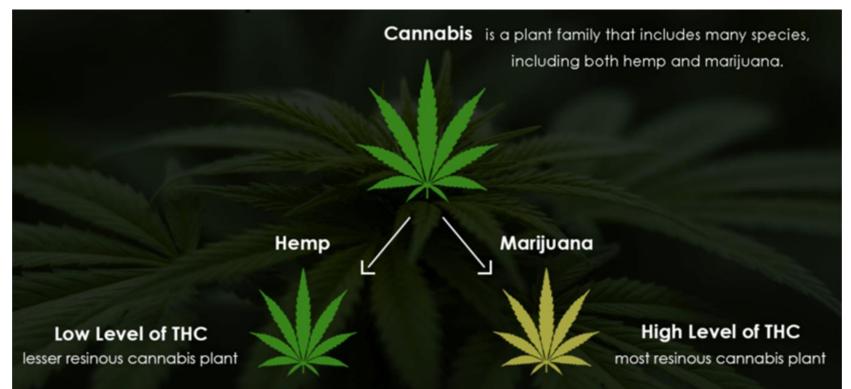
## Level-Setting: Scope of Terms and Products Covered

 Alva C. Mather, Partner, McDermott Will & Emery
Megan L. Olsen, Assistant General Counsel, Council for Responsible Nutrition
Moderated by Bridget C.E. Dooling, Research Professor, George Washington University



## Hemp v. Marijuana



#### Marijuana

Means all parts of the plant Cannabis sativa L., ٠ whether growing or not; the seeds thereof; the resin extracted from any part of such plant; and every compound, manufacture, salt, derivative, mixture, or preparation of such plant, its seeds or resin. The term 'marihuana' does not include hemp as defined in section 297A of the Agricultural Marketing Act of 1946, the mature stalks of such plant, fiber produced from such stalks, oil or cake made from the seeds of such plant, any other compound, manufacture, salt, derivative, mixture, or preparation of such mature stalks (except the resin extracted therefrom), fiber, oil, or cake, or the sterilized seed of such plant which is incapable of germination.

21 U.S.C. § 802. Definitions

### Hemp

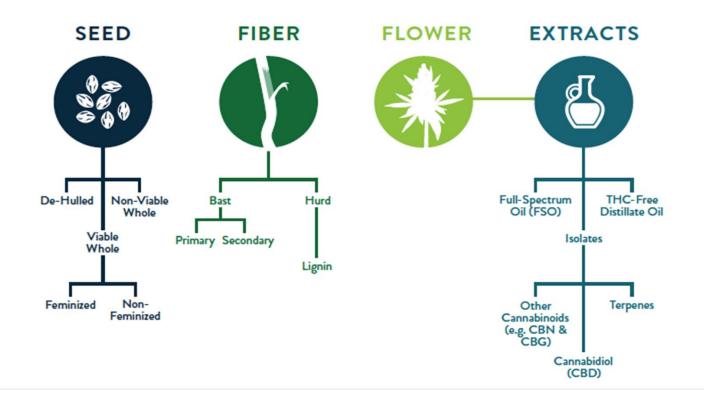
 Means the plant Cannabis sativa L. and any part of that plant, including the seeds thereof and all derivatives, extracts, cannabinoids, isomers, acids, salts, and salts of isomers, whether growing or not, with a delta-9 tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis.

Section 297A of the Agricultural Improvement Act of 2018 ("2018 Farm Bill")

## Marijuana

 Marijuana (or "marihuana") is defined as a Schedule 1 controlled substance under the Controlled Substances Act. Defined as drugs with no currently accepted medical use and a high potential for abuse. Schedule 1 substances include LSD, ecstasy, and cocaine

## What is hemp used for?



#### Tetrahydrocannabinol (THC)

- Compound that is the main physiologically active ingredient of cannabis
- Psychoactive
- Associated with "high" or "stoned" feelings of cannabis

### **Cannabidiol (CBD)**

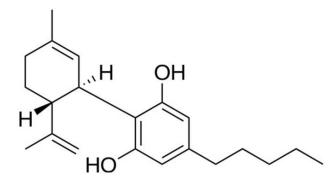
- Compound of the cannabis plant (both marijuana and hemp)
- Non-psychoactive
- Associated with purported health benefits including relief from pain and anxiety

## What is the deal with CBD?

- CBD = Cannabidiol
  - One of many components (phytocannabinoids) found naturally in the *Cannabis sativa L.* plant



### **CBD** Isolate





## **CBD** Isolate

- CBD isolate is a type of CBD supplement that provides the compound CBD at its most pure. It comes in the form of a fine white powder containing 99 percent CBD. CBD, or cannabidiol, is an all natural cannabinoid found in cannabis plants, including hemp.
- Proponents tout CBD Isolate as the purest form of cannabis, primarily because of the way manufacturers split (or isolate) the CBD from all of the other components of the cannabis plant
- Contrast with broad and full spectrum hemp extract which contains other cannabinoids besides CBD.

## Hemp Extract



### Broad Spectrum v. Full Spectrum

- No legal definition
- Industry working to define, but no consensus yet
- U.S. Hemp Authority has proposed definitions

## Other Components of the Cannabis Plant

- Terpenes
  - Aromatic oils, provide flavor, may play a role in differentiating the effects of various cannabis strains
- Fatty acids
- Vitamins

# Endocannabinoid System (ECS)

- A signaling system found in every species of animals, except insects
- Main function is to maintain bodily homeostasis
- Endogenous cannabinoids (endocannabinoids) are lipid neurotransmitters that act as signaling molecules
- Cannabinoids from cannabis appear to mimic endocannabinoid function
  - By binding to receptors in the brain (CB1) or body (CB2)

# Synthetic Cannabinoids

- Can be produced from yeast and are identical to cannabinoids from cannabis
- But can also be man-made chemicals that act on brain cell receptors similar to THC and other cannabinoids
  - Can produce cannabinoids that do not exist in nature
  - Significant safety concerns

## **FDA Definitions**

- "GRAS" or Generally recognized as safe is a United States Food and Drug Administration (FDA) designation that a chemical or substance added to food is considered safe by experts, and so is exempted from the usual Federal Food, Drug, and Cosmetic Act (FD&CA) food additive tolerance requirements.
- "Drug" defined as articles intended for use in the diagnosis, cure, mitigation, treatment or prevention of disease or articles (other than food) intended to affect the structure of any function of the body of man or other animals
- "Dietary Supplement" defined as a product intended to supplement the diet that contains, among other ingredients an herb or other botanical
- "Cosmetics" defined as articles applied to the human body for cleansing, beautifying, promoting attractiveness or altering the appearance

## Level-Setting: Scope of Terms and Products Covered

 Alva C. Mather, Partner, McDermott Will & Emery
Megan L. Olsen, Assistant General Counsel, Council for Responsible Nutrition
Moderated by Bridget C.E. Dooling, Research Professor, George Washington University

