

## Cannabis, CBD oil and cancer

Source: [Cannabis, CBD oil and cancer | Cancer Research UK](#)

Cannabis is a plant and a class B drug. It affects people differently. It can make you feel relaxed and chilled. But it can also make you:

- feel sick
- affect your memory
- make you feel lethargic
- CBD oil is a chemical found in cannabis.

Summary:

Cannabis has been used for centuries recreationally and as a medicine.

It is illegal to possess or supply cannabis as it is a class B drug in the UK.

Research is looking at the substances in cannabis to see if it might help treat cancer.

There are anti sickness medicines that contain man-made substances of cannabis.

What are cannabis and cannabinoids?

Cannabis is a plant. It is known by many names including:

- marijuana
- weed
- hemp
- grass
- pot
- dope
- ganja
- hash

The plant produces a resin that contains several substances or chemicals. These are called cannabinoids. Cannabinoids can have medicinal effects on the body.

The main cannabinoids are:

Delta-9-tetrahydrocannabinol (THC)

Cannabidiol (CBD)

THC is a psychoactive substance that can create a 'high' feeling. It can affect how your brain works, changing your mood and how you feel.

CBD is a cannabinoid that may relieve pain, lower inflammation and decrease anxiety without the psychoactive 'high' effect of THC.

Different types of cannabis have differing amounts of these and other chemicals in them. This means they can have different effects on the body.

Cannabis is a class B drug in the UK. This means that it is illegal to have it, sell it or buy it.

CBD oil, cannabis oil and hemp oil

There are different types of oil made from parts of the cannabis plant. Some are sold legally in health food stores as a food supplement. Other types of oil are illegal.

CBD oil

Cannabis oil

Hemp oil

Why people with cancer use it

Cannabis has been used medicinally and recreationally for hundreds of years.

There has been a lot of interest into whether cannabinoids might be useful as a cancer treatment. The scientific research done so far has been laboratory research, with mixed results, so we do not know if cannabinoids can treat cancer in people.

Results have shown that different cannabinoids can:

cause cell death

block cell growth

stop the development of blood vessels – needed for tumours to grow

reduce inflammation

reduce the ability of cancers to spread

Scientists also discovered that cannabinoids can:

sometimes encourage cancer cells to grow

cause damage to blood vessels

Cannabinoids have helped with sickness and pain in some people.

Medical cannabis

This means a cannabis based product used to relieve symptoms. Some cannabis based products are available on prescription as medicinal cannabis.

Only some specialist doctors can prescribe medical cannabis. And only for certain medical conditions. They might prescribe medical cannabis for:

epilepsy - if you (or your child) have a rare form of epilepsy that might be helped by medical cannabis

Multiple Sclerosis (MS) - if you have spasticity from MS and other treatments have not worked

sickness or vomiting caused by chemotherapy - when other anti sickness medicines have not helped

A prescription for medical cannabis is only given when it is believed to be in your best interests. And when other treatments have not worked or are not suitable.

The following medicines are sometimes prescribed to help relieve symptoms.

Nabilone (Cesamet)

Nabilone is a drug developed from cannabis. It is licensed for treating severe sickness from chemotherapy that is not controlled by other anti sickness drugs. It is a capsule that you swallow whole.

Sativex (Nabiximols)

Sativex is a cannabis-based medicine. It is licensed in the UK for people with Multiple Sclerosis muscle spasticity that hasn't improved with other treatments. Sativex is a liquid that you spray into your mouth.

Researchers are looking into Sativex as a treatment for cancer related symptoms and for certain types of cancer.

How you have it  
Cannabis products can be:

- smoked
- vaporized
- ingested (eating or drinking)
- absorbed through the skin from a patch
- applied as a cream
- applied as a spray
- CBD oil comes as a liquid or in capsules.

Side effects

Prescription drugs such as Nabilone can cause side effects. This can include:

- increased heart rate
- blood pressure problems
- drowsiness
- dizziness
- mood changes
- memory problems

Cannabis that contains high levels of THC can cause panic attacks, hallucinations and paranoia.

There are also many cannabis based products available online without a prescription. The quality of these products can vary. It is impossible to know what substances they might contain. They could potentially be harmful to your health and may be illegal.

Research into cannabinoids and cancer

We need more research to know if cannabis or the chemicals in it can treat cancer.

Clinical trials need to be done in large numbers where some patients have the drug and some don't. Then you can compare how well the treatment works.

Many of the studies done so far have been small and in the laboratory. There have been a few studies involving people with cancer.

Sativex and temozolomide for a brain tumour (glioblastoma) that has come back  
In 2021, scientists reported the final results of a phase 1 study to treat people with recurrent glioblastoma (a type of brain tumour that has come back). The study looked at Sativex in combination with the chemotherapy drug temozolomide.

Researchers found that adding Sativex caused side effects, which included, vomiting, dizziness, fatigue, nausea and headache but patients found the side effects manageable.

They also observed that 83 out of 100 people (83%) were alive after one year using Sativex, compared to 44 out of 100 people (44%) taking the placebo.

However, this phase 1 study only involved 27 patients, which was too small to learn about any potential benefits of Sativex. The study wanted to find out if Sativex and temozolomide was safe to take by patients.

Researchers have now started a larger phase 2 trial called ARISTOCRAT, to find out if this treatment is effective and who might benefit from it. Speak to your specialist if you want to take part in a clinical trial.

Find out more on our science blog

Sativex and cancer pain

There are trials looking at whether Sativex can help with cancer pain that has not responded to other painkillers.

The results of one trial showed that Sativex did not improve pain levels. You can read the results of the trial on our clinical trials website.

Read about the Sativex trial for cancer pain

Cancer and nausea and vomiting

A cannabis based medicine, Nabilone, is a treatment for nausea and vomiting.

A Cochrane review in 2015 looked at all the research available looking into cannabis-based medicine as a treatment for nausea and sickness in people having chemotherapy for cancer. It reported that many of the studies were too small. Or not well run to be able to say how well these medicines work. They say that they may be useful if all other medicines are not working.

Read the Cochrane review

Other research

A drug called dexanabinol which is a man-made form of a chemical similar to that found in cannabis has been trialled in a phase 1 trial. This is an early trial that tries to work out:

whether the drug works in humans

what the correct dose is

what the side effects might be

The results are not available yet. You can read about the trial on our clinical trials database.

Find out more about this trial

Word of caution

Cannabis is a class B drug and illegal in the UK.

There are internet scams where people offer to sell cannabis preparations to people with cancer. There is no knowing what the ingredients are in these products and they could harm your health. Some of these scammers trick cancer patients into buying 'cannabis oil' which they then never receive.

You could talk with your cancer specialist about the possibility of joining a clinical trial. Trials can give access to new drugs in a safe and monitored environment.