

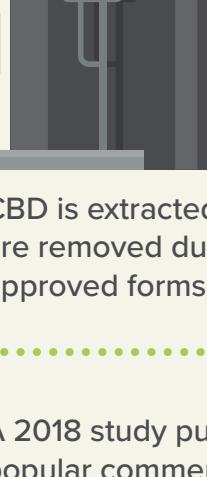
STRAIGHT FACTS on CBD



Cannabidiol (CBD) is everywhere, but how can you be sure of what you're buying?

Not all CBD products are created equal — including where they come from and how they are developed, tested, and approved for human use.

WHERE DOES CBD COME FROM?



CBD comes from the cannabis plant, which also contains tetrahydrocannabinol (THC), the chemical that can cause the "high" associated with marijuana.¹

Low levels of CBD and THC can also be found in a type of cannabis plant called hemp.²



CBD is extracted from cannabis plants, including the hemp variety. Other cannabinoids and elements are removed during the purification process.³ Standards for CBD purification vary widely for non-FDA approved forms of CBD versus products approved by the Food and Drug Administration (FDA).^{4,5}

A 2018 study published in *Nature* found a concerning lack of consistency in tests to ensure that popular commercial (non-FDA approved) cannabinoid products contain what their labels claim.⁴

FDA-approved products are required to meet purification, content and dosing standards. They are rigorously tested in controlled clinical trials to understand the safety profile and efficacy. So far, the only rigorous studies of CBD that adhere to FDA standards have been in seizures, leading to FDA approval of a prescription version of CBD.^{6,7,8}

Although CBD products are widely available, it is hard to know the benefits and risks of CBD and what you're getting with non-FDA-approved CBD. A 2017 study in the *Journal of the American Medical Association* found that:⁹

Almost 70% of all CBD products sold online did not contain the amount of CBD stated on the package. Of that 70%:



contained less CBD than claimed.
contained more CBD than claimed.

20% of all CBD products studied included enough unlabeled THC to cause intoxication, especially in children.

The FDA also evaluated some retail/online CBD products and found they did not contain the levels of CBD that they claimed.¹⁰

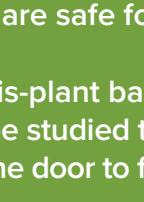
HOW DO I KNOW IF IT'S LEGAL?

More Americans have access to CBD than ever before, but the laws can be confusing. For example, did you know the type of cannabis plant CBD comes from determines whether it is legal and how it can be sold in the U.S.?



MEDICAL MARIJUANA^{2,11,12}

Federally illegal; only available in medical marijuana states



HEMP-DERIVED CBD^{2,13}

Federally legal but state-by-state legality unclear



FDA-APPROVED CBD^{5,14}

Available in all states by a clinician's prescription

CAUTION

- Cannabis-derived CBD products are considered medical marijuana.
- Medical marijuana products are not FDA approved.
- Products haven't been shown to meet FDA standards for safety and effectiveness or regulated on a federal level to ensure consistency or quality.

CAUTION

- It is illegal to promote these products for medical or health uses.
- The FDA has not approved their use in food or beverages.
- Products haven't been shown to meet FDA standards for safety and effectiveness, or regulated on a federal level to ensure consistency or quality.

- Only FDA-approved medicines can be marketed for FDA-specified medical or health uses.
- There is only one FDA-approved CBD medicine.
- FDA-approved medicines are accessible only by a clinician's prescription in pharmacies.

WHAT IS MEDICAL MARIJUANA?

Medical marijuana is the use of cannabis to treat disease. Although there is a lack of scientific evidence to support the use of medical marijuana products, they are dispensed to ease disease symptoms.^{2,15}

