



CBD Oil

Medical Uses, Benefits and Risks

story by Bryan Ziegler, PharmD, MBA
 Clinical Compounding Pharmacist, Moss Compounding Pharmacy

Not a day goes by that I don't receive calls or questions about CBD Oil. There is much interest about the potential medical benefits, proper use, and how to find a good quality product. Due to this interest, I have conducted extensive research into these products to identify what makes a quality product, what are the potential medical benefits, and what are the risks with the products. I'll share some key highlights in this article.

What is CBD?

CBD is a cannabinoid that is extracted from the flowers of the cannabis sativa (hemp) plant. Over 100 cannabinoids have been identified in the hemp plant. The extracted CBD oil is then produced in a variety of dosage forms such as capsules, sublingual tinctures, and topical salves. CBD products that are indicated as "full spectrum" are produced in a manner to extract and capture all the cannabinoids from the hemp plant. Early medical research on CBD points to full spectrum products having a more beneficial effect over products that only contain a select few cannabinoids (also called "isolates").

I routinely get questions about the difference between medical marijuana and CBD oil. There are a few distinct differences. Marijuana is produced from cannabis plants that have high concentrations of THC (usually in the range of 20-30% THC concentration) and lower concentrations of CBD. This higher level of THC is what produces the "high" or psychoactive effect of marijuana. CBD oil on the other hand contains a trace amount of THC (<0.3% is what is required by law) but has higher concentrations of CBD. CBD oil therefore does not produce a "high" or psychoactive effect, even at high doses. CBD oil products are also available THC-free as well.

What is CBD being used for?

The higher CBD concentration appears to produce the medical benefits throughout the body by impacting the endocannabinoid system (ECS). The endocannabinoid system is extremely complex and plays important roles in many vital processes, and it holds promise as a treatment target for many debilitating conditions. The ECS helps to regulate sleep, appetite, digestion, hunger, mood, motor control, immune function, reproduction and fertility, pleasure and reward, pain, memory and temperature regulation. The most common reasons we have recommended CBD oil to patients is for pain, inflammation, anxiety, and insomnia but there are numerous other potential uses for these products that researchers are continuing to study.

How do I find a quality product?

Finding a quality CBD Oil product is quite challenging. At our pharmacy, we spent months researching numerous products and companies before identifying the best options to stock and recommend. The challenge in the marketplace is that CBD oil is classified like a dietary or food supplement. This means that these products are not required to go through safety and efficacy testing by the FDA and will contain language on the packaging indicating it "has not been evaluated by the Food and Drug Administration, and this product is not intended to diagnose, treat, cure or prevent any disease." This is the same statement that is found on other dietary supplements and herbal products routinely used by patients. There are a growing number of companies producing CBD products, with very loose regulations on the quality of these products. A recent research article analyzed a large sample of CBD products to evaluate what these products actually contained compared to what was listed on the package labeling. The results..... less than 30% actually contained what was listed on the label. Therefore, it is very important that you purchase a quality CBD oil product from a reputable source.

When evaluating a CBD oil product, I personally recommend asking the following questions:

1. Does the product have a lot number and expiration date on the package? This is a minimum expectation of a good quality product that follows good manufacturing processes.
2. Does the company test (preferably with an outside lab) every product lot to confirm ingredients are accurate with product label? The higher quality products will test every batch and make this information easily available to the public.
3. Is the cannabis grown in the US? The government registers and regulates farmers growing hemp and has some restrictions in place that help ensure a higher quality product than crops grown outside the US.
4. Is the cannabis produced without the use of harmful pesticides and fungicides? Cannabis plants absorb these harmful substances, which can be present in the final CBD oil product. A quality product will have outside lab testing on every product batch indicating the product is free of any of these contaminants.
5. What is the actual concentration (ie. strength) of the final product? Just because the box label indicates a strength, doesn't mean that all products with the same label strength are equivalent. The key is to understand the concentration of the active CBD ingredients. The extraction processes used by CBD oil producers vary and this can impact the concentration of active CBD in the final product (ie. a more or less potent product). This greatly impacts that dosing of the product and is why you can't easily switch between brands of CBD and get similar results with the same dose.

Lastly, it can be dangerous to seek medical advice from non-healthcare providers. All too often I hear from individuals that have been provided no information (or in some cases incorrect information) on proper CBD oil use. There are many issues to consider before using CBD oil including:

- your medical conditions,
- other medications being used,
- potential issues with drug screening/testing, and
- proper use of the CBD product for optimal benefit while reducing the risk of harmful effects.

It is especially important to check with your local pharmacist regarding potential drug interactions with CBD oil. There are some commonly used medications that can have interactions that increase the risk of side effects and toxic drug levels if combined with CBD oil.

Overall, CBD oil has the potential to provide benefit for a variety of conditions. Individuals do need to be cautious before using a product to minimize the risk of harm by fully evaluating the quality of the product and seeking knowledgeable medical advice on proper use.



**MOSS COMPOUNDING
PHARMACY**

2500 Hoffmeyer Road, Florence
(843) 773-2821 • mosscompounding.com