CANNABINOID 101 What are the most important 5 THINGS TO KNOW about cannabinoids? CANNABINOID Cannabinoids are a complex and SOURCES evolving area in science and medicine. Understanding the terminology and the variation that exists from the molecular level, to products, to regulation, builds a strong foundation. However, rapid changes in this space make staying current vital. **TERMINOLOGY** STAY CURRENT

1. TERMINOLOGY

Cannabis and cannabinoids are different

- Cannabis sativa L. is the plant¹
- Cannabinoids are molecules
- Group of over 100 molecules, including THC and CBD²
- Derived from the plant and other sources³

azz Pharmaceuticals.

2. CANNABINOID SOURCES

Cannabinoids are often classified by their source

- Endocannabinoids are **made in the** bodv³
- Phytocannabinoids are derived from plants3
- Synthetic cannabinoids are **created** in a lab3

3. CANNABIS PRODUCTS

Cannabis-based products vary

- FDA has approved 4 cannabinoid-based products:4*
- 3 formulations of synthetic THC
- 1 formulation of plant-based CBD
- Non-FDA-approved:
 - Dispensary products
- Hemp products

4. LEGAL AND REGULATORY

Buyer beware: Insufficient regulation widespread

- FDA-approved products are dependably regulated to ensure consistency and quality^{4,5}
- Products are approved based on efficacy and safety studies
- Non-FDA-approved products exist in a patchwork of regulation that is not standardized from state to state^{6,7}
- CBD and THC levels are inconsistent⁸⁻¹⁰
- Many products contain toxins, heavy metals or other harmful chemicals¹⁰⁻¹³

5. STAY CURRENT

Seek evidence-based scientific/medical information at CannabinoidClinical.com





CBD: cannabidiol; FDA: Food and Drug Administration; THC: delta-9-tetrahydrocannabinol. *As of October 2024

1. Fischedick JT et al. Phytochemistry. 2010;71(17-18):2058-2073. 2. ElSohly M et al. In: Pertwee R, ed. Handbook of Cannabis. Oxford University Press; 2014;3:1093. 3. VanDolah HJ et al. Mayo Clin Proc. 2019;94(9):1840-1851. 4. https://www.fda.gov/news-events/public-health-focus/fda-and-cannabis-research-anddrug-approval-process 5, https://www.fda.gov/media/93113/download 6, Sarma ND et al. J Nat Prod. 2020;83(4):1334-1351. 7, https://www.ncsl.org/health/statemedical-cannabis-laws 8, Spindle TR et al. JAMA Netw Open. 2022;5(7):e2223019. 9, Johnson E et al. Drug Alcohol Depend. 2022;237:109522. 10. Gidal BE et al. Front Pharmacol. 2024;15:1335441. 11. Dubrow GA et al. J Food Compost Anal. 2021;97:103800. 12. Gardener H et al. Sci Total Environ. 2022;851(Pt 1):158110. Jameson LE et al. Environ Health Perspect. 2022;130(9):97001.