you've most likely heard someone talk about CBD, especially if you're battling cancer or chronic pain.

As more states and countries legalise the recreational and medicinal use of cannabis, CBD- based products are growing in leaps and bounds. However, despite all this buzz, most people are unsure what CBD is, what benefits it can provide them, and whether it's even safe for use.

If you want to use CBD but are confused about where to start or how to use it for the highest benefits, we have prepared this comprehensive guide to clear any confusion, answer your questions and help you make informed decisions:



## WHAT IS CBD?

Cannabidiol, popularly known as CBD, is a prevalent cannabinoid found in cannabis plants. Cannabis plants contain hundreds of chemicals. Approximately 113 of these chemicals called cannabinoids, with THC and CBD being the most abundant.

Tetrahydrocannabinol, abbreviated as THC, is the psychoactive and intoxicating chemical responsible for providing users with a 'high' sensation. THC is often extracted from marijuana plants.

Comparably, CBD is non-psychoactive and does not create a state of euphoria or make you high. CBD's potential role in alleviating many health symptoms has been touted for decades, and recent research and clinical studies have backed its potency.

CBD can be sourced from both hemp and marijuana plants. However, unlike marijuana plants that contain high THC levels (5-30%), hemp plants contain CBD in abundance and negligible THC amounts (below 0.3%). Therefore, most of the CBD products available in the market today are hemp- derived.

## CBD vs THC

CBD and THC work by interacting with our endocannabinoid system (ECS), but they deliver relatively different effects. They have a similar chemical structure, however, there is a small difference in how the atoms are arranged. This accounts for the difference in how the two compounds interact with our ECS and the varying effects delivered.

CBD interacts with our cannabinoid receptors to deliver more relaxing, sedating, and calming effects. On the other hand, THC binds with the receptors to provide a high, enhanced mood and a state of euphoria.

CBD and THC have been shown to deliver nearly the same medicinal benefits like pain, depression, anxiety, and nausea relief. Hence, users can consume CBD to experience the therapeutic benefits of THC, but without the side effect of getting high or stoned.

## HOW IS CBD CULTIVATED?

As noted above, CBD can be obtained from both hemp and marijuana plants. Marijuana plants remain federally illegal. However, in 2018, former President Donald Trump signed the Farm Bill and officially legalised hemp at a federal level.



Since then, hemp plants have been cultivated widely to provide CBD. While the biggest companies are cultivating industrial hemp on a large scale to make oil and numerous products, people also grow hemp at home.

Growing hemp for CBD demands mastery and skills to keep the THC levels below 0.3% while boosting CBD production.

CBD is obtained from the female hemp plants. When male and female plants are grown together, they encourage seed production through pollination while reducing the levels of CBD. For these reasons, growers looking to obtain high CBD amounts cultivate female plants only.

Though the 2018 Farm Bill legalised the cultivation and consumption of hemp and its derivatives, hemp cultivation laws differ from state to state and from country to country.

Hence, it's vital that you check the current hemp laws in your place of residence.

## HOW IS CBD EXTRACTED?

Once hemp grown for CBD extraction is harvested, it is slowly dried and excellently cured. Hemp growers will then sell their optimally cured buds in wholesale to CBD extracting labs/companies.

Various techniques can be used to extract CBD oil from hemp plants. Ideally, companies extract CBD using highly efficient solvents that separate CBD molecules from other chemicals within the plant and then purifying it.



Liquid CO2 is the most common and arguably safest solvent for CBD extraction. That's because it extracts high amounts of CBD while preserving its purity.

Other companies may use alcohol-based solvents like hexane, propane, or butane. Experts advise that these solvents may be toxic and harmful to your health.

Alternatively, companies can use organic and pharmaceutical grade ethanol to extract CBD. This method is especially preferred as it eliminates unwanted substances and toxins from the hemp plant while extracting the highest level of CBD.

After the extraction process, the solvent is evaporated so that only pure CBD oil is left behind. The oil is then mixed with a carrier oil like coconut oil so that the body easily absorbs it.

Before it's available for sale, The Believe Club products is rigorously lab-tested to ensure its quality and safety.

## WHAT IS CBD QUALITY?



It may sound pretty obvious, but a high-quality CBD oil will provide you with the highest benefits. When buying CBD oil or CBD infused products, you want to dig deep and get its updated and accurate quality information.

The Food and Drug Administration (FDA) does not regulate CBD the same way it does other medicines. This means that there are high chances of illegitimate companies falsely advertising their product quality to rip off your money.

You can watch out for various details to ensure you don't buy inferior CBD oil in such a flooded market. For instance, you need to ensure that the oil was manufactured using the safest extraction methods.

Secondly, you want to buy products made from hemp grown in healthy and quality lands, free of contaminants like heavy metals and pesticides.

You can easily confirm the quality and safety of your CBD product by going through its certificate of analysis (COA). The best companies usually send a sample of their products to a third party lab where their quality, purity, safety and potency are tested.

The COA shows you the CBD or THC amounts in the product and tells if it's contaminant-free. A trustworthy company will willingly present its products' COA to its customers.



## WHAT IS CBD OIL?

Generally, CBD oil is the CBD compound extracted from hemp plants. It is extracted as a very thick oily paste that is then combined with an effective carrier oil like hemp seed oil, olive oil or coconut oil. The end product is what we refer to as CBD oil we use a MCT carrier oil

## THE DIFFERENT TYPES OF CBD?

When CBD is extracted, manufactures can avail it to consumers in three different types, including CBD Isolate, Broad-spectrum CBD and Full-spectrum CBD.

## CBD ISOLATE

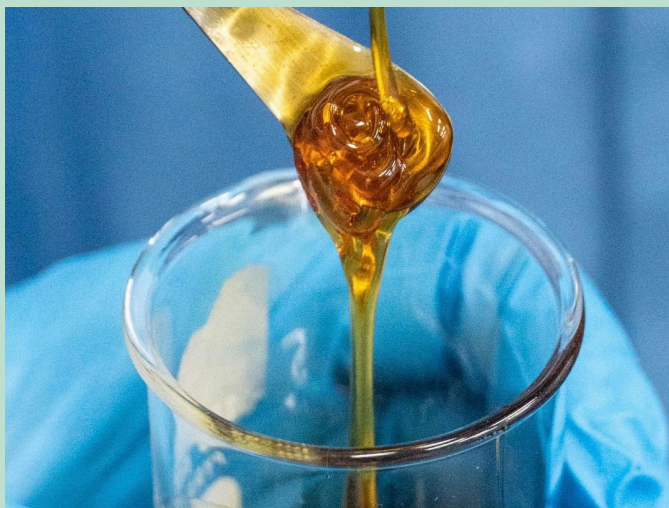
The purest type of CBD available, lighter by colour and is made by rigorously refining the extract to eliminate all other hemp compounds, leaving behind only pure CBD. CBD isolate products may not provide highly potent effects.

## CBD BROAD-SPECTRUM

Broad-spectrum is darker by colour. This type of CBD contains all the cannabinoids and beneficial compounds of the hemp plant, except THC. It is highly recommended for people looking for the best benefits

## FULL-SPECTRUM CBD

This type of CBD contains all the compounds and chemicals of the hemp plant, including less than 0.3% THC. Experts suggest that full-spectrum CBD is the most potent type of CBD. That's because its users experience all the benefits of each compound in the plant through a mechanism referred to as the entourage effect.



## CBD AND THE HUMAN BODY - HOW DOES CBD WORK?

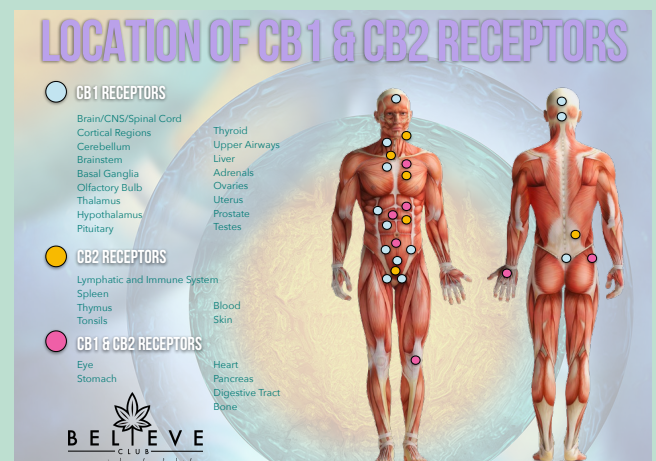
Once you consume CBD oil or any CBD product, the CBD compound is absorbed into the body. It influences the endocannabinoid system to deliver a myriad of medicinal and wellness benefits.

To better understand how CBD delivers its benefits, you'll need first to learn the endocannabinoid system.

## WHAT IS THE ENDOCANNABINOID SYSTEM?

The endocannabinoid system (ECS) is a biological and active cell signalling system in our bodies. Though only identified recently, in the early 1990s by medical experts studying THC, there is much information about how it works and influences our bodies.

The ECS comprises endocannabinoids, enzymes, and numerous receptors that are spread throughout our bodies. These components work in synergy to regulate and control nearly all the critical processes in our bodies, including memory, sleep, mood, appetite, temperature control, inflammation and immunity.



## HOW DO THESE COMPONENTS WORK?

RECEPTORS - also referred to as our body's 'cannabinoid receptors. They are spread throughout our bodies, and endocannabinoids bind to them. This interaction controls and regulates our response to things like pain, hunger, and temperature changes.

ENZYMES - Enzymes are the compounds that break down endocannabinoids.

ENDOCANNABINOIDS - Our bodies naturally produce molecules known as endocannabinoids.

Endocannabinoids work to keep nearly all our internal processes running smoothly.

The cannabinoids in the cannabis plants have the same molecular structure as our bodies endocannabinoids. Cannabis cannabinoids work by literally hijacking our natural endocannabinoids.

## UNDERSTANDING CBD & THE CANNABINOID SYSTEM

As noted above, part of the components of the ECS is receptors that are expressed throughout our body and brain.

CB1 receptors are densely found in the brain and central nervous system. They govern and regulate our mood, appetite, pain, and more. The CB2 receptors primarily exist in the peripheral nervous system, and they influence pain perception and inflammation.

Once CBD is introduced into the body, the enzymes break the compound down to bind with these receptors. However, unlike THC which directly attaches itself to the receptors, CBD works by influencing the receptors. Researchers believe that CBD activates the receptors to provide the numerous health benefits associated with it.

## WHAT IS HOMEOSTASIS?

Homeostasis is the self-regulating ability to maintain a relatively stable internal condition. This involves the bodies biological systems working to ensure an ideal internal condition for variables such as temperature and water levels.

Maintaining this balanced environment is incredibly important for all species survival. If you get too warm, your body will send signals to sweat in order to cool you down.

When you're ill, your lymphatic system by ensuring your body fluids are balanced and helping to fight off any infection.

Breathing is an involuntary consistent action, while the nervous system makes sure you breath the pertinent amount so that you obtain the right amount of oxygen. If you've ever been on holiday and you've had a dodgy tummy from something you ate, this is the body trying to rid the dangerous substance you've consumed by removing it via the digestive system, helping to restore homeostasis.

These are all examples of how our bodies are constantly trying to ensure a state of homeostasis, however this is also present in animals and in plants.



## WHY DOES THIS RELATE TO CBD?

Within the body, we have an endocannabinoid system, which is a cell signalling system responsible for regulating various physiological functions such as pain or digestion, to ensure homeostasis.

Endocannabinoids are cannabinoids your body generates, which are produced when there is some form of imbalance.

They then interact with the relevant cannabinoid receptor, which are commonly found in either the central nervous system or the immune system.

Sometimes the body is incapable of producing the required amount of endocannabinoids, which is when you have an imbalance in your body, homeostasis is no longer achieved, meaning health conditions can occur.

Phytocannabinoids, which means a plant based cannabinoid, interact with the endocannabinoid system, helping to promote homeostasis.

Rather than binding with the CB1 and CB2 receptors, like THC or other cannabinoids, CBD can trigger, impede or provoke the receptors.

Some interesting studies have shown how CBD can activate the TRPV-1 receptor, encourage synthesis of 2-AG and impede the signalling of GPR55, amongst the list of ways in which it helps to achieve homeostasis.

## CONCLUSION:-

It is important to achieve homeostasis in the body, meaning a balanced internal state, to have a health body.

Thanks to the endocannabinoid system, CBD can help us achieve this level of balance by influencing the functions of the receptors.

You have natural levels of endocannabinoids in the body that will try to ensure equilibrium, however as your body might not have enough to solve internal issues, cannabinoids can be utilised to help restore balance.

## HOW MUCH CBD SUCH I TAKE?

There is no one size fits all dosage for CBD to provide users with the same benefits. Because our bodies are different, including our metabolism and the ECS, what may provide one user with optimal benefits may not be enough to deliver any notable benefits to another user.

Therefore, all users are advised to start with low CBD doses and gradually work their way up while noting the effects delivered.

Once you find the ideal amount for your symptoms, physicians recommend that you stick to that dose and build consistency to experience the maximum benefits CBD offers.

## STARTING OUT WITH CBD - Finding your sweet spot

Are you starting a CBD routine but don't know what dosage to begin with? Whichever form of CBD you're using, topicals, gummies, or oil, the goal is to take an amount that will provide you with the highest benefits.

Even before we can teach you how to find your CBD sweet spot, there are some vital facts about the relationship between CBD oil and your body that you need to be familiar with:

Perhaps you've heard someone say, "I tried CBD, but it didn't provide even the slightest effects for me." Though that may be true, it doesn't mean that the entire industry is a scam.

To begin with, CBD does not work on our bodies the same way. That's because every user has unique biology, meaning that our endocannabinoid systems (ECS) are different. CBD delivers its effects by interacting with our ECS, hence the different effects experienced by every person.

Because of these differences, the amount of CBD oil that provides optimal effects for one person after just a few days may not provide another person with any effects for weeks.

Additionally, CBD is fat-soluble, meaning it is attracted to fats (fat-soluble). When you consume CBD, a significant percentage of it is stored in the body fat cells. It remains in the fat cells for days until enough is stored to be released gradually into the ECS to provide effects.

Therefore, don't give up on your CBD regimen just yet. Be patient and experiment until you find your sweet spot to start enjoying the near-magical benefits of CBD.

## HOW TO FIND YOUR SWEET SPOT?

CBD sweet spot refers to the least dose or amount of CBD you need to take to experience the effects you're looking for. Everybody's sweet spot is different, and finding it requires you to experiment with different doses patiently.

Generally, most people will begin to experience their desired results with 10-20mg of CBD daily. Experts advise that beginners start with a small dose of CBD and slowly work their way up while observing the effects experienced at different doses.



## START SLOW & INCREASE GRADUALLY

The best dosage to begin with, is 10-20mg CBD. Take this amount daily for the next 3-5 days and let the CBD build up in your body as the ECS gets used to it.

Consider taking the oil at the same time every day to build consistency/consistent levels of CBD in your system for maximum effectiveness. Let's say that this dosage gives you the relief you're looking for; then, it may be very well your sweet spot.

However, some people may find this amount not enough to provide the effects they seek. In this case, increase your dose by 5-10mg. Take the amount daily for 3-5 days, and if you feel any difference, that means your ECS is responding to CBD.

Continue with this dose until the 5 days are over and if you don't get maximum benefits, raise the dosage by a tiny amount. Evaluate the effects, and if you feel that you are happy and receiving the highest benefits at that dose, you have found your sweet spot.

Note that it can take 4-6 weeks to build a consistency. Therefore you need to be patient and increase your dose slowly until you get your desired relief.



## FOR CBD, LESS IS MORE!

Taking massive amounts of CBD does not provide you with more relief! Once you have found your sweet spot, it's highly likely there's no room for additional benefits. Meaning, the extra amount of CBD past your ideal dosage will be excreted like any other nutrients.

## BUILD A CONSISTENCY FOR MAXIMUM BENEFITS

Consistency is key to getting the highest benefits of your CBD dose. The positive benefits of CBD build with time.

CBD lasts in your system for up to 12-24 hours. After this timeline, your system will no longer have CBD.

Therefore, you want to consume your CBD every day (even twice a day) at the same time to guarantee a consistent amount of CBD in your system. This stimulates your ECS to react more to the compound and provide maximum benefits.

Remember that CBD can be consumed in numerous forms, from gummies, topicals, tinctures, to oils. So, do not be afraid to do some 'trial and error' until you find the form that works perfectly for you.



## CBD & YOUR MENTAL HEALTH

CBD is greatly revered for its ability to help with numerous mental disorders like depression, stress, addiction, bipolar, , autism, epilepsy, post-traumatic stress syndrome and more!

Experts suggest that low serotonin levels in the brain may result in depression. Recent studies show that CBD possesses anti-depressant effects, and it delivers these benefits by influencing how our brain responds to the available serotonin.

CBD may also be used to help with physical conditions as well. A involving rats concluded that CBD may be used to alleviate the pain associated with arthritis. A recent study on human cells concluded that CBD may help with inflammation and its related diseases

## WHY CBD IS BENEFICIAL TO YOUR DAILY ROUTINE

Users can experience a boatload of wellness benefits by incorporating CBD into their daily routine. By regulating different bodily functions, CBD may provide you with the following benefits:

**Better sleep:** studies have supported CBDs effectiveness in promoting better sleep and helping users stay asleep for much longer. Increased levels of cortisol, a stress hormone, may influence insomnia. CBD may affect the production of cortisol and provide sedative effects.

**Anti-inflammatory benefits:** Research has found that CBD contains anti-inflammatory properties and may reduce inflammation while helping with inflammation symptoms like pain, arthritis, and cancer.

**Alleviating Stress:** CBD has been shown to contain anti-stress effects and may be used to effectively lower stress levels, thereby reducing depression and promoting better sleep.

**Enhancing the skin:** Because of its anti-inflammatory properties, CBD may be used to effectively while alleviating symptoms like acne, psoriasis and eczema. Today, you can find numerous CBD-based beauty products like lotions, creams, oils, and balms.

*These statements have not been evaluated by the FDA and are not intended to diagnose, treat or cure any disease. Always check with your doctor before starting a new dietary supplement regimen. Cannabidiol (CBD) is a natural constituent of hemp oil. This product should only be used as directed on the label. Professional medical advice should be sought before using any hemp products. Consult with a doctor before use if you have a serious medical condition or use prescription medications.*

