Cannabis CBD vs. Hemp CBD

Cannabis Marijuana and Hemp plants contain both CBD and THC along with more than 540 other substances. The main difference between the two plants is the amount of each compound they contain. Hemp plants will contain high amounts of all Cannabinoid Profiles and low level THC where the Cannabis Marijuana plant is the complete opposite. Both plants are cousins of each other.

Cannabis contains more THC, and less CBD and the other Profiles. The Hemp Plant contains more CBD and the other profiles and less THC.

Most importantly, the benefits of CBD do not change whether it is cannabis-derived CBD or hemp-derived CBD. Common benefits to the receptor groups, the ECS – Endocannabinoid System) will remain the same. Full spectrum CBD with high levels of the Cannabinoid profiles and low level THC .3% are key to high level reactions and generating the most effective benefits. This is because the chemical make-up of CBD does not depend on which plant it comes from. CBD products and CBD processors use the Hemp plant for CBD products because of the these differences and you acquire much more out of the hemp oil.

However, the amount of CBD available for extraction does depend on the source. Hemp plants contain far more CBD, making them the more lucrative option for manufacturers and the option with the least potential legal ramifications.

The main difference between hemp CBD and cannabis CBD is their legal status. <u>According to the 2018</u> <u>Farm Bill</u>, products made from plants that meet the legal standards of hemp are legal across most of the USA, except three states.

Products made from plants that have higher levels of THC are not legal under this statute. However, it is important to note that all CBD products must have less than 0.3% THC, so even those made from cannabis-derived CBD should contain less than this amount. 0.3% or less has been put in place to trigger the CB1 receptor group through daily use and not generate a psychoactive response. The United States Drug Enforcement Administration (DEA) consider any CBD products containing more than 0.3% THC as a Schedule I drug in states where the recreational use of cannabis is not legal.

HEMP

MARIJUANA



HEMP OIL vs CANNABIS OIL

CATNIPBILL

THE DIFFERENCE BETWEEN CBD FROM HEMP AND CBD FROM CANNABIS STRAINS

HEMP OIL

Product Hemp bi-product.

Labels Must state that is made from hemp.

Testing

Due to lax testing outside the U.S. some products may be highly contaminated.

Ingredients GMO's, tranfats & additives.

Extraction BHO, propane, hexane, hydrocarbons or CO2.

Hemp

Typically low in cannabinoid content. A huge amount of hemp is required to extract a small amount of CBD, raising the risk of contaminants because hemp, a bioaccumulator, draws toxins from the soil.

CANNABIS OIL

Product

High level CBD. For maximum therapeutic impact, choose both CBD and THC product.

Labels

Show ratio of CBD/THC, a manufacturing date and batch number.

Testing

Varies by state. Tested for consistency.

Ingredients No corn syrup, GMO's, tranfats or additives

Extraction Supercritical CO2, butane, ethanol, non-toxic.

Cannabis

The robust terpene profile of whole plant cannabis enhances the therapeutic benefits of CBD and THC.

FULL SPECTRUM CBD ISOLATE BROAD SPECTRUM THC + TERPENES + TERPENES + THE THC **RELIEF W/O** NO ENTOURAGE **ENTOURAGE** THC EFFECT EFFECT

ESSENTIAL VITAMINS STRONG TASTE AND SMELL PURE FORM OF CBD

THE HUMAN ENDOCANNABINOID SYSTEM

Certain cannabinoids, including THC, fit like a lock and key into existing human receptors. These receptors are part of the endocannabinoid system which impact physiological processes affecting pain modulation, memory and appetite plus anti-inflammatory effects and other immune system responses. The endocannabinoid system comprises two types of receptors, CB1 and CB2, which serve distinct functions in human healthand well-being.



Receptors are found on

cell surfaces

CBD1 - Receptors are concentrated in the brain & the central nervous system but are also present insome nerves and organs

CBD2 - Receptors are mostly peripheral organs, especially cells associated with the immune system

TRVP1- Receptors are concentrated in the blood, bone, marrow, tongue, kidney, liver, stomach and ovaries

TRVP2- Receptors are concentrated in the skin, muscle, kidney, stomach and lungs

GPR 18- Receptors can be found primarly in bone marrow, the spleen and lymph nodes, and to a lesser extent, the testes

GPR 55- Receptors are found in the bones, the brain (particularily the cerebellum), and the jelunum and ileum

GPR 119- Receptors are found predominantly in the pancreas and the intestinal tract, in small amounts

THE ENDOCANNABINOID SYSTEM

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HUMAN CANNABINOID RECEPTORS



CANNABINOID PROFILE

Various benefits which research suggests may be attributed to individual cannabiniods present in full spectrum hemp extract.

PHARMACOLOGICAL ACTIONS OF NON-PSYCHOTROPIC CANNABINOIDS

With the Indication of the Proposed Mechanisms of Action



ABBREVIATIONS

CBN = cannabinol CBD = cannabidiol CBC = cannabichromene CBG = cannabigerol

CBDA = cannabidiolic acid

 \triangle^{9} -THC = \triangle^{9} -tetrahydrocannabinol \triangle^{8} -THC = \triangle^{8} -tetrahydrocannabinol \triangle^{9} -THCV = \triangle^{9} -tetrahydrocannabivarin \triangle^{9} -THCA = \triangle^{9} -tetrahydrocannabinolic acid TRVP1 = transient receptor potential vanilloid type 1 PPAR_Y = peroxisome proliferator-activated receptor _Y ROS = reactive oxygen species 5HT_{1A} = 5-hydroxytryptamine receptor subtype 1A FAAH = fatty acid amide hydrolase (+) = direct or indirect activation (\uparrow) = increase (\downarrow) = decrease

- KNOWN/PRESUMED PATHWAYS ARE INDICATED

TERPINOLENE

MYRCENE

LIMONENE

-SMOKEY WOOD AROMA -EFFECTIVE AGAINST BACTERIAL PATHOGENS -ANTIOXIDANT PROPERTIES -STRONG EFFECT ON BACTERIA AND FUNGI -SLOWS GROWTH OF CANCER CELLS -ANTIMICROBIAL AGENT -SEDATIVE -MUSKY AROMA -USED AS A SEDATIVE -RELAXES MUSCLES -HYPNOTIC PROPERTIES -ANALGESIC (PAINKILLER) -ANTI-INFLAMMATORY COMPOUND -ANTI-CANCER

-ORANGE AROMA -MODD ENHANCER -RELIEVE HEARTBURN AND GASTROINTESTINAL REFLUX -SHOWN TO DESTROY BREAST-CANCER CELLS -POWERFUL ANTIMICROBIAL ACTION CAN KILL PATHOGENIC BACTERIA

a-HUMULENE

-HOPPY AROMA -RELIEVES PAIN -SLOWS BACTERIAL GROWTH -REDUCES INFLAMMATION SYSTEMICALLY -INHIBITS CANCER CELL GROWTH -APPETITE SUPPRESSANT -ANALGESIC PROPERTIES

a-PINENE

-PINE AROMA -BRONCHODILATOR POTENTIALLY HELPFUL FOR ASTHMATICS -PROMOTES ALERTNESS AND MEMORY RETENTION -REDUCES INFLAMMATION -KILLS BACTERIA -ANTIOXIDANT -ANTIOCNVULSANT

CARYOPHYLLENE OXIDE

-SPICY AROMA -SLOWS BACTERIAL GROWTH -HELPS RELIEVE ANXIETY -SLOWS DAMAGE TO THE NERVOUS SYSTEM AND BRAIN -ANTIPROLIFERATIVE -LOCAL ANESTHETIC EFFECTS -ANTI-INFLAMMATORY

LINALOOL b-CARYOPHYLLENE

-FLORAL AROMA -COUNTERS ANXIETY -MEDIATES STRESS -STRONG ANTICONVULSANT -AMPLIFIES SEROTONIN RECEPTOR TRANSMISSION -ANTIDEPRESSANT -TOPICALLY CAN HEAL ACNE AND SKIN BURNS WITHOUT SCARPING

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HUC HY CH

-RICH SPICY AROMA -GASTRO-PROTECTIVE, GOOD FOR TREATING CERTAIN ULCERS -THERAPEUTIC COMPOUND FOR INFLAMMATORY CONDITIONS AND AUTOIMMUNE DISORDERS -ANTIBACTERIAL -ANTISEPTIC -ANTIFUNGAL

THE TYPES OF CBD AND THE DIFFERENCES OF CBD TODAY

& THE TYPES OF EXTRACTION METHODS OF CBD TODAY

- IMBUE FULL and BROAD-SPECTRUM CBD We use #1 Rated Extraction process -20degree Cold Press / Ethanol Soak (RSO Method) – This is acquiring all 160 + Active Ingredients, nutrients and Cannabinoid Profiles from the hemp plant which allows our product to generate the Entourage Effect – The RSO method ensures all active components are encapsulated and protected during the extraction process. A True Full spectrum Oil focuses on every receptor group connected to your ECS. This includes the CB1 and CB2 Receptors and all subcategory receptor groups. With our Broad Spectrum we use the same methods to ensure the highest quality, we just remove the 4 main THCA / THCV / Delta 8 /9 components by taking it a few steps further in the distillation process. <u>https://imbuebotanicals.com/product-manufacturing-and-testing/</u>
- CO2 Full Spectrum CBD CO2 extraction method has its pros and cons whether it is Super or Sub Critical extraction. The Cons in our research out way the pros. This method which can be too clean and potentially will damage critical trichomes, terpenes, active ingredients and the Cannabinoid profiles from the plant, which will ultimately be a much less effective oil. By going from Liquid to Gas, Heat and Pressure Process to using Solvents this can be cause for quality and effectiveness concerns.
- CBD ISOLATE Mainly CO2 Extracted Single Profile Compound With a Single Receptor Style approach from an Isolated Compound but can expand receptor reach based on profile. It does bare benefits because CBD is largest Cannabinoid profile but has many cons and more possible chances adverse reactions in people can because of the process not the benefits CBD or other profiles offer. This is striped down pharmaceutical approach.
- OTHER CANNABINOID DISTILLATES / ISOLATES CBG, CBN, CBV, CBC including (A) variations - that will boost other receptor connections and provide the ECS system with more support in certain areas where possible deficiencies exist.
- To put this into perspective and understand or relate to it best is Full Spectrum / Broad Spectrum is like a Multi Vitamin and CBD Isolate and other isolated Profiles are like Vitamin D, C or E etc....
- There is Cold water Extraction being performed along with Nano Technology: These
 methods have great benefits for different styles of products in the market to promote
 absorption and bio-availability within the energy shots, drinks or edible market for CBD
 products.

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