

Cannabidiol (CBD)

Obtained from the Cannabis Sativa hemp plant



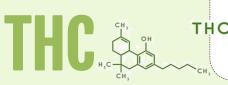
APPROVED INDICATIONS

- Multiple sclerosis (4)
- Epilepsy (4,1)
- Aids symptom control (4)
- Cancer symptom control (4,5)
- Nausea and vomiting (4,5)
- Chronic non-cancer related pain (4,5)
- Palliative care indications (5, 10)
- Neuropathic pain (5)
- Refractory anxiety (1,10)
- Short-term sleep improvement (10)

NON-APPROVED INDICATIONS*

- Anti-psychotic (9)
- Parkinson's disease (9)
- Lowering cravings for selected addictions (10)

*experimental or insufficient data



🤪 SAFETY & TOLERABILITY

CBD is well tolerated although its safety is dependent on mental health history, current medication (2) use and previous cannabis use

POSSIBLE NEGATIVE EFFECTS

- Drowsiness (10)
- Dry mouth (9)
- Nausea (9)
- Vomiting (9)
- Decreased appetite (9)
- Diarrhea (9)
- Headache (11)
- Drowsiness (11)
- Sleep disturbance (11)

MECHANISMS OF ACTION

THC & CBD bind to cannabinoid receptors CB1 and CB2, which are part of the endogenous cannabinoid system, the expression and pathway is not known although CB1 expresses via the central nervous system. The major psychoactive component and THC while CB2 expresses via the peripheral nervous system, one of the 113 cannabinoids recognized organs and immune cells. THC can modulate sensory, somatic and cognitive perception (2).

Contraindications*

- Immunosuppressants (11)
- Anti-depressants (11)
- Opioids (11)
- Statins (11)
- Fungal treatments (11)
- Anti-epileptics (11)
- Cimetidine (11)
- Sartans (11)
- *CBD has a high drug interaction profile, caution is warranted and GP's should be consulted (11)

NEGATIVE EFFECTS OF **PROLONGED USE**

The prolonged effects of CBD are still unknown (10) however liver function abnormalities and weight loss are attributed to prolonged use (11)

in cannabis

Delta-9-tetrahydrocannabinol (THC)

APPROVED INDICATIONS

- Nausea and vomiting (2,3,4)
- Appetite stimulation in HIV/AIDS anorexia (2,3)
- Epilepsy (3,4)
- Multiple sclerosis (4)
- Aids symptom control (4)
- Alzheimer's disease (4)
- Cancer symptom control (4, 5)
- Nausea and vomiting (4)
- Chronic non-cancer related pain (4)

* NEGATIVE EFFECTS OF **PROLONGED USE**

- Recurring vomiting, dehydration, nausea and abdominal pain (Cannabis hyperemesis syndrome) (2)
- Depression with a lack of motivation (amotivational syndrome) (2)

SAFETY & TOLERABIL

its safety is dependent on

history as well as current

mental health and addiction

THC is well tolerated although

NON-APPROVED INDICATIONS*

- Moderate evidence for PTSD (1, 10)
- Some evidence for Glaucoma (1,
- Some evidence for dementia and Alzheimer's disease symptomology management (1, 10)
- Little some evidence for Tourette's syndrome (1, 10) *experiential and inconclusive

CONTRAINDICATIONS

Pregnancy and nursing mothers (2)

- Previous history of psychosis, anxiety or mood disorder (4.7)
- Unstable cardiovascular disease
- History of hyper-sensitivity to cannabis products (4,7)
- Children or adolescents (11)

POSSIBLE NEGATIVE EFFECTS

- Dysphoria (2)
- Paranoia (2)
- Hallucinations (2,4, 10) (high doses)
- Sedation (2,4)
- Confusion (2,4)
- Headache (2)
- Dry mouth (2,4)
- Hypo-tension (2)
- Anxiety (4)
- Seizures and seizure like activity (2)
- Impaired executive functioning, cognition and driving (3,4)
- Diarrhoea (4)
- Fatigue (4)
- Impaired short term memory (10)
- Impaired perception and motor skills (10)



PHARMACEUTICAL/BIOCHEMICAL

Within Australia, there are four forms of medical grade cannabis in Australia, they are schedule 8 controlled drugs that require a prescription (5):

- •Dronabinol: Synthetic form of THC (capsule form) max daily dose of 20mg a day (8)
- •Nabilone: Synthetic form of THC (capsule form) max daily dose of 6mg per day (8)
- •Nabiximols: Chemically pure 50:50 mixture of THC and CBD (oromucosal spray) max 1-16 sprays per day (7,8)
- •10-20% (low) bioavailability (7)
- •Peak effects at 2-4 hrs, lasting 8-24 hrs (7)
- •Epidyolex: CBD formulation for intractable childhood epilepsy



Manufactured in standardised conditions, low levels of THC and high levels of CBD. Available in herbal, oil, balm, capsule or pill form (4), CBD products with 98% CBD and less than 2%. CBD is a schedule 4 prescription only medicine while any part of the cannabis plant and THC are schedule 8 drugs within Australia (5).



Within Australia, recreational herbal cannabis can have unstable CBD and THC components (4,8). Smoking cannabis is the most harmful form of administration. Vaping and edible forms of cannabis harbour less harm potential, although caution is warranted when ingesting edible cannabis as there is a large onset delay that varies from 1-3 hours (1). Smoking cannabis has varied bio-availability from 2-56% while edibles range from 4–12% (1).

- Generally smoked (7)
- 2-4 hr duration peaking at 30 minutes (7)
- Synthetic forms of recreational cannabis are highly potent and have been associated with hallucinations, vomiting, agitation, confusion, and in rare circumstances, heart attacks (10).
- Long-term and frequent users of smoked cannabis have been associated with respiratory symptoms, social anxiety, depressive disorders, suicidal ideation, increased mania and hypomania for those with bipolar (10)

DOSE COST ACCESS

Dose depends on the nature of administration, individual history, previous cannabis use and tolerance development. All doses are recommended to start low and increase slowly on a weekly basis (7)

The cost of accessing medicinal cannabis depends on the dose and type. It is not covered by the Pharmaceutical Benefits Scheme (with the exception of Epidyolex), depending on your state and territory, there may be medicinal cannabis products compassionate use schemes. A list of manufacturers and suppliers can be found here

THC & CBD are classified as 'unapproved therapeutic goods' in Australia but the following access pathways exist:

- Authorised Prescriber Scheme (AP)
- •Special Access Scheme (SAS)
- Clinical trials
- (6)

The Royal Australian College of General Practitioner's (RACGP) has a summary on the use of cannabis products in Australia here and a guide for GP's prescribing within Australia here. This link contains information on how to access medicinal cannabis across each state and territory in Australia.

- 1. Barnes, M. & Barnes, J. (2016). Cannabis: The Evidence for Medical Use, All-Party Parliamentary Group for Drug Policy Reform. http://www.drugsandalcohol.ie/26086/1/Cannabis_medical_use_evidence.pdf
- 2. Terence, N.G. & Gupta, V. (2021). Tetrahydrocannabinol (THC). In StatPearls. StatPearls Publishing.
- 3. Moss, D. A., Hawks, M. K., Snyder, M. J., & Crawford, P. F. (2021). Integrative Medicine: Cannabis and Cannabis-Related Drugs. FP essentials, 505, 28–34.
- 4. Royal Australian College of General Practitioner's. (2019). Use of medicinal cannabis products. https://www.racgp.org.au/advocacy/position-statements/view-all-position-statements/clinical-and-practice
- 5. Department of Health: Therapeutic Goods Administration. (11 April 2022). Medicinal cannabis: Role of the TGA. https://www.tga.gov.au/medicinal-cannabis-role-tga
- 6. Department of Health: Therapeutic Goods Administration. (21 December 2017). Guidance for the use of medicinal cannabis in Australia: Patient information.
- 7. Queensland Health. (2018). Clinical Guidance: for the use of medicinal cannabis products in Queensland. https://www.health.gid.gov.au/_data/assets/pdf_file/0023/634163/med-cannabis-clinical-guide.pdf 8. Australian and New Zealand College of Anaesthetists. (2019). Statement on "Medicinal Cannabis" with particular reference to its use in the management of patients with chronic non-cancer pain.
- 9. Iffland, K., & Grotenhermen, F. (2017). An update on safety and side effects of cannabidiol: A review of clinical data and relevant animal studies. Cannabis and cannabinoid research, 2(1), 139–154.
- 10. National Academies of Sciences, Engineering, and Medicine. (2017). The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research. The National Academies Press. https://doi.org/10.17226/24625.
- 11. Department of Health: Therapeutic Goods Administration. (April 2020). Safety of low dose Cannabidiol. https://www.tga.gov.au/sites/default/files/review-safety-low-dose-cannabidiol.pd





