History

* Long history of uses: hemp fiber, medicinal uses, recreational

* Originated in mountain areas of Himalayas

* First recorded use of *Cannabis*: 440BCE from a Greek historian but referred to in Hindu Vedas and found in ancient settlements as far back as 2200 BCE

* 1839 introduced to Western medicine for analgesic and sedative effects
Cannabis
Types (Strains) of Cannabis

- Cannabis sativa
- Cannabis ruderalis
- Cannabis indica
Parts Used

- Dried and cured flower buds
- Kief—a fine, powdery substance from trichomes of plant
Components

- Contains terpene-phenolic compounds
- 483 identifiable chemical constituents
- Over 200 terpenes (flavor & aroma) identified
- 85 different cannabinoids
- Cannabidiol (CBD) and delta-9-tetrahydrocannabinol (THC) are the 2 produced in greatest abundance
Clinical Uses

- Appetite stimulation
- Weight gain
- Nausea/Vomiting
- Anti-anxiety
- Sleep disturbances
- Chronic pain
- Muscle spasms
- Nerve pain
Using *Cannabis*

- Herb prepared for smoking or vaporizing
  - Rapidly absorbed (2-10 minutes, lasting for 30 minutes-1 hour)
- Herb in food products or cooking with cannabis
  - Slowly absorbed (1-6 hours, lasting for 20-30 hours)
Cannabis Herbal Forms

- Bud cured and dried
- Resin (hashish)—processed version of kief, involves pressure and heat
- Rosin—from flower buds, extracted with heat and pressure
- Solvent-Based Concentrates—Alcohol solvent extraction (RSO, Phoenix Tears), butane hash oil (BHO), or CO2
- Topical preparations
- Suppositories
- Tinctures
Prescription Forms

* Dronabinol (Marinol)—synthetic delta-9-THC in sesame oil in pill
* Nabilone (Cesamet)—delta-9-THC in pill
* Nabiximols (Sativex)—1:1 ratio of THC:CBD in pill, Canada only
Potential Side Effects

- Anxiety
- Dizziness
- Tachycardia (rapid heart rate)
- Low blood pressure
- Decreased gastrointestinal mobility
- Mild irritability and insomnia from withdrawal that lasts a few days
- Metabolized through the liver CYP 450 system: caution with other drugs!
Current Legal Status

Legality of cannabis in the United States

Legal  Legal for medical use  Legal for medical use, limited THC content  Prohibited
for any use  D  Decriminalized

Notes: • Includes laws which have not yet gone into effect. • Cannabis remains a Schedule I drug under federal law. • Some Indian reservations have legalization policies separate from the states they are located in.
WA Regulations

- Medical Marijuana Authorization Form filled out by a provider allowed to authorize marijuana for medical purposes
  - Medical Purpose: allows you to grow own plants, exempt from sales tax & purchase unlimited amount
  - Recreational Use: allows up to 1 oz bud/16oz edibles/72 oz liquid/7 grams concentrate at a time of purchase

- [http://www.doh.wa.gov/Portals/1/Documents/Pubs/608017.pdf](http://www.doh.wa.gov/Portals/1/Documents/Pubs/608017.pdf) for list of Medically Endorsed stores with a consultant
Recipes

* Cook’s Science article, “Beyond Brownies: The Science of Cooking with Cannabis” by Andy Wright
* Elise McDonough, edibles editor for High Times and author of The Official High Times Cannabis Cookbook
* Grow Your Own: Understanding, Cultivating and Enjoying Cannabis by David Stein and Liz Crain
Resources

* National Cancer Institute
* The Splendid Table
* Washington State Department of Health
* *Grow Your Own: Understanding, Cultivating and Enjoying Cannabis* by David Stein and Liz Crain
Questions?

Thank you!