



CIBG
*Ministerie van Volksgezondheid,
Welzijn en Sport*

Medicinal Cannabis

Information for patients



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This brochure is meant for patients who are using medicinal cannabis or considering using it in the future and provides information about this medication in general, its effects and how to take it.

What is medicinal cannabis?

Cannabis consists of the dried flowers of the female *Cannabis sativa L* plant, also known as hemp or marihuana. Cannabis contains a number of active substances, like dronabinol (THC) and cannabidiol (CBD). THC is mainly responsible for the effects of cannabis, but others – like CBD – may also influence the effectiveness of the drug. The chemical composition of the cannabis determines the effects and side effects. Cannabis dispensed by pharmacies complies with the strictest quality standards and is intended for medicinal use only. Therefore, it is called medicinal cannabis.

Varieties

There are several varieties of medicinal cannabis which have different compositions and strengths, and thus different effects. There are three varieties of medicinal cannabis available through Dutch pharmacies: Bedrocan, Bedrobinol and Bediol. Each variety has its own predetermined strength and composition.

Variety	THC content	CBD content
Bedrocan	about 19%	< 1%
Bedrobinol	about 12%	< 1%
Bediol	about 6%	about 7,5%

Figure 1: Medicinal cannabis varieties

What variety is best depends on the symptoms. For example: there is reason to believe that inhaling cannabis with a high CBD content (like Bediol) provides effective relief for pain and muscle spasms in patients with multiple sclerosis (MS). Because of the anti-inflammatory properties of CBD, this variety may be more effective than others for patients with inflammatory conditions.

Cannabis with high levels of THC (Bedrocan and Bedrobinol) is preferred for disorders such as Gilles de la Tourette syndrome, therapy-resistant glaucoma and symptoms like weight loss, nausea and vomiting.

In case of chronic neural pain, Bediol is often prescribed first (for inhaling). If this provides insufficient relief, a variety with a higher THC content is substituted. It is also possible to start with Bedrocan (as tea) or combine varieties and methods of administration.

The effects not only depend on your symptoms, there are large variations between individuals, too. Your doctor will discuss with you which variety and what method of administration are best in your case.

Quality

Medicinal cannabis has to meet certain quality criteria. It must not contain any pesticides, heavy metals, fungi or bacteria. This is strictly monitored.

Research has shown that the cannabis sold in coffee shops hardly ever meets the quality standards of medicinal cannabis from the pharmacy. It's cultivated under specific, controlled conditions by growers who are licensed by the Office of Medicinal Cannabis (OMC).

Which medical disorders?

There is sufficient reason to believe that medicinal cannabis can help in cases of:

- pain and muscle spasms or cramps associated with multiple sclerosis or spinal cord damage;
- nausea, loss of appetite, weight loss and debilitation due to cancer or AIDS;
- nausea and vomiting associated with chemotherapy or radiotherapy used in the treatment of cancer, hepatitis C or HIV infection and AIDS;
- chronic pain (mainly pain associated with the nervous system, for example that caused by a damaged nerve, phantom pain, facial neuralgia or chronic pain which remains after the recovery from shingles);
- Gilles de la Tourette syndrome;
- therapy-resistant glaucoma.

Patients and doctors have also reported positive effects on a range of other conditions, including Crohn's disease, ulcerative colitis, epilepsy, itching, migraine, rheumatism, rheumatoid arthritis, ADD and brain trauma. These positive effects still need to be confirmed by scientific research. (For more information, go to www.cannabis-med.org.)

At present, medicinal cannabis does not cure the disorders mentioned above, but it can relieve the symptoms associated with them. It may also enable other medication to be given at a lower dosage, and reduce their side effects. It is up to doctors to determine whether treatment with medicinal cannabis would benefit a patient, given his or her diagnosis and circumstances. In doing so, they are not limited to the list of conditions given above. A doctor will only prescribe medicinal cannabis if the standard treatments and registered medicines are not having the desired effect or are causing too many side effects.

Side effects

Patients generally tolerate medicinal cannabis well. A low dosage often provides sufficient relief, so that side effects rarely occur. When they do, it is usually the result of a high dosage or combined use with a substance such as alcohol that intensifies the side effects.

Known side effects of medicinal cannabis are mood-altering effects, insomnia and heart palpitations. Other effects are: relaxation, fits of laughter, feeling hungry, heightened sensitivity to the perception of e.g. colour and music, lethargy and distorted temporal and spatial awareness. Your reaction time may also be slower, especially during the first hours after use.

If you take a large dose, you can get 'high'. This is a feeling of euphoria which slowly subsides into feeling satisfied, peaceful and calm. The altered perception may cause you to feel confused. These effects usually disappear after a few hours.

If you have a genetic predisposition to psychosis (like schizophrenia) or other mental health problems, please consult your specialist before using medicinal cannabis. You should also consult your doctor if you are a cardiac patient.

Continuous use of cannabis during pregnancy can affect the foetus. Also, certain components of cannabis - like THC - end up in breast milk. That is why the use of medicinal cannabis is not advisable during pregnancy and while breastfeeding. For more information, consult your doctor or pharmacist.

Smoking

Smoking cannabis regularly is bad for your health. Smoke damages the lungs and could lead to infections of the nose, throat and lungs. For this reason, smoking medicinal cannabis is not recommended. Instead, inhaling cannabis using a reliable vaporiser is a more suitable method.

Addiction

Addiction is unlikely with cannabis used as a medicine. The recommended dose is usually lower than that for recreational use. You should take particular care,

however, if you have been addicted in the past. High dosages of medicinal cannabis taken over a longer period may lead to addiction. Quitting may then cause withdrawal symptoms, such as mild forms of restlessness, irritability, insomnia and nausea.

Using medicinal cannabis

Your doctor will determine, in consultation with you:

- Which variety would be most suitable
- What dosage you need
- How to take the medicinal cannabis

You will probably start with a low dosage (see 'Instructions for use and dosage'). If the effect is insufficient, your doctor will gradually increase the dosage. No maximum dose has been determined. Your doctor can keep increasing the amounts of cannabis you take until an effective result is achieved. Therefore, the dose can vary from one cup of tea a week to several grams a day.

You can take medicinal cannabis in various ways. For example: prepared as tea or inhaled using a vaporiser. It is important for the effect to heat the cannabis before using it. We discourage smoking medicinal cannabis.

When inhaled, the active components of cannabis are absorbed quickly by the body. The maximum effect occurs within 15 minutes, and slowly wears off over three to four hours. It is quite easy to adjust the dose when inhaling. If the effect is insufficient, you can choose to inhale more. You can also stop when you achieve the required effect or when you start feeling side effects.

When medicinal cannabis is drunk as tea, it takes at least 30 to 90 minutes before any effects occur. The maximum effect is usually achieved after two or three hours, and it takes four to eight hours to wear off. Eating high-fat food with the tea can improve the absorption of the active substances.

Instructions for use and dosage

Tea

Bedrocan is the most suitable variety for making tea.

- Boil 500 ml of water in a pan with the lid on.
- Add 0.5 grams (about 2 teaspoons or 1 measuring scoop) of medicinal cannabis.
- Turn down the heat and let the tea simmer gently for 15 minutes with the lid still on the pan.
- Take the tea off the stove and pour it through a sieve.
- Keep the tea in a thermos flask if you plan to drink it the same day.

If you want to make tea for several days, use 1 gram (about 4 teaspoons or 2 measuring scoops) of medicinal cannabis for one litre of water. Then, after preparing the tea as described above, add a package or teaspoon of coffee creamer powder to the warm tea. This will keep the active substances in the tea from sticking to the inside of the teapot or cup, reducing its effectiveness. Let the tea cool down and store it in the fridge. It will keep for several days.

You may reheat the refrigerated tea, and can add sugar, syrup or honey to improve its taste.

Dosage:

Start by drinking 1 cup (0.2 litres) of tea in the evening. If this provides insufficient relief after one or two weeks, you can – in consultation with your doctor – drink an extra cup (0.2 litres) in the morning. If the tea still provides insufficient relief, ask your doctor about inhaling medicinal cannabis using a vaporiser. Inhalation acts faster, and its effect is stronger than cannabis tea. Furthermore, the dose is easier to adjust.

Bedrocan and Bedrobinol are available in the form of dried flower tips (flos). Bediol is provided as granules, as the flower tips have been crushed. All three varieties can be used to make tea or inhaled through an inhaler. It doesn't matter if you use the granules or the flower tips.

Inhalation

To inhale medicinal cannabis we advise you to use a reliable vaporiser. Vaporisers – with instructions – are obtainable in the Netherlands from ‘Stichting NCSM’ (Volcano®) and in pharmacies. The pharmacies order the vaporisers from Fagron BV.

Dosage:

- The initial dose should be about 200 mg (1 teaspoon or ½ measuring scoop).
- Place this in the vaporiser, heat the cannabis, then inhale once.
- Wait 5 to 15 minutes before inhaling again.
- Repeat this a few times – including the interval between two inhalations – until the desired effect is achieved, or until the onset of undesirable side effects (physical or mental). Start by performing this procedure once or twice a day.
- It’s important that you gradually build up your intake. Inhaling several times a day can only be considered after some time has elapsed. Always consult your doctor first, since the dosage and amounts used vary widely between individual patients.

Medicinal cannabis heated in a vaporiser can be reused up to 3 times, as active components will still be released.

Smoking cannabis – with or without tobacco – is not recommended. Nor is using a water pipe as harmful chemicals are also inhaled.

Taking medicinal cannabis abroad

The use of medicinal cannabis is subject to restrictions laid down in the Opium Act. This means you must follow certain rules when using medicinal cannabis. In the Netherlands possession of medicinal cannabis is allowed – if prescribed by a doctor and dispensed by a pharmacy. This does not apply for most other countries, however.

If you are travelling to a Schengen country and want to take medicinal cannabis along, you need a declaration (Schengenverklaring) from the CIBG, part of the Ministry of Health, Welfare and Sport. The CIBG's website (www.farmatec.nl) has more information about this.

If you are travelling to a country outside the Schengen area, you must contact the embassy or the consulate of the country in question for permission to take the medicinal cannabis with you. You should allow plenty of time for your application to be processed.

Health insurance

Medicinal cannabis is not automatically covered by healthcare insurers. Some healthcare insurers provide partial cover through supplementary insurance. Check your healthcare insurer's policy for details.

More information

If you have any questions, please consult your doctor or pharmacist. For general questions about medicinal cannabis, you – or your doctor or pharmacist – can also contact the Office of Medicinal Cannabis (OMC), which is part of the CIBG, Ministry of Health, Welfare and Sport, in The Hague. The OMC is responsible for overseeing the production of cannabis for medicinal and scientific purposes.

On the OMC's website (www.cannabisbureau.nl), you will find answers to several frequently asked questions on medicinal cannabis use.

Websites

- > Office of Medicinal Cannabis (OMC): www.cannabisbureau.nl/en/
- > CIBG, Ministry of Health, Welfare and Sport: www.cibg.nl
- > International Association for Cannabinoids as Medicine: www.cannabis-med.org
- > Dutch Association for Legal Cannabis and Its Constituents as Medicine (NCSM): www.ncsm.nl

The CIBG is an implementing body of the Ministry of Health, Welfare and Sport. What started as a project in 1995 became the Central Information Unit on Healthcare Professions in 2000, or CIBG for short. Since then, more and more responsibilities have been delegated to the organisation. Its current duties are so diverse that the original name doesn't cover them. That is why we refer to ourselves simply as the acronym CIBG.



This brochure is published by the Institute for Responsible Medicine Use and the Office of Medicinal Cannabis of the CIBG, Ministry of Health, Welfare and Sport.

Postal address

PO Box 16114 | 2500 BC The Hague
T +31 (0)70 340 5113 | F +31 (0)70 340 7426

photographer: Martin Hogeboom

BM 12.01 | February 2011