HEALTH BASICS

CBD oil

CBD oil is a product containing cannabidiol, a chemical found in cannabis plants.

WHAT IT IS
An oil containing cannabidiol, a chemical found in cannabis

WHERE IT COMES UP
Wellness products, prescription medicine, and discussions about pain or sleep

WHY IT MATTERS
Can affect alertness, liver health, and other medicines

WHAT IT IS NOT
Not a disease or a proven general-purpose treatment

WHO TO ASK
Pharmacist, primary care clinician, or relevant specialist

HOW IT IS CHECKED
Product testing and, for prescription use, liver blood tests

Overview

CBD oil contains cannabidiol, usually shortened to CBD. CBD is one of many chemicals called cannabinoids that occur naturally in cannabis plants. The CBD is commonly mixed with a carrier oil, such as coconut-derived or hemp seed oil.

CBD oil is not a disease or a diagnosis. It is a type of product. Products sold under this name range from regulated prescription medicines to non-prescription oils marketed for general wellness.

CBD and tetrahydrocannabinol, or THC, are different cannabinoids. THC causes the "high" associated with cannabis. CBD does not produce the same intoxicating effect, but it can still cause sleepiness or affect alertness. Some CBD oils contain small or unexpected amounts of THC.

Product descriptions may use terms such as:

These terms do not guarantee what is actually in a product. Independent studies of products sold online have found inaccurate CBD and THC labels.

In the United States, a purified prescription form of CBD is approved for seizures associated with Lennox-Gastaut syndrome, Dravet syndrome, and tuberous sclerosis complex. These are uncommon neurological conditions. This prescription medicine is not the same as a typical

shop-bought CBD oil.

- CBD isolate: intended to contain CBD without other cannabis compounds
- Broad-spectrum: CBD plus other compounds, usually with THC removed
- Full-spectrum: CBD plus other cannabis compounds, which may include THC

How it works

The body has an endocannabinoid system. This is a network of natural chemicals, receptors, and enzymes involved in functions such as nerve signalling, appetite, memory, and responses to stress.

THC strongly activates a receptor called CB1 in the brain. CBD does not act on this receptor in the same way. It appears to affect several signalling systems, but its actions are complex and are not fully understood.

The exact way prescription CBD helps control certain seizures is also unclear. Its effect cannot be explained simply as "balancing" the endocannabinoid system.

CBD is processed mainly by the liver. Some of the same liver enzymes also process prescription medicines. CBD can therefore change the amount of another medicine in the body. Other medicines can also change CBD levels.

How much CBD reaches the bloodstream is influenced by the product, the amount used, how it is taken, and whether it is taken with food. Results from one oil or research product may not apply to another.

Why it matters for your health

There is good evidence for purified prescription CBD in the specific seizure disorders for which it is approved. It is prescribed with medical monitoring and has consistent manufacturing standards.

Claims for non-prescription CBD are much broader. Products are promoted for pain, anxiety, sleep problems, inflammation, and many other concerns. Research into these uses is continuing, but the evidence is often limited or mixed. Studies may use different products and amounts, making comparisons difficult.

A label that says "natural" does not establish that a product is effective or free from harm. Non-prescription CBD may cause side effects, interact with medicines, or contain a different amount of CBD than stated. Depending on local rules, it may not have been assessed as a

medicine for safety, quality, or effectiveness.

CBD also matters when you need to drive, operate machinery, compete in drug-tested sport, or have workplace testing. CBD itself is not usually the target of standard cannabis tests, but THC in a product may lead to a positive result. Labels such as "THC-free" do not remove this possibility.

Health authorities advise avoiding CBD during pregnancy and breastfeeding because its effects on a developing baby are uncertain and products may contain contaminants or THC.

What can go wrong

CBD can cause unwanted effects. In clinical studies of prescription CBD, reported problems included sleepiness, diarrhoea, reduced appetite, fatigue, and vomiting. Effects from a retail product are less predictable because its contents and concentration may differ.

Situations linked to CBD include:

People taking prescription CBD may need routine liver blood tests. Follow-up may also cover sleepiness, digestive effects, seizure control, and interactions with other medicines. These are planned monitoring issues rather than emergencies.

Contact a clinician promptly if you develop yellow skin or eyes, dark urine, severe or persistent vomiting, unusual bleeding, or marked sleepiness after using CBD. These may need timely assessment, especially if you take other medicines.

Call emergency services for trouble breathing, swelling of the face or throat, collapse, or inability to wake someone. Contact a poison information service promptly if a child takes CBD or a person takes much more than intended.

- Liver injury: CBD can raise liver enzymes, which are blood markers of irritation or damage
- Medicine interactions: important with some seizure medicines, blood thinners like warfarin or apixaban , sedatives, and other medicines processed by the liver
- Excess sedation: greater sleepiness when combined with alcohol or medicines that reduce alertness
- Product contamination or mislabelling: possible THC, pesticides, solvents, microbes, or an inaccurate CBD amount
- Accidental ingestion: a concern for children and pets
- Delayed care: relying on CBD may postpone assessment of an ongoing health problem

What you can do

Before trying CBD, decide what you expect it to change. Ask a pharmacist or clinician whether there is evidence for that goal and whether another assessment or treatment would be more appropriate.

Bring a complete list of your medicines and supplements. Include occasional products, sleep aids, and recreational substances. Do not stop or reduce prescribed medicine to replace it with CBD unless the clinician responsible for that treatment has advised the change.

If you use a non-prescription product, record:

A recent certificate of analysis from an independent laboratory may show tested cannabinoid levels and contaminants. It cannot prove that CBD will help you, and it is only useful if the batch number matches your product.

There is no single routine test that can confirm whether retail CBD is suitable or effective for you. Blood tests may be appropriate when prescription CBD is used or when there is concern about liver effects or medicine interactions.

Avoid driving or hazardous work until you know how the product affects your alertness. Store it away from children and pets, preferably in its original child-resistant container.

- The exact product name, manufacturer, and batch number
- The labelled CBD and THC amounts
- How much you take and when
- Any changes you notice, including unwanted effects
- Other medicines, alcohol, or cannabis used at the same time

Common questions

Will CBD oil make me high?

Pure CBD does not cause the typical cannabis high. It can still make you sleepy. A product containing unexpected THC may cause intoxication or impaired coordination.

Is CBD oil the same as hemp seed oil?

No. Hemp seed oil is made from seeds and usually contains little or no CBD. It is often used as a food or carrier oil. Check the ingredient list rather than relying on the word "hemp."

Can CBD oil cause a positive drug test?

It can if the product contains enough THC. This may occur with full-spectrum oils or with

products whose labels are inaccurate. No retail label can guarantee the outcome of a workplace or sports test.

Is CBD oil legal?

Legal status is determined by your location, the product's THC content, how it is sold, and whether it is classed as a medicine or food. Check current information from the relevant medicines, food, or government authority where you live.

Can I give CBD oil to a child or pet?

Do not give a retail CBD product to a child without guidance from an appropriate clinician. Prescription CBD for certain childhood seizure disorders is used under specialist supervision. Ask a veterinarian before giving any cannabis-derived product to an animal; human oils may contain unsuitable ingredients.

Is there a standard dose?

There is no single established dose for general retail CBD use. Prescription CBD has condition-specific instructions and monitoring. Product concentrations also differ, so drops or millilitres are not interchangeable between brands.

Sources

- US Food and Drug Administration. What You Need to Know (And What We're Working to Find Out) About Products Containing Cannabis or Cannabis-Derived Compounds, Including CBD
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