



CYTOGEN™

CYTOGEN Frequently Asked Questions (FAQs)

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1. What is CBD?

Cannabidiol (CBD) is a naturally occurring constituent of industrial hemp/cannabis. Its formula is C₂₁H₃₀O₂ and it has a molecular mass of 314.4636. It is the most abundant non-psychoactive cannabinoid found in cannabis, and is being scientifically investigated for various reasons.

CBD oil is a cannabis oil (whether derived from marijuana or industrial hemp, as the word cannabis is the latin genus name for both) that has significant amounts of cannabidiol (CBD) contained within it.

Our CBD products and extracts are derived from industrial hemp, so they could be considered CBD-rich hemp oil, hemp derived CBD oil, CBD-rich cannabis oil, or plainly “hemp extracts” since they typically contain much more than just CBD. Again, cannabis doesn’t mean marijuana, but is the genus name, and general umbrella term which all forms of marijuana and hemp fall under. The form of cannabis we use for our CBD and hemp extracts is industrial hemp; we do not sell marijuana.

2. What’s the difference between Hemp and Marijuana?

Scientifically, industrial Hemp and Marijuana are the same plant, with a genus and species name of Cannabis Sativa. They have a drastically different genetic profile though. Industrial Hemp is always a strain of Cannabis sativa, while marijuana can be Cannabis sativa, Cannabis indica, or Cannabis ruderalis. The major difference is how industrial hemp has been bred compared to a marijuana form of Cannabis sativa. Typically speaking, industrial hemp is very fibrous, with long strong stalks, and barely has any flowering buds, while a marijuana strain of Cannabis sativa will be smaller, bushier, and full of flowering buds. However, newer industrial hemp varieties in the USA are being bred to have more flowers and higher yields of cannabinoids and terpenes, such as our Colorado hemp we’re now using!

99% of the time marijuana has a high amount of THC and only a very low amount of CBD. Hemp, on the other hand, naturally has a very high amount of CBD in most instances, and only a trace amount of THC. Fortunately, the cannabinoid profile of hemp is ideal for people looking for benefits from cannabis without the ‘high.’ Hemp is used for making herbal supplements, food, fiber, rope, paper, bricks, oil, natural plastic, and so much more, whereas marijuana is usually used just recreationally, spiritually, and medicinally. The term cannabis oil can refer to either a marijuana or hemp derived oil, since marijuana and hemp are two different forms of cannabis.

In the USA the legal definition of “industrial hemp,” per Section 7606 of the Agricultural Appropriations Act of 2014, is “INDUSTRIAL HEMP – The term “industrial hemp” means the plant Cannabis sativa L. and any part of such plant, whether growing or not, with a delta-9 tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis.”

3. Are hemp derived cannabinoids such as CBD as good as CBD from marijuana?

The short answer is yes. CBD is CBD, whether from marijuana or hemp. Most marijuana has a very low non-psychoactive cannabinoid profile (like CBD, CBC, CBG), so most of the time hemp would be much more preferable for anything besides THC. Marijuana is usually very high in THC (gives people the high) but usually very low in other non-psychoactive cannabinoids.



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4. What's the percentage of cannabinoids and CBD in your product?

Our raw extracts have varying percentages of cannabinoid and cannabidiol (CBD) content, the range being 40%-99%. Each product has a unique formulation and uses varying ratios of our extract types. Our CBD Isolate is over 99% pure CBD and our water-soluble products have been nano sized for maximum absorption.

5. What is the best method of use?

Because each individual has a preference on how they take a dietary supplement, we have created a complete line of products, each with a different delivery method. We offer capsules, sublingual tinctures, a high percentage water soluble gel, edible gummies, a transdermal patch, a topical salve, and vape products. For our sublingual dietary supplements, if you don't like the flavor the flavor, you can mix with something sweet like apple sauce or honey to cut through the flavor.

6. What's the ideal serving size for me, and how often should I take it?

There is no easy answer to this. Our starting recommended serving size is listed on each of our products, but we generally recommend experimenting to see what feels best to you. Some prefer 10mg's per serving, some prefer over 300mg's depending on their needs.

7. What is the safety of your hemp extracts? Are there negative side effects?

Hemp is considered by many to be generally safe. We've never seen or heard of any significant or negative side effects in our years in the industry. That said, we can't rule them out. Please consult with your physician before using any dietary supplement including Hemp extract supplements.

8. Which of your CBD and hemp products should I get?

As a company who sells various supplements, we can't suggest any of our products for the prevention, treatment or cure of any disease or ailment.

When considering our different dietary hemp products, know that they all come in different applications.

The main difference between our blends is the additional herbal ingredients besides hemp. We suggest you research the separate components of each blend to determine which product may be most appealing to add to your dietary regimen. If you know it's solely the hemp extract that you are looking for, with no additional ingredients, then the Complete Choice Tinctures are what you're looking for.

For dabbing and vaporizing or for research you can try our CBD Isolate.

THOSE WHO SUSPECT THEY MAY HAVE A DISEASE OR ARE SEEKING HELP FOR A DISEASE SHOULD CONSULT A QUALIFIED MEDICAL PROFESSIONAL.



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9. Why do people use Hemp Extracts and CBD? What are the benefits and uses of CBD?

In accordance with federal regulations we cannot make health claims regarding our dietary supplement products. We can only recommend our products for general wellness.

10. Is a standard hemp seed oil the same as a high-CBD hemp extract?

Definitely not. Standard hemp oil, which can be found very cheaply at a grocery store, is a much different product than our full spectrum hemp extracts (not from seed). Standard hemp oil is produced by cold pressing the seeds, whereas our hemp extract is a full plant extraction with many components not typically found in the seeds. Hemp seed oil is considered to be a great nutritive food, but it doesn't have the naturally occurring terpenes, cannabinoids and other components that our extracts do have.

11. Is your Hemp Extract Oil similar to Rick Simpson Hemp Oil?

Not quite. Ours are from hemp and RSHO is usually using marijuana, a different form of cannabis than industrial hemp. Our industrial hemp extracts are more standardized and will usually have a much higher content of non-psychoactive cannabinoids like CBD than one produced through the Rick Simpson method. And oils produced through his method will usually have a much higher THC content, as it's typically marijuana that is used for RSHO.†

Generally speaking, most marijuana producers and sellers (especially on the black market) don't test for contaminants (metals, pesticides, bacteria, etc.). Rick Simpson Hemp Oil is actually more a method of extraction than it is a specific product. People use the Rick Simpson method with hundreds of different strains of marijuana, so the THC, CBD and other cannabinoid content of the final oil is always varying greatly, depending on the cannabis the consumers are acquiring. Usually what's used for Rick Simpson oil is a strain with an inferior CBD content (and high THC), because that's what the vast amount of marijuana is nowadays.

12. Where do you source your hemp and CBD from?

We source directly from the Netherlands and have been for the past 4 years.

13. What type of extraction method do you employ?

We use a Proprietary Hydrocarbon process that is Non-Toxic and THC-Free to extract our hemp. It is a clean and safe method that allows for optimal retention of terpenes and other sensitive compounds.

14. What kind of testing/analysis is performed on your products?

We have an industry leading quality control system, and we have third party laboratories analyze all of our hemp extracts and our final products for cannabinoid potency, heavy metals, bacterial and microbial life, mycotoxins (fungus), and pesticides.



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15. What is the endocannabinoid system (ECS)?

“The endocannabinoid system (ECS) is a group of endogenous cannabinoid receptors located in the mammalian brain and throughout the central and peripheral nervous systems, consisting of neuromodulatory lipids and their receptors.” Wikipedia

There are two main types of receptors in the ECS, CB1 and CB2. CB1 receptors are primarily located in the central nervous system and brains of mammals, and CB2 are generally found in the peripheral nervous system. There are two main cannabinoids mammals produce- 2AG and Anandamide (named after the Sanskrit term “ananda” which translates to “peace”).

For hundreds of millions of years every vertebrate on Earth has been equipped with this ECS, a crucial system in the body, and it has been known about in the scientific and medical communities since the 1980's. However, it's still not taught about in most medical schools.

16. If a hemp extract is 25% cannabinoids, what's the other 75%? What's in your hemp extracts besides the naturally occurring cannabinoids?

Our EU hemp extracts contain over 80 different phyto-cannabinoids such as cannabidiol (CBD), CBC, CBG, CBN, etc. In addition to the cannabinoids naturally present in our agricultural hemp extracts, there are also many other types of natural molecules and phyto-chemical compounds such as amino acids, carbohydrates, vitamins (including B1, B2, B6, D), fatty acids (including omega 3 & 6), trace minerals (including iron, zinc, calcium, magnesium, potassium), beta-carotene, chlorophyll, flavanoids, ketones, nitrogenous compounds, alkanes, glycosides, pigments, water, and terpenes. The most common terpenes in our hemp extracts are Myrcene, Beta-caryophyllene, Terpinolene, Linalool, alpha-Pinene, beta-Pinene, Nerolidol og Phytol, trans-alpha-Bergamotene, Limonene/ beta-Phellandrene (Co-elution), and alpha-Humulene.

17. Forms of CBD Hemp Oil

CYTOGEN™ Premium Raw Hemp Oil is in its most natural form, pressed directly from the mature stalk of the plant. This process is similar to that of juicing a fruit. In this form, the CBD Hemp Oil contains unique properties to HMB's other forms of Premium Hemp Oil because it contains carboxylic acid, known as CBDa.

CYTOGEN™ Premium Decarboxylated Hemp Oil

After the hemp plant is pressed, the hemp oil is extracted through a CO2 supercritical process and is decarboxylated. This process turns the acidic cannabinoids into active cannabinoids, while maintaining its natural form. At this stage, the hemp oil still contains waxes, lipids, chlorophylls, terpenes and natural plant material.

CYTOGEN™ Premium Filtered Hemp Oil

After the hemp oil is decarboxylated, there is a final filtering process. This final filtering