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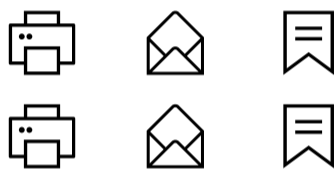
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CBD vs. THC: What's the Difference?



You're probably hearing a lot about [cannabis](#) and marijuana products as they become legal in more and more states. Two natural compounds are getting the most attention: CBD and THC.

Cannabis is a plant that makes a

IN THIS ARTICLE

[Chemical Structure](#)

[How CBD and THC Affect the Body](#)

[Medical Benefits](#)

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[What's Legal?](#)

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thick substance full of compounds called cannabinoids. There are more than 100 of these chemicals in cannabis. They cause drug-like reactions in your body.

CBD (cannabidiol) and THC (tetrahydrocannabinol) are the most common cannabinoids found in cannabis products.

THC and CBD are in both marijuana and hemp. Marijuana contains much more THC than hemp, while hemp has a lot of CBD.

Chemical Structure

CBD and THC have the same chemical formula -- 21 carbon atoms, 30 hydrogen atoms, and two oxygen atoms. The difference lies in the way the atoms are arranged. That gives CBD and THC different chemical properties, and they affect your body differently.

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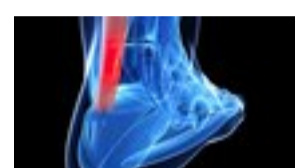
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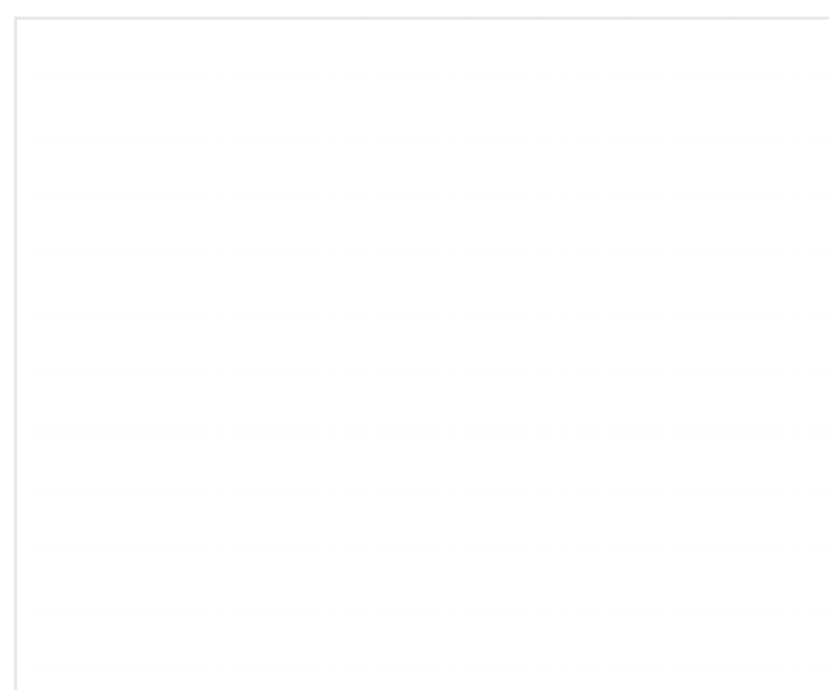
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Medical Marijuana FAQ

Medical Marijuana

Both CBD and THC work with receptors that release neurotransmitters in your brain. They can affect things like [pain](#), mood, [sleep](#), and memory.

How CBD and THC Affect the Body

THC is the main psychoactive compound in marijuana. It's what makes people feel "high."

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Excedrin

Aleve

Bayer

Motrin

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We have two types of cannabinoid receptors in our bodies. THC binds with receptors -- mostly in the [brain](#) -- that control pain, mood, and other feelings. That's why THC can make you feel euphoric and give you that so-called high.

CBD doesn't cause that high. Instead, it's thought to work with other elements in the body linked to feelings of well-being.

Medical Benefits

People take CBD products to help with everything from [arthritis](#) and [Crohn's disease](#) to [diabetes](#) and [multiple sclerosis](#). Some say it helps with [anxiety](#), [insomnia](#), and [chronic pain](#). So far, there's little evidence that CBD helps with any of these.

The FDA has approved one CBD-based drug. Epidiolex is a treatment for several severe forms of rare childhood [epilepsy](#).

CBD is a hot topic for researchers. The National Institutes of Health [clinical trials](#) database shows more than 160 trials involving CBD that are either active or recruiting.

As part of [medical marijuana](#), THC helps ease things like:

- [Multiple sclerosis pain](#)
- [Nerve pain](#)
- [Parkinson's disease tremors](#)
- [Nausea](#)
- [Glaucoma](#)

Side Effects

THC can cause:

- Problems with concentration
- Dizziness
- Vomiting
- Drowsiness
- Balance
- Memory

Side effects from CBD can include:

- Nausea
- [Diarrhea](#)
- Upset stomach
- Tiredness
- Lightheadedness
- Crankiness
- [Low blood pressure](#)
- Drowsiness

CBD can also change the way some medicines work. Talk with your doctor about it.


What's Legal?

Laws are changing all the time on cannabis. Many states allow medical marijuana, containing THC, for several uses, but it is still illegal under federal law. Some states have made recreational marijuana with THC legal for personal use. But it's also illegal under U.S. law.

As part of the Farm Bill in December 2018, Congress legalized hemp. But there are still rules about where and how you can sell products that contain CBD. You can't sell some across state lines, for example. All CBD products are illegal if they're sold with the promise of medical benefits.

Check your state's laws before buying products with CBD or THC.

WebMD Medical Reference | Reviewed by [Laura J. Martin, MD](#) on August 08, 2019

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