

Things to Consider About Cannabis-based Treatments:



The Importance of Growing Conditions^{1,2}

Cannabis plants absorb chemicals from the soil. Growing plants outdoors may seem natural. However, research has shown that ground soil can contain toxins such as pesticides, heavy metals, or fertilizers. Additionally, the light/dark cycle affects the expression of cannabinoids.



The Production Process¹⁻⁴

Testing standards and labeling vary greatly from state to state and among manufacturers. The growing conditions of the plants and the way cannabinoids are extracted can have a big impact on the ingredients, consistency, and stability of products.



Product Ingredients⁴

Most cannabis-based dispensary products are extracts or mixtures of different phytocannabinoids and other plant constituents. Due to varying product regulation, the actual content of THC and/or CBD may be uncertain or unreliable. Medicinal cannabis dosage, safety, and efficacy is not specified by the FDA and product formulations may be dependent upon state law.



Inspection and Regulations^{2,3}

Look for manufacturers who meet the World Health Organization's Good Agricultural Practices and are certified by an accepted certification body.



Clinical Trial Results⁵

Every patient's safety is important. An FDA-approved product means that the medication has been studied in large patient populations and is being monitored for long-term safety. Data from these controlled clinical trials help evaluate safety, effectiveness, and appropriate dosing.



Consistency From Batch to Batch¹⁻⁴

For medical treatment, it's important to keep a consistent dose from batch to batch. The product should be tracked from seed-to-sale and validated by a regulatory authority, which includes labeling with a batch number, expiration date, and/or serial number to ensure identification of the product and its contents.

References:

1. U.S. Food and Drug Administration, Center for Drug Evaluation and Research (2016). *Botanical Drug Development Guidance for Industry*. <https://www.fda.gov/media/93113/download>. Accessed August 2020.
2. Organization, World. (2003). *WHO Guidelines on Good Agricultural and Collection Practices (GACP) for Medicinal Plants*. <http://whqlibdoc.who.int/publications/2003/9241546271.pdf>. Accessed August 2020.
3. U.S. Food and Drug Administration (2019). *Questions and Answers on Current Good Manufacturing Practices—Production and Process Controls*. <https://www.fda.gov/drugs/guidances-drugs/questions-and-answers-current-good-manufacturing-practices-production-and-process-controls>. Accessed August 2020.
4. Association of Public Health Laboratories (2016). *Guidance for State Medical Cannabis Testing Programs*. <https://www.aphl.org/aboutAPHL/publications/Documents/EH-Guide-State-Med-Cannabis-052016.pdf>. Accessed August 2020.
5. US Food & Drug Administration (2018). *The Drug Development Process*. <https://www.fda.gov/patients/learn-about-drug-and-device-approvals/drug-development-process>. Accessed August 2020.



Thinking about a cannabinoid or cannabis-based treatment?

Here are some questions you may want to discuss with your healthcare provider:

- Are current medications working?
- Are current medications causing side effects?
- Is a cannabis-based product an option?
- What is the difference between CBD (cannabidiol) and THC (tetrahydrocannabinol)?
- Do you know which cannabinoids are in the product you are considering?

<input type="checkbox"/> CBD	<input type="checkbox"/> Other
<input type="checkbox"/> THC	<input type="checkbox"/> I don't know
- Is the cannabinoid or cannabis-based product approved by the FDA or other regulatory authority?
- Are cannabinoids appropriate for my medical condition? If so, are there clinical data to support how to use cannabinoid products for this condition?
- Has the product been tested for safety and effectiveness at this dose?
- Do you know the potential drug interactions and side effects of cannabinoids or cannabis-based products?
- Who manufactures this product and why does that matter?

<input type="checkbox"/>	Pharmaceutical Company
<input type="checkbox"/>	Dispensary
<input type="checkbox"/>	Private Grower / Self Grown
<input type="checkbox"/>	Unknown
- Will insurance cover this treatment?
- Has the product been tested by a properly certified laboratory to ensure it is free from the following contaminants?

<input type="checkbox"/>	Mold
<input type="checkbox"/>	Environmental toxins
<input type="checkbox"/>	Heavy metals
<input type="checkbox"/>	Dioxins
<input type="checkbox"/>	Pesticides

Scan QR code for information on drug interactions & potential side effects

