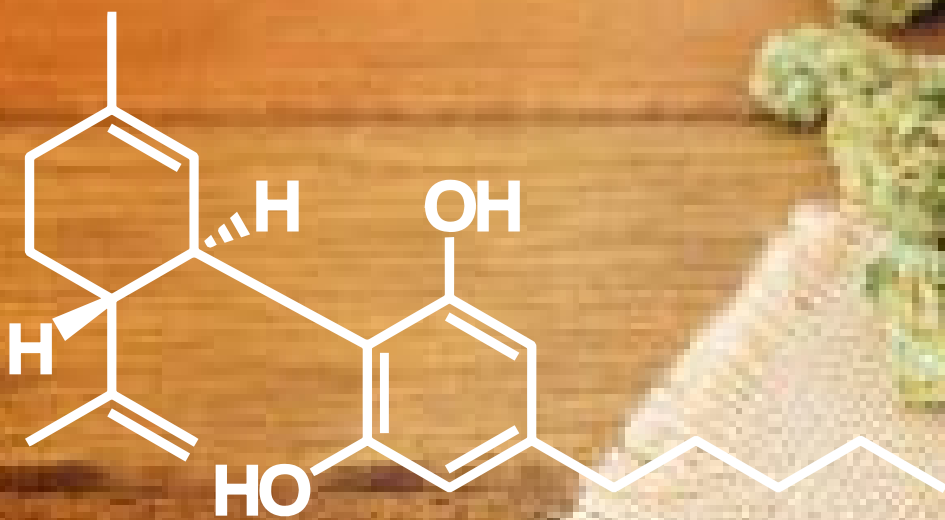


#CBDMOVEMENT



# The Ultimate CBD User Guide



# TABLE OF CONTENTS

1. [Introduction to CBD](#)
2. [The history of CBD](#)
3. [How are CBD products made?](#)
4. [Where is hemp grown and is it organic?](#)
5. [Hemp CBD vs. Marijuana CBD](#)
6. [The Endocannabinoid System and how CBD works](#)
7. [What are the side effects of CBD?](#)
8. [Can you take too much CBD?](#)
9. [Does CBD affect everyone the same?](#)
10. [What are the different ways you can ingest CBD?](#)
11. [What is important to consider when choosing a CBD product?](#)
12. [Full spectrum products and the Entourage Effect](#)
13. [What is the recommended dosage for CBD products?](#)
14. [Is CBD legal?](#)
15. [Will I pass a drug test using CBD products?](#)
16. [What do people use CBD for?](#)
17. [Are CBD products safe for pets?](#)



# INTRODUCTION TO CBD

Cannabis plants contain 60+, naturally occurring, active compounds called cannabinoids. Cannabidiol (CBD) is one of these compounds found in all cannabis plants. Tetrahydrocannabinol (THC) is the most well-known cannabinoid and is associated with marijuana's psychoactive properties. Unlike THC, CBD does not cause a "high" effect and can offer relief and benefits without the disconcerting feelings of lethargy or dysphoria. Cannabis plants are separated into two different types of crops, known as hemp and marijuana. These two plants differ in their cannabinoid ratios, but come from the same plant species *Cannabis Sativa L.* Both hemp and marijuana can be used to produce cannabidiol products. Dating back to the ancient civilizations, it was some of the first people of earth who discovered and identified the differences between hemp and marijuana and began using cannabidiol for various purposes. Next, we will dive into the history of hemp and CBD.

#CBDMOVEMENT



# THE HISTORY OF CBD



Archaeologists believe the plant species "Cannabis Sativa," dates back 10,000 years ago and was likely one of the first crops planted by early man. Hemp was first found in what is known today as Taiwan where farmers used hemp seeds to condition their soil. These people also identified that hemp seeds have high

levels of protein, vitamins, and essential fatty amino acids. During this period, hemp seeds were used so frequently that they became essential to human civilization.

Around 6,000 B.C. hemp was published in the oldest pharmacopoeia "Pen Ts'ao Ching" where the ancient Chinese identified that cannabis plants contain either male or female reproductive properties. This discovery was the first understanding of the difference between

"hemp" and "marijuana." Hemp plants, grown for industrial purposes, were tall and thin and cut before flowering, producing seeds and long stalks. These plants were considered to have male reproductive properties whereas, marijuana plants were recognized as female, grown for more extended periods of time and would eventually sprout a flower. During



ancient times, the reproductive properties of cannabis plants complemented the Taoist philosophy of the Yin and Yang, stating that two halves together complete wholeness. Cannabis thus became a vital component to the ancient Chinese.

In 2737 B.C., for the first time, hemp is recorded as being used by Chinese Emperor Shen-Nung as medicine. Text published, in Pen Ts'ao Ching suggests that the emperor extracted hemp oil from the plant's seeds for pain treatment and made topical salves for treating skin rashes and irritation. Hemp eventually made its way to Europe and specifically Ancient Greece, where plants were found in burial sites indicating it's believed importance in the afterlife. Decades later, King Henry VIII required the cultivation of hemp in

England which was used to make clothing and building materials.

In 1616, settlers traveling from Europe brought hemp to North America, and by 1619 it was again mandated that the plants were cultivated for various purposes.

In the 1700's hemp became prevalent on the continent of Africa, where amongst other uses, the plant was given to pregnant women before childbirth.

In the 1800's the medical use of hemp becomes more common in the US and Europe. It is known that Queen Victoria used CBD rich cannabis to treat menstrual pain. During this same period, Irish physician William Brooke O'Shaughnessy published an assertion indicating that hemp can be used to treat rheumatism, rabies, epilepsy, and tetanus.

Fast forward to 1910 during the Mexican Revolution. With an influx of Mexican immigrants who introduced the recreational use of cannabis and propaganda against these foreigners, sparked the criminalization of all cannabis products in the United States. This was a defining time in the cannabis industry and by the 1980's marijuana cultivators worldwide were on one mission: to grow the most potent, most psychoactive cannabis on the market. Because of this, plants that were rich in



other cannabinoids like CBD were considered “garbage crops.”

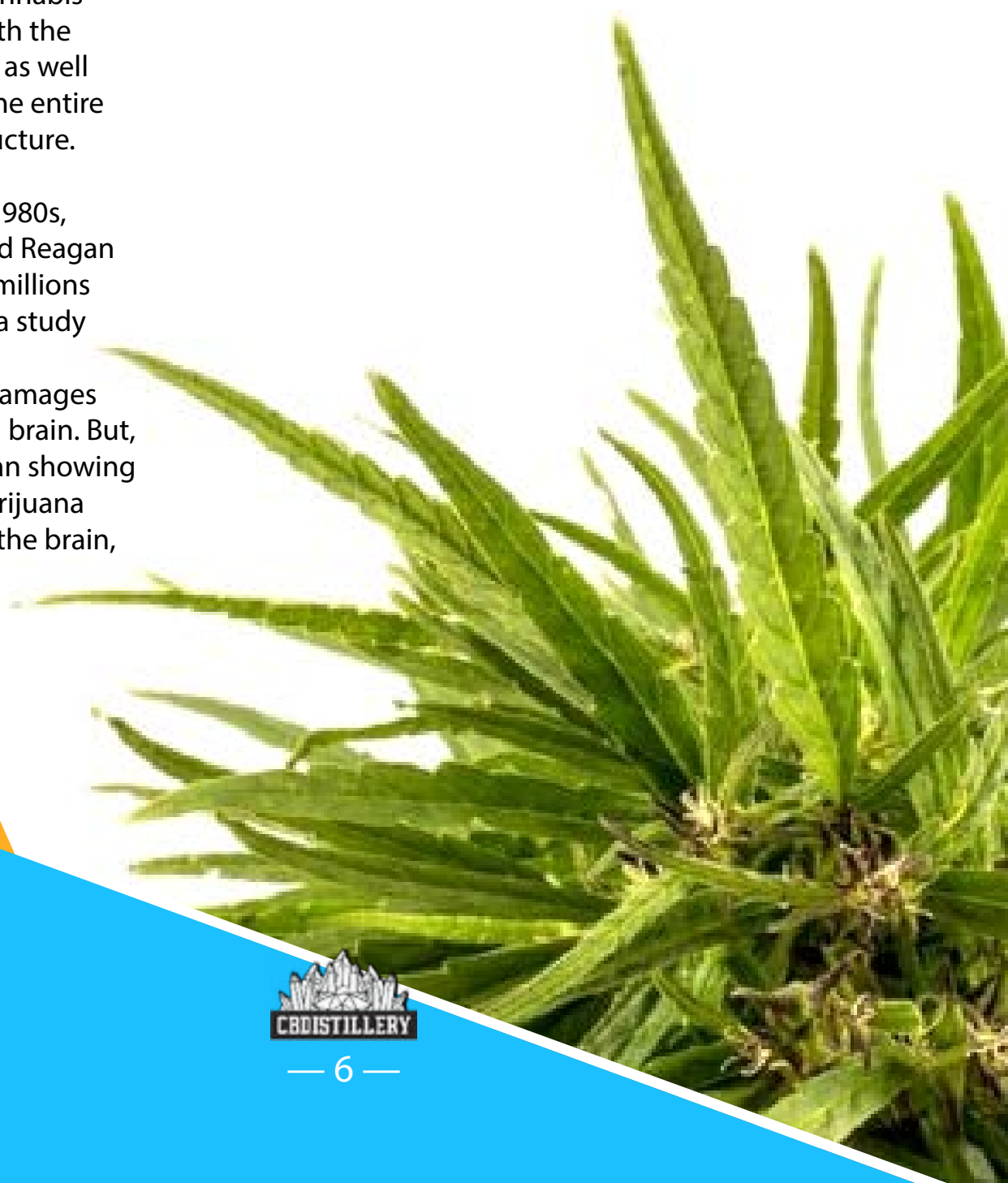
In 1940, American organic chemist, Roger Adams, was the first person to isolate the CBD compound. Twenty-four years later, Raphael Mechoulam, known as the “father of cannabis” was credited with the isolation of THC as well as elucidating the entire cannabidiol structure.

Then, in the 1980s, President Ronald Reagan poured tens of millions of dollars into a study to prove that marijuana damages the human brain. But, rather than showing how marijuana harms the brain,

the Reagan administration ended up subsidizing a series of studies that culminated in the discovery of the endocannabinoid system, expanding our understanding of how cannabinoids interact with the human body.

The Hemp Business Journal predicts that the CBD market will grow 700% by 2020. Thanks to independent and sponsored studies as well as CBD advocates, the world is gaining a better understanding the various uses of cannabidiol products.

#CBDMOVEMENT



# HOW ARE CBD PRODUCTS MADE?

CBD can be extracted from marijuana or industrial hemp plants. For legality purposes, many CBD products are extracted from the stalks and stems of industrial hemp plants which are cannabis plants with .3% THC or less so they qualify as "Industrial Hemp." Once cultivated, cannabis plants are lifted from the ground and brought to an extraction facility. Ethanol and CO2 extraction are two commonly used methods



for extracting CBD and are two of the cleanest ways to extract CBD for human consumption. CO2 extraction, a popular extraction method typically used when extracting smaller quantities of hemp, involves filtering plants through a series

of chambers that control temperature and pressure. When different temperatures and units of pressure are applied to cannabis plants, this sophisticated system is able to isolate cannabinoids at a 90% efficiency.



An alternative method, is ethanol extraction which involves introducing the solvent ethanol to the hemp plant in order to separate and isolate cannabinoids. Unlike CO2 extraction, one is able to produce a very high volume of full spectrum extract with this method. Ethanol also removes unwanted components such as chlorophyll from dried hemp.

Once extracted, hemp undergoes an additional step known as chromatography, a mechanism used to remove unwanted plant phytochemicals from the desired cannabinoid. Cannabinoids like CBD have a strong interaction with chromatography media, thus traveling slower than unwanted plant material like chlorophyll which has a weak interaction. Once divided, cannabidiol and other terpenes can be isolated and

undesirable plant material can be disposed of.

Many CBD oil products also undergo what is known as decarboxylation. This involves heating the cannabinoids into a form that allows the cannabinoids to immediately interact with the endocannabinoid system making the compound more usable throughout the body. When the extracted oil is decarboxylated it is converted from CBDA to CBD, thus removing the acid form so it's readily bio available.

Once decarboxylated, the oil can be consumed directly, however it may not have a favorable taste. Instead, this oil can be mixed with a carrying oil such as hemp seed or coconut oil, turned into capsules, or hardened into an isolate form for consumer use.





# WHERE IS HEMP GROWN AND IS IT ORGANIC?



 **14 States Allowed to Grow Hemp**

Cannabidiol products sold in the United States can be sourced from hemp or marijuana plants grown either domestically or internationally. For legality purposes, many CBD products (containing less than .3% THC) are sourced from industrial hemp. Fourteen states within the United States can legally grow and process industrial hemp and hemp seeds. These states include California, Colorado, Kentucky, Oregon, and Tennessee.

Reputable CBD companies source their industrial hemp grown with organic practices, but hemp, in general, is not a USDA certified organic product. Moreover, it is recommended that you choose a CBD product made from NON-GMO, pesticide free, industrial hemp that

is tested consistently for contamination to ensure safe consumption. When selecting a CBD product, make sure the company uses a safe solvent and a verified extraction method.



# HEMP CBD VS. MARIJUANA CBD

Hemp and marijuana come from the same cannabis species, but are grown for different purposes. Hemp – also called industrial hemp – is one of the oldest plants known to man, dating back to 8000 BC. The plant itself is typically tall and thin and cultivated to produce food, oils, paper, other textiles, and high CBD extractions. Marijuana plants, on the other hand, are bred for their psychotropic properties. The cannabis plant species, which includes industrial hemp, contains 60 known cannabinoid compounds. The levels of THC in cannabis are what legally distinguish which plants are considered industrial hemp and which are considered marijuana. High levels of THC (3 -15%) the cannabinoid commonly associated with the plant's psychoactive properties, is found in higher

concentrations in marijuana plants, whereas industrial hemp status is given to cannabis plants with THC levels less than .3%. Cannabinoid ratios differ from each cannabis strain. Whereas the marijuana strain in Girl Scout Cookies has high levels of CBG, the Sativa strain Durban Poison is richer in THCV. Neither strain is necessarily better, they simply differ in cannabinoid ratios. Similarly, hemp is a cannabis strain with typically higher concentrations of CBD, CBG, CBC and sometimes THCV but will always have low levels of THC.

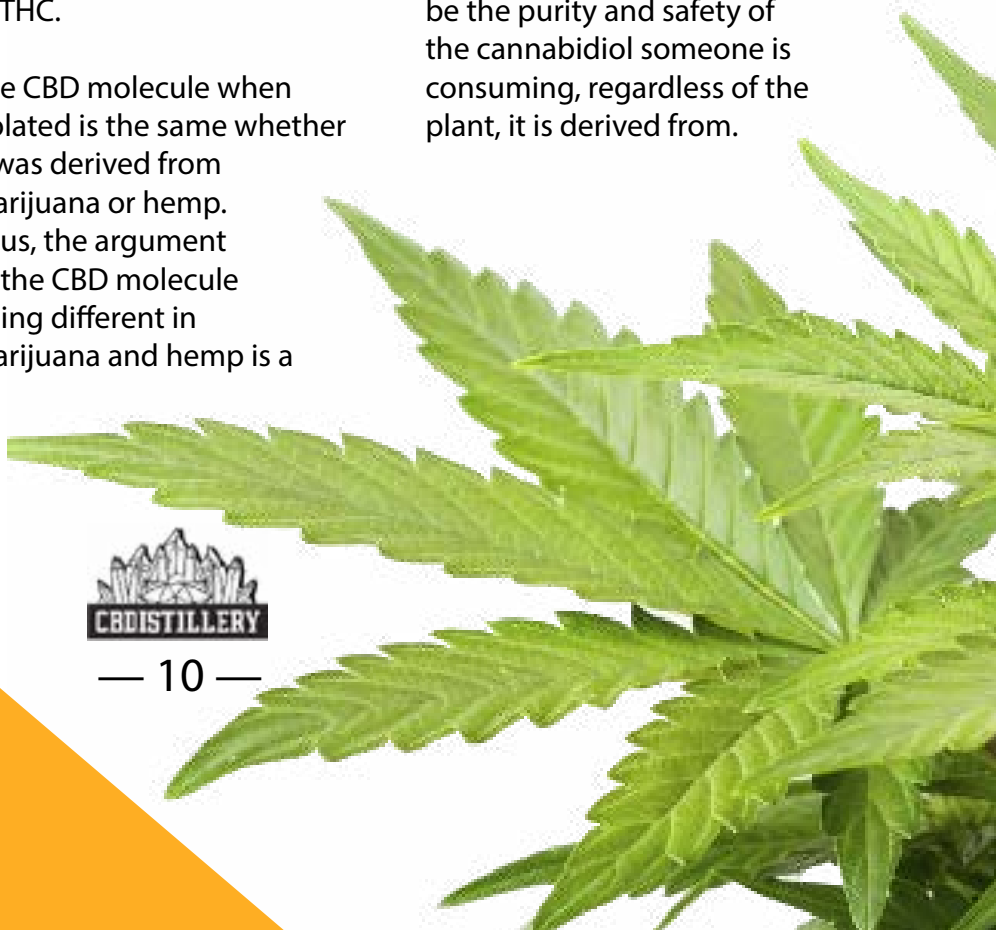
The CBD molecule when isolated is the same whether it was derived from marijuana or hemp. Thus, the argument of the CBD molecule being different in marijuana and hemp is a

misconception. Franjo Grotenhermen of the International Association of Cannabinoid Medicines famously declared, "CBD is CBD. The human body does not care where the molecule comes from."

To better understand this, think of drinking water from the faucet of your sink or a filtered water bottle. Although the purity of the water might be different, the H2O molecule is consistent.

Similar to the above analogy, what is arguably relevant in the debate between hemp or marijuana extracts should be the purity and safety of the cannabidiol someone is consuming, regardless of the plant, it is derived from.

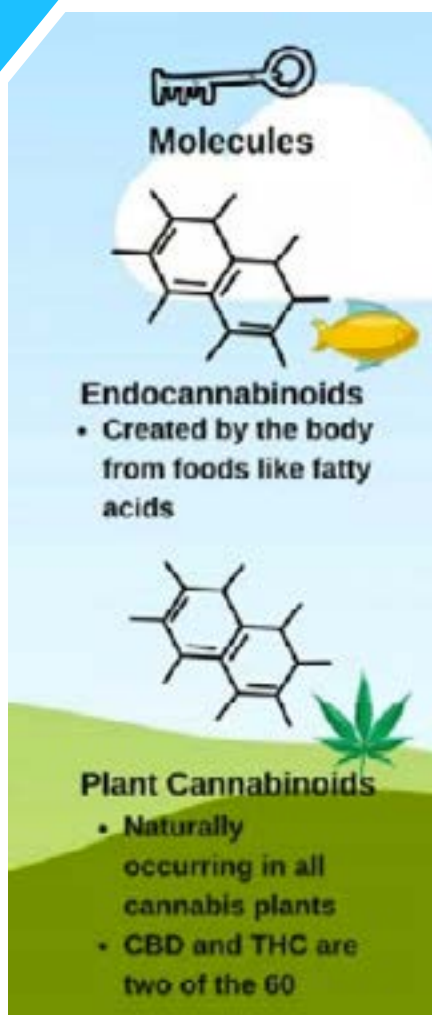
#CBDMOVEMENT



# THE ENDOCANNABINOID SYSTEM AND HOW CBD WORKS

In the 1980s, President Ronald Reagan poured tens of millions of dollars into a study to prove that marijuana damages the human brain. But, rather than showing how marijuana harms the brain,

the Reagan administration ended up subsidizing a series of studies that culminated in the discovery of the endocannabinoid system. The endocannabinoid system (ECS) is a collection



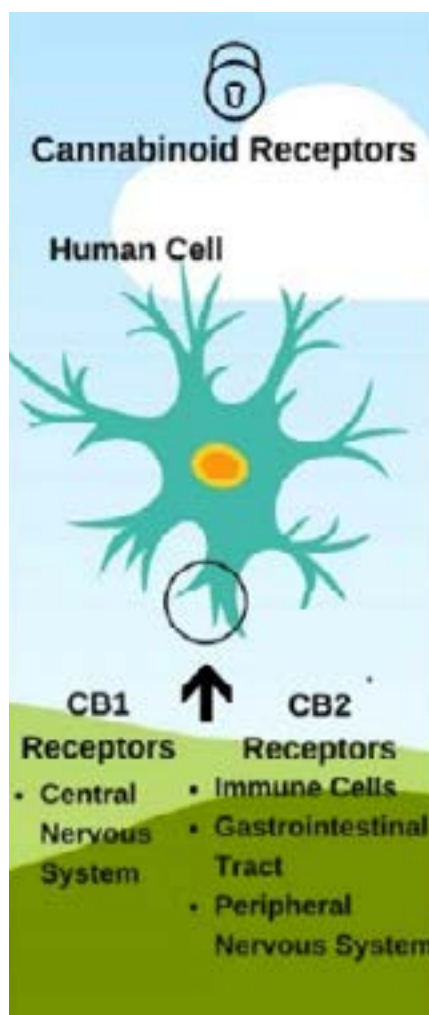
**Molecules**

**Endocannabinoids**

- Created by the body from foods like fatty acids

**Plant Cannabinoids**

- Naturally occurring in all cannabis plants
- CBD and THC are two of the 60



**Cannabinoid Receptors**

**Human Cell**

**CB1 Receptors**

- Central Nervous System

**CB2 Receptors**

- Immune Cells
- Gastrointestinal Tract
- Peripheral Nervous System



**Endocannabinoid System**

Endocannabinoids or plant cannabinoids bind with cannabinoid receptors and send a message to the body to do certain things.

This aids in:

- Sleep
- Appetite
- Mood
- Motor Control
- Immune Function
- Pleasure
- Pain
- Reproduction and Fertility
- Memory
- Temperature Regulation



of cell receptors and the corresponding molecules (agonists) in the human body. This system helps to regulate sleep, appetite, mood, motor control, immune function, pleasure, pain, reproduction and fertility, memory and temperature regulation.

When the ECS is in balance, one experiences homeostasis.

Endocannabinoids are the molecules that act as chemical messengers that bind to cannabinoid cell receptors and tell the body to do certain things. The human body naturally produces endocannabinoids with the help of consuming foods like fatty acids found in nuts and fish. The 60 cannabinoid molecules found in cannabis also can bind to cannabinoid receptors. Although different

cannabinoids (like CBD and THC) cause different effects, it is all through the same system that similar molecular messages are sent throughout the body. Put more simply, the molecules found in cannabis plants aid in the human body's endocannabinoid system, which is responsible for many vital functions.



## WHAT ARE THE SIDE EFFECTS OF CBD?

Multiple studies, published as early as 1980, suggest that CBD has minimal side effects and is overall safe for consumption. Nonetheless, consumers should be made aware of any known, potential drawbacks when consuming a product. Below, we discuss the findings from each recorded study and review on the safety and known side effects of CBD.



### 1980 Study in Pharmacology

On January 3, 1980, Pharmacology published their findings conducted during a study in which they tested eight healthy volunteers and 15 patients with epilepsy, looking at the side effects of CBD when consumed daily for a month. Their reported conclusions were, 'All patients and volunteers tolerated CBD very well and no signs of toxicity or serious side effects were detected on examination.'



International Journal  
of Neuroscience

In 1986, oral doses, ranging from 100 to 600 mg per day of cannabidiol were given to 5 patients with dystonic movement disorders. In addition to recording specific benefits, this study also uncovered mild side effects of CBD such as hypotension, dry mouth, psychomotor slowing, lightheadedness, and sedation. It is also noteworthy that during this study two patients were given CBD in doses over 300 mg per day seemed to aggravate their Parkinson's symptoms. Yet in 2014 a separate paper described how CBD significantly improves the lives of those with Parkinson's disease.

#### Safety and Side Effects of Cannabidiol

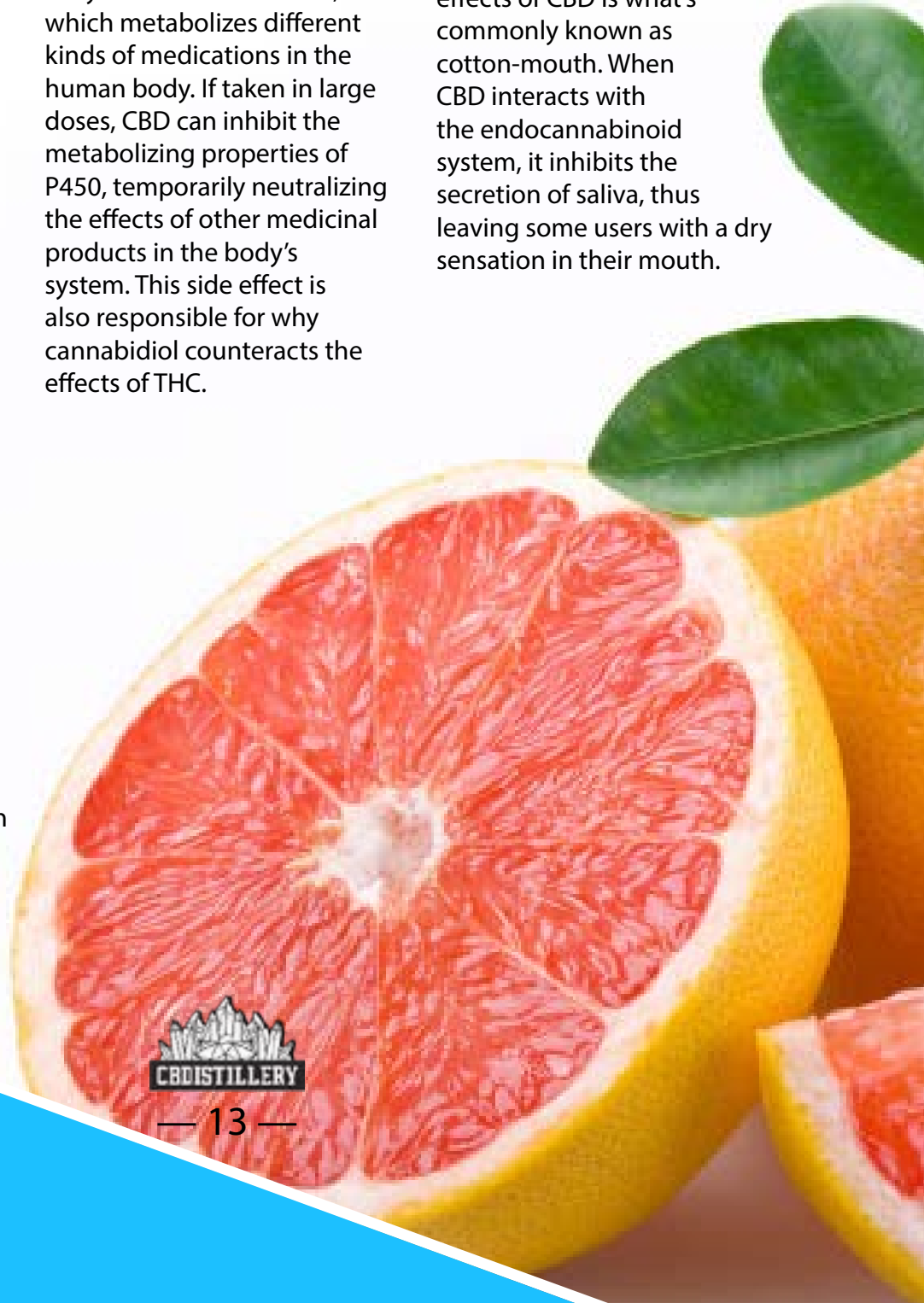
Most recently in 2011, a review on the safety and side effects of cannabidiol, found that CBD might interfere with the hepatic drug

metabolism, alteration of in vitro cell viability, decreased fertilization capacity or the reduced activity of p-glycoprotein. Have you ever been told by a doctor or pharmacist not to drink or eat grapefruit while taking a prescription medication? Grapefruit and CBD have a similar effect on P450, an enzyme found in the liver, which metabolizes different kinds of medications in the human body. If taken in large doses, CBD can inhibit the metabolizing properties of P450, temporarily neutralizing the effects of other medicinal products in the body's system. This side effect is also responsible for why cannabidiol counteracts the effects of THC.

#### 2006 Study Argentinian Study

In 2006 a group of scientist hypothesized that there are cannabinoid receptors in human's salivary glands. In fact, their hypothesis was correct, which is most likely the reason that one of the previously discovered side effects of CBD is what's commonly known as cotton-mouth. When CBD interacts with the endocannabinoid system, it inhibits the secretion of saliva, thus leaving some users with a dry sensation in their mouth.

#CBDMOVEMENT



# CAN YOU TAKE TOO MUCH CBD?

Cannabidiol and other cannabinoids are known to be non-toxic, with no known fatal overdose levels ever reported. The previously mentioned

study from 2011 indicated that chronic use and high doses up to 1,500 mg/day of CBD are reportedly well tolerated in humans. The Department of Health and Human Services states, 'no signs of toxicity or serious side effects have been

observed following chronic administration of cannabidiol to healthy volunteers (Cunha et al., Pharmacology 21:127-185, 1980), even in large acute doses of 700 mg/day (Consroe et al., Pharmacol, Biochem, Behav. 40:701-708, 1991).'

## DOES CBD AFFECT EVERYONE THE SAME?

Shortly after Rafael Mechoulam, the 'father of THC,' isolated THC and elucidated the entire cannabidiol structure, he was curious about how the THC molecule would affect different people. Thus, one evening he invited over a few of his friends for some cake, which little did they know, was laced with 10mg of

pure THC. A few of his friends felt 'strange, in a different world,' while some couldn't stop talking or giggling. While the scientist now understood that cannabis compounds, do, in fact, cause different reactions, it wasn't until years later that we would figure out why. Here is a look as to why all cannabis (marijuana or hemp derived) products affect people differently.

### Genetics

About 20% of the population has good endocannabinoid genetics. These people were born with a genetic mutation that increases the level of endocannabinoids and levels of anandamide (the so-called bliss molecule) naturally occurring in their system. As a whole, the endocannabinoid system is partially responsible for regulating sleep, appetite, mood, motor control, immune



function, pleasure, pain, reproduction and fertility, memory and temperature regulation. When someone consumes cannabis, the cannabinoids, like THC and CBD, replace the naturally occurring endocannabinoids in your body. Thus, if you are among the lucky few that have this genetic mutation, you are most likely less inclined to feel the effects of CBD because your body already naturally produces a similar result.

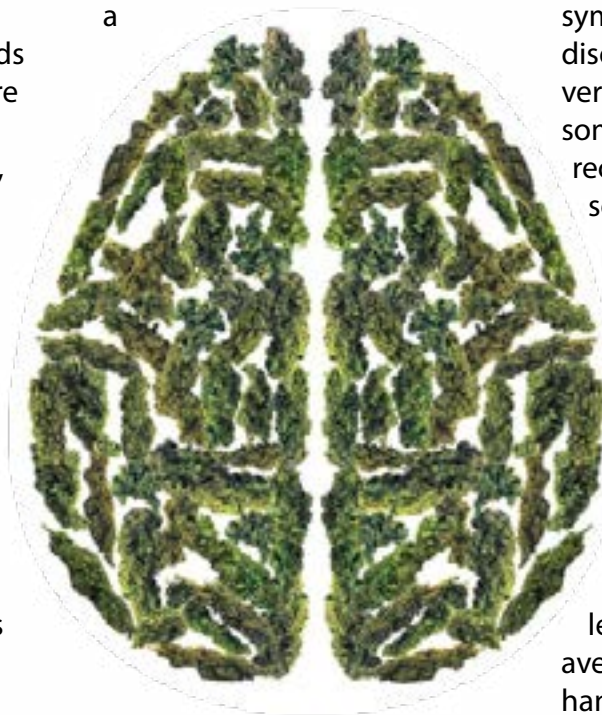
#### Men vs. Women

Cannabidiol products affect males and females differently. Research shows that estrogen makes women more sensitive to cannabis. That time of the month? Washington State University found that women are impacted more by THC a day or two before ovulation, because of the peak in estrogen levels.

#### Unique Biochemistry

Biochemistry, the study of chemical substances and vital processes occurring in living organisms is yet another explanation as to why people react differently to CBD products. No two individuals have the exact

biochemistry makeup, which affects the way substances metabolize throughout our system. The health of one's endocannabinoid system plays a



significant role in this. As previously mentioned, the human body naturally produces endocannabinoids. Things like diet, stress, and overall lifestyle influences endocannabinoid levels. When consuming cannabis products, you are increasing endocannabinoid levels. For individuals who have deprived levels, cannabis consumption will most likely produce a favorable experience, whereas someone with healthy endocannabinoid levels might

not “feel” the effects of CBD or other marijuana products. Overall Health

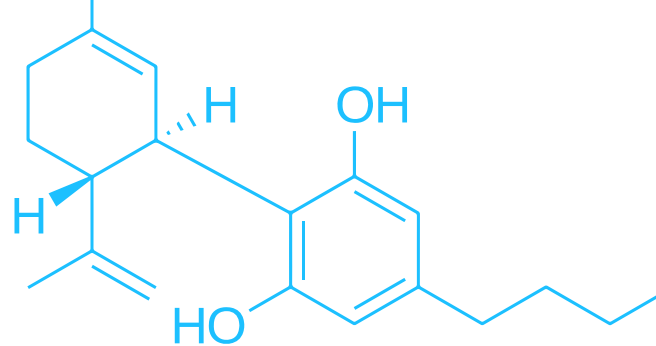
Someone who is using cannabis products to treat symptoms for a disease or disorder is going to have a very different experience than someone using cannabis recreationally. When someone is fighting off an ailment or illness, that individual's biochemistry and endocannabinoid levels are altered. Thus, when someone with Parkinson's disease uses a product like CBD oil, the outcome may be feeling “normal” because endocannabinoid levels are replenished. The average person, on the other hand, may use the same product and feel nothing at all or very different effects.

#### Tolerance

It is relatively well-known that over time and continued use, one will most likely build a tolerance to THC. Yet, in one study conducted in 2011, findings suggest that one may not build a tolerance to CBD. However, more research needs to be done to prove this theory.



# WHAT ARE THE DIFFERENT WAYS YOU CAN INGEST CBD?



There are dozens of ways to ingest CBD, including smoking, vaping, using topical products, tinctures, suppositories, and sprays. Below is a list of 6 of the most popular forms of administering CBD.

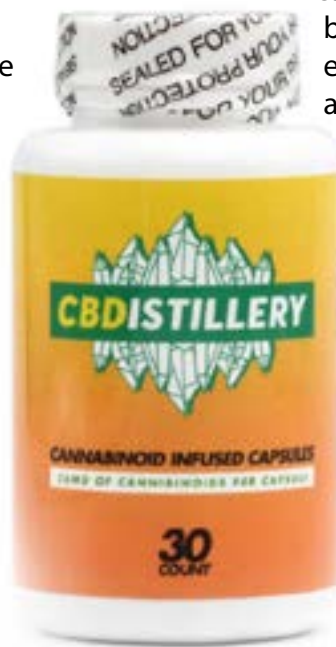
## CBD Oil and Sublingual Administration

Oils are easily the most popular and highly sought after products on the market, due to its ease of consumption, accurate dosing, overall high-quality, and effectiveness. Cannabidiol oil is meant to be consumed orally and most often used sublingually.

Sublingual administration involves placing drops under your tongue and holding it there for several seconds before swallowing. Using CBD sublingually



is the second fastest form of consumption (the first being vaping or dabbing). Some find the taste of CBD oil very appealing while others do not prefer the hemp flavor. For those who are not fond of the taste of hemp, CBD drops can be placed in a beverage like orange juice or foods like salad dressing to dilute the taste. CBD oils that are mixed with MCT coconut oil are not meant to be vaped. Vaping MCT coconut oil can be dangerous to an individual's health.



## CBD Capsules

For those who are not fond of the taste of CBD oils, capsules are an excellent alternative. Similar to CBD oil products, capsules offer people the benefits of CBD paired with ease of consumption and accurate dosing.

## CBD Topical Creams

Topical creams are a unique product because CBD can be mixed with other essential nutrients such as lavender, tea tree, and aloe to heighten the benefits of CBD.





Designed to be applied directly to the skin, topical creams deliver CBD oil throughout your body. These products often smell amazing too!

### Vaping CBD



Smoking any kind of cannabis product can cause irritation and inflammation in the lungs, even when smoking high strains of CBD. Vaporizing CBD is an excellent alternative to avoid these types of issues. CBD vape oils can be purchased or created easily on your own by melting down a high concentrate CBD isolate and mixing it with VG or PG oil.

### Infusing CBD into food or liquids

### Adding cannabidiol

to you the foods you already love is a great way of

ingesting CBD. While you can put CBD oil drops in orange juice and other

liquids, CBD isolates are excellent for cooking because they are tasteless, odorless and are easily soluble into products like coconut oil, butter, and honey. Once infused, these products can be used to cook with to make pasta dishes, dips, and desserts like brownies. Infused honey or agave nectar can also be used to sweeten coffee or tea.

### Dabbing CBD

Dabbing is defined as the consumption method associated with the flash vaporization of cannabis concentrates (cannabidiol) once applied to a hot surface and inhaled. Concentrates,



like 99% pure CBD isolate is more potent than flowers, so a little bit goes a long way and is known to be one of the best ways to get immediate and effective relief. CBD Isolate also contains less plant material, so you are inhaling more cannabidiol and less combusted resin.





# WHAT IS IMPORTANT TO CONSIDER WHEN CHOOSING A CBD PRODUCT?

Some believe that just because you are purchasing a product from a plant, that is must be safe to use. That is not necessarily the case with CBD products. Here are four things to remember when choosing a CBD product that is safe for consumption.

It starts with the plant

The first thing to consider when selecting a product is understanding where the hemp or marijuana plant came from. Contrary to what some may think, cannabis plants grown domestically and internationally can all be safe for consumption. But, it is crucial only to choose products that are sourced

from pesticide free, NON-GMO, plants to avoid ingesting harsh chemicals.

Price does not determine quality

The FDA recently conducted a series of tests on so-called CBD oils sold on the internet. Despite manufacturer claims, many of these products contained little to no CBD.

*MB1: Microbiological Contaminants [WI-10-09]*

*Analyst: matt*

*Test Date: 3/20/2017*

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**16505-MBI**

| Symbol | Analysis                                | Results | Units | Limits*      | Status |
|--------|---|---------|-------|--------------|--------|
| AC     | Total Aerobic Bacterial Count           | <100    | CFU/g | 10,000 CFU/g | PASS   |
| CC     | Total Coliform Bacterial Count          | <100    | CFU/g | 100 CFU/g    | PASS   |
| FB     | Total Bile Tolerant Gram Negative Count | <100    | CFU/g | 100 CFU/g    | PASS   |
| YM     | Total Yeast & Mold                      | <100    | CFU/g | 1,000 CFU/g  | PASS   |

Note: All recorded Microbiological tests are within the established limits.



The best CBD companies are transparent about how much cannabidiol and other cannabinoids you are paying for. These companies will frequently conduct third party tests on their products and publish the results on their website. Do some additional research on the business you are purchasing from and read their customer reviews. Are people satisfied with the quality of their products?

Not all extraction methods are safe

There are various ways of extracting cannabidiol from

a cannabis plant, each with their pros and cons. CO2 and ethanol extraction are two of the most commonly used methods. CO2 extraction, for example, uses carbon dioxide under high pressure and extremely low temperatures to extract, preserve, and maintain the purity of the CBD oil. According to ProjectCBD.org, 'when well done the end product is safe, potent, and free of chlorophyll'. When choosing a CBD product, make sure the company uses a safe solvent and a verified extraction method.

Make sure the product is non-psychoactive

While cannabidiol is scientifically proven to be non-psychoactive, CBD products can be produced and sold with levels of THC that can get you high. If this is not your desired effect, it is recommended when selecting a product, to choose only those that have "non-psychoactive" effects.

## FULL SPECTRUM AND THE ENTOURAGE EFFECT

Some CBD oil products on the market are limited to CBD explicitly while others advertise their product as "full spectrum" meaning it contains other cannabinoids such as CBN, CBC, and THCA. A wider range cannabinoid spectrum can aid in what is known as the entourage effect which is the scientific belief that cannabinoids

have greater therapeutic benefits when working together rather than acting as a single molecule. The interaction of more than one cannabinoid stimulates the endocannabinoid system and the molecular interaction.



# WHAT IS THE RECOMMENDED DOSAGE FOR CBD PRODUCTS?

CBD effects everyone differently, so it is important to customize the dosage to an individual's needs. It is recommended that an individual starts with a small dosage and then slightly increase as necessary to achieve the desired result or as recommended by a healthcare provider or physician. An excellent source for dosage recommendations is ProjectCBD.org.

Below is a breakdown of how much CBD is in each strength of CBD tincture (one full dropper is approximately 1 mL). Drops sizes can vary in size, but 1 mL is about 10 drops

- 1000mg tincture has approximately 66.66mg of CBD in 1 mL.
- 500mg tincture has approximately 33.33mg of CBD in 1 mL.
- 250mg tincture has approximately 16.66mg of CBD in 1 mL.
- One full dropper is approximately 1 mL.

## CBD Isolate

- 1 gram of CBD isolate is generally 998mg of CBD (499mg/.5g and 98mg/.1g)



# IS CBD LEGAL?

CBD companies are unable to give legal advice on the legality of CBD. The information below is a third party interpretation in an effort to provide consumers information. It is strongly encouraged that consumers to do their own research as well as seek legal advice if

concerned about the legality of purchasing CBD across state lines.

CBD is legal in 44 states

Leafly: Is CBD Oil Legal? Depends on Where You Are and Who You Ask

<https://www.leafly.com/news/politics/cbd-oil-legal-depends-ask>

*CBD is legal in 44 states. In the 28 states where medical marijuana is legal, CBD products are covered by those same medical marijuana legal protections. In recent years, 16 states have passed CBD-only laws, which legalize the possession and use of CBD products for specific qualifying conditions—but not cannabis products containing higher levels of THC. Those*

#CBDMOVEMENT



*CBD-only laws often limit the legal possession and use of CBD products to children with epilepsy, and some nerve and muscle afflictions. Even in those states with CBD legal protections, however, the substance is considered federally illegal by the DEA. Only six states—Idaho, South Dakota, Nebraska, Kansas, Indiana, and West Virginia still consider every part of the cannabis plant, including CBD, to be illegal.*

### Legality of Industrial Hemp

<http://www.thecannabist.co/2017/07/07/dea-statement-cbd-hemp-farm-bill-cw-hemp-response/83322/>

*The Controlled Substance Act does not contain the terms “Cannabidiol,” “Cannabinoids” or “Hemp.” In order for these terms to be included in the CSA and officially become law, it would take an act of Congress, passed by the House and Senate, and signed by the President. Companies who source*

*domestic hemp products, cultivated in full compliance with the Farm Bill, under appropriate licensing from respective state departments of agriculture in Colorado and Kentucky are covered under this legislation. Furthermore, according to the continuing Appropriations Acts of 2016 and 2017, it is the expressed intent of Congress that hemp cultivated in compliance with the Farm Bill be intended for **“transportation, processing, and sale.”***

## WILL I PASS A DRUG TEST?

We are unable to legally state whether or not a consumer of CBD products will pass a drug test. The information below is a third party interpretation in an effort to provide consumers information. It is recommend that all consumers concerned about drug screening do additional

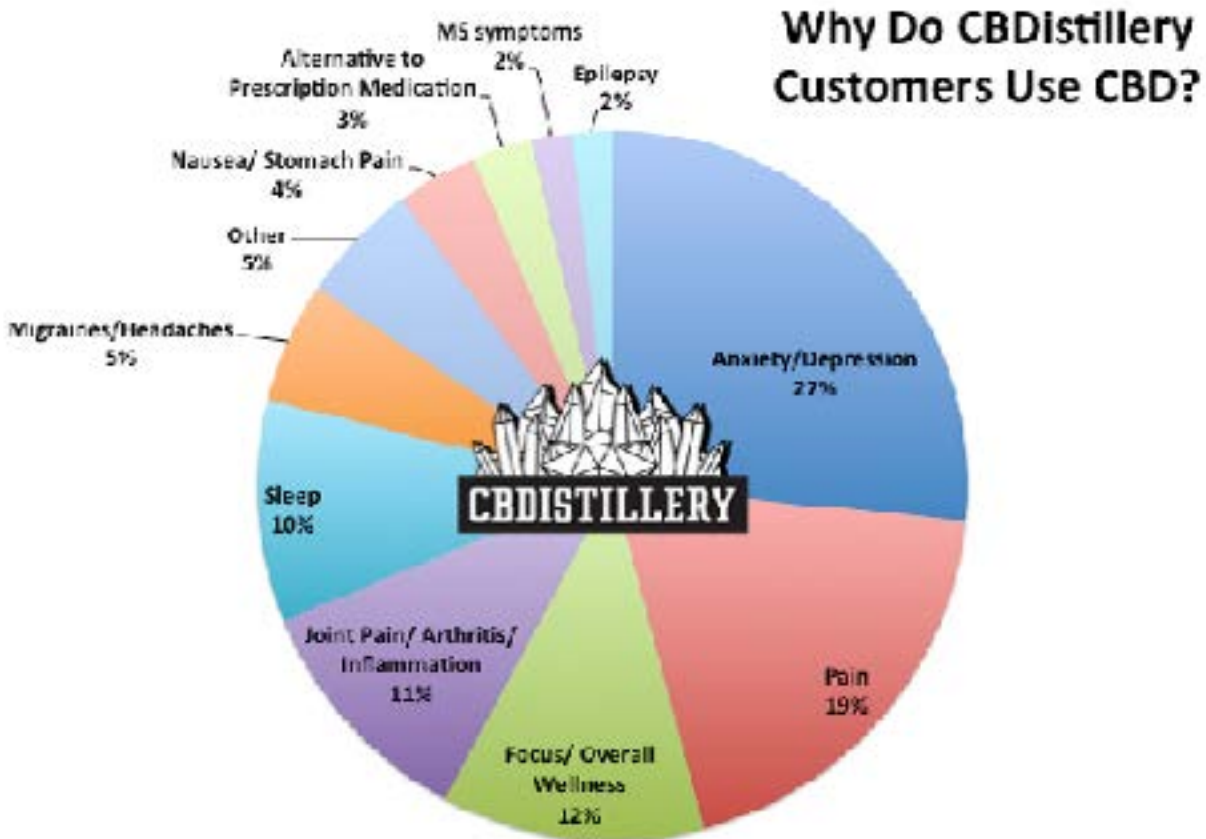
research prior to making the decision to consume any CBD products. Non-psychoactive cannabinoids such as CBD, CBG, and CBN among others typically do not have cross-reactivity in a drug screen with the psychoactive compound, THC. However, in rare cases,

an individual consuming large doses of CBD (above 1000-2000mg) could potentially represent a false-positive. Full spectrum products like capsules and tinctures contain less than .3% THC.



# WHAT DO PEOPLE USE CBD FOR?

The CBDistillery™ recently conducted a survey where we asked our customers, “What is the primary benefit that you have received from The CBDistillery™? Here is a breakdown of the responses we received



The CBDistillery™ shall not be held liable for the medical claims made by customer testimonials. The statements made regarding these products have not been evaluated by the Food and Drug Administration. The efficacy of these products and the testimonials made

have not been confirmed by FDA- approved research. These products are not intended to diagnose, treat, cure or prevent any disease. All information presented here is not meant as a substitute for or alternative to information from health care practitioners. Please consult

your healthcare professional about potential interactions or other possible complications before using any product. The Federal Food, Drug and Cosmetic Act requires this notice.



# ARE CBD PRODUCTS SAFE FOR PETS?

Just like humans, animals also have cannabinoid receptors primarily in the brain and central nervous system, making up what is called the endocannabinoid system. For mammals, this system partially controls inflammation, pain, motor control, skin condition, appetite, aggression, anxiety and neurological disorders. CBD is an agonist, weakly binding to endocannabinoid receptors, causing a long-lasting response with non-intoxicating effects.

THC on the other hand, can be poisonous to pets. It is therefore important to select a CBD product that is “non-psychoactive”. Please consult with your veterinarian prior to giving your pet CBD.

#CBDMOVEMENT



# References

<http://www.hemp.com/history-of-hemp/>  
<https://www.cwhemp.com/hemp-oil-uses/benefits-of-hemp>  
<http://herb.co/2016/07/27/cannabis-affects-everyone-differently/>  
[https://www.nytimes.com/2015/03/08/opinion/sunday/the-feel-good-gene.html?\\_r=0](https://www.nytimes.com/2015/03/08/opinion/sunday/the-feel-good-gene.html?_r=0)  
[http://www.medicinalgenomics.com/wp-content/uploads/2013/01/Bergamaschi\\_2011.pdf](http://www.medicinalgenomics.com/wp-content/uploads/2013/01/Bergamaschi_2011.pdf)  
<https://www.karger.com/Article/Abstract/137430>  
<http://www.tandfonline.com/doi/abs/10.3109/00207458608985678>  
<https://www.ncbi.nlm.nih.gov/pubmed/25237116>  
<https://www.ncbi.nlm.nih.gov/pubmed/16946411>  
<http://onlinelibrary.wiley.com/doi/10.1111/j.1465-3362.2009.00149.x/abstract;jsessionid=8E80190C664B369FBE63EBC9F7856A7E.f02t03>  
[https://www.cdc.gov/HomeAndRecreationalSafety/pubs/RXReport\\_web-a.pdf](https://www.cdc.gov/HomeAndRecreationalSafety/pubs/RXReport_web-a.pdf)  
<http://study.com/academy/lesson/what-is-homeostasis-definition-examples-quiz.html>  
<https://www.leafly.com/news/science-tech/what-is-the-endocannabinoid-system>  
<http://www.leafscience.com/2017/03/17/the-endocannabinoid-system-a-beginners-guide/>  
<https://www.projectcbd.org/how-cbd-works>  
<http://herb.co/2016/07/28/endocannabinoid-system-dummies/>  
<https://www.forbes.com/sites/debraborchardt/2016/12/12/the-cannabis-market-that-could-grow-700-by-2020/#568255c34be1>  
<https://www.leafly.com/news/cannabis-101/hemp-101-what-is-hemp-whats-it-used-for-and-why-is-it-illegal>  
<http://www.medicalmarijuanainc.com/cbd-hemp-oil-vs-cbd-medical-marijuana/>  
<https://www.projectcbd.org/cannabis-oil-extraction>  
<http://www.thecannabist.co/2017/07/07/dea-statement-cbd-hemp-farm-bill-cw-hemp-response/83322/>  
<https://www.leafly.com/news/politics/cbd-oil-legal-depends-ask>

