

Cannabis-derived compounds: What you need to know

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annabis-derived compounds, such as cannabidiol (CBD), are popping up like weeds (so to speak) in retail and online stores, and are being marketed for a wide range of purported health benefits, most of which are unsubstantiated. Cannabidiol—a chemical component of the *Cannabis sativa* plant (marijuana) does not produce intoxication or euphoria (ie, the "high") that comes from delta-9-tetrahydrocannabinol (THC), which is the psychoactive component of marijuana.¹ Cannabidiol has become popular partly due to increased cultural acceptance of marijuana. In a 2019 Pew Research Center survey, 67% of Americans supported marijuana legalization.²

In addition, changing laws have increased the interest in and availability of CBD. The Agricultural Improvement Act of 2018 legalized hemp, which is defined as cannabis and cannabis-derived compounds with significantly low concentrations of THC (<0.3% on a dry weight basis).^{1,3} However, this act also preserved the FDA's authority to regulate products containing cannabis and cannabis-derived compounds.1

With the recent emphasis on CBD, it is easy to forget that the FDA has approved a few medications that are derived from or related to cannabis. In this article, I review the current FDA-approved cannabis-related treatments and their indications, and concerns regarding CBD products.

FDA-approved treatments

To date, the FDA has not approved cannabis for the treatment of any medical or psychiatric condition. However, the FDA has approved 1 cannabis-derived medication (CBD) and 2 cannabis-related medications (dronabinol and nabilone) for specific indications (these medications are available by prescription only):

Cannabidiol (brand name: Epidiolex) is approved for the treatment of seizures associated with Lennox-Gastaut syndrome or Dravet syndrome in patients age ≥2, and for the treatment of seizures associated with tuberous sclerosis complex in patients age ≥1.14 There are no other FDA-approved medications that contain CBD.

Dronabinol (brand names: Marinol and Syndros) is an antiemetic agent that contains synthetic THC. It is approved for treating or preventing nausea and vomiting caused by cancer medications and for increasing the appetite of individuals with AIDS.1

Nabilone (brand name: Cesamet) is a synthetic compound that is structurally similar to THC. It is approved for treating or preventing nausea and vomiting caused by cancer medications.1

Questionable claims about CBD

Some manufacturers market CBD products as having a variety of health benefits for both humans and pets, but most of these claims are unsubstantiated.1 The FDA has issued warning letters to several manufacturers who have marketed CBD products as producing therapeutic effects.⁵

Under the Federal Food, Drug, and Cosmetic Act, any products intended to have a therapeutic effect are considered drugs, and unapproved drugs cannot be distributed or sold in interstate commerce.¹ Cannabidiol products cannot be sold as dietary supplements.¹ In addition, food products containing CBD cannot be introduced or delivered for introduction into interstate commerce.¹ Many CBD products do not contain the amount of CBD advertised, and some contain contaminants such as pesticides and heavy metals.¹ Also, CBD products can affect the therapeutic effectiveness of prescription medications.

Discuss CBD with your patients

Ask your patients if they use CBD and, if so, find out which product(s), the quantity and frequency of use, and any effects they have experienced from using them. Patients can report any adverse effects from CBD products to the FDA's MedWatch program (www.accessdata.fda.gov/scripts/medwatch/). Tell your patients that there is limited or inconclusive evidence regarding the therapeutic efficacy of over-the-counter CBD products for any medical

or psychiatric condition. Encourage your patients to be open with you about using these products, so you can make appropriate treatment decisions.

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Encourage your patients to discuss their use of CBD, so you can make appropriate treatment decisions

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