











# Science is political.

From Occupying Wall St. to Occupying the Wall St. Journal....











#### Who am I?

One individual with several intersectionalities...



# California State University Northridge



















### Cannabis is a plant!

Non-toxic & related to hops and roses.

Hemp and "marijuana" -both considered Cannabis

#### Various types:

- Cannabinoid Composition
- Flavor & Smell (Terpene Composition)
- Leaf Size, Type & Number

#### **US Hemp Bill**

- Hemp defined in the USA as:
  - "Cannabis having less than 0.3% THC"
- Raw Cannabis plants measure average under 0.1% THC.



### Cannabis has been used for thousands of years!

Every continent

Every people

Every culture

So why was it ever illegal in the United States?



## Cannabis prohibition is founded in racism (not science)

- Henry Anslinger associated
   Cannabis smoking with Black jazz
   musicians and Mexican workers.
  - Henry blamed Cannabis for crime, insanity and interracial marriage.
  - Henry became the FIRST head of the DEA.
- Ending prohibition now- is very complicated!
- Ending prohibition requires us to look into the science of *Cannabis* deeper.



#### Cannabis is more than THC!

- Over 90 cannabinoid compounds have been discovered
- Only 1 cannabinoid (THC) gets you "high".
- Raw Cannabis has little to no THC.
- Raw Cannabis may be a link to our nutritional history if you think of disease as a nutrient defieciency.
- Raw cannabinoids are 10-20X more effective than THC or CBD.



## What is Raw Hemp?

Raw hemp- refers to non-THC containing *Cannabis* which is processed without heat to maintain the natural non-psychoactive properties & deliver micro-nutrients.

- Orally & Sublingually
- Topically
- Omega-rich
- Amino Acid rich



# Raw hemp & Cannabis can be obtained many ways.



RAW JUICING - EATING (RAW)

- RAW (COLD PRESSED) OILS

#### What is THCA?

- Non-psychotropic cannabinoid in cold-pressed/extracted Cannabis strains
- Published scientific studies:
  - Anti-inflammatory (Ruhaak, 2011)
  - Neuroprotective (Moldzio, 2012)
  - Antiemetic (anti-vomiting)(Rock, 2013)
  - Anti-cancer (De Petrocellis, 2013)
    - Low binding efficiency to CB1
       AND CB2 receptors
    - Possible inhibition of cellular channels (TRP)
- NOT scheduled by the UN or federally due to its empirical formula and properties.

# THC **THCA Formula Formula** $C_{21}H_{30}O_{2}$ Molar mass Molar mass 358.4733 g/mol 314.469 g/mol $CH_3$

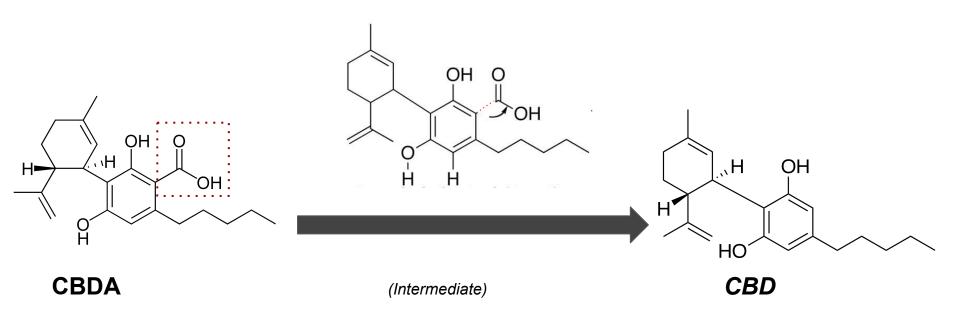
#### What is CBDA?

- Non-psychotropic cannabinoid in cold-pressed/extracted
   Cannabis strains (hemp-like)
- Not well studied in mainstream science.
- Preliminary studies show:
  - improvement of seizure
  - Improvement for mood disorders and hormone related phenomena.
  - Pain Relief/Anti-inflammatory

 NOT scheduled by the UN or federally due to its empirical formula and properties. CBDA CBD



# Raw Cannabis is not decarboxylated.



- **Heat** (over 2-300F)
- UV (Light) (4hr+ of direct sunlight)

#### Raw Cannabis is therapeutic: The Study

#### We wanted to know:

- What is raw Cannabis useful for?
- How many mgs are required:
  - o Per person?
  - o Per dose?
  - o Per day?
  - Weight vs Age
- What are the differences between THC,
   CBD and THCA or CBDA?
- How well do raw cannabinoids work?
- Can raw cannabinoids replace/reduce RX medicines?



#### Raw Cannabis is therapeutic: THCA

#### **Clinical studies show:**

- 88% Decreased seizure & Spasm (intensity & duration)
- 89% reduced/eliminated Rx drug
- 85% Increased physical coordination
- 81% Increased cognition & focus
- 79%Decreased Pain & Inflammation
- 66% Increased motivation & organization.
- 59% Increased communication.
- Averaged a 90% improvement for multiple (more than 2) symptoms overall.
- Effective dose (children-adult)
  - o 2.5-20 mg TOTAL DAILY
  - 10x more effective than THC

THCA may replace or reduce dependence on:

- THC regimens- more focused/clarity
- Rx Drugs:
  - Keppra & other AEDs
  - Topomax
  - Lamictal
  - Sleeping pills
  - Muscle Relaxers
  - Anti-depressants/Anti-Anxiety
  - Opiates
    - Extends efficacy while reducing psychotropism ("high")
    - Reduces overall use & addictive tension.



#### Raw Cannabis is therapeutic: CBDA

#### Clinical studies show:

- Decreased seizure & Spasm (intensity & duration)
- Increased mood stability
- Decreased Pain & Inflammation
- Decrease in Hormone-Replacement- Therapy (HRT) side-effects
- Effective for women however study was low in males (95% female cohort).
- 20X more effective than CBD

CBDA may replace or reduce dependence on:

- THC regimens- more focused/clarity
- Rx Drugs:
  - Mood DIsorder Drugs
  - Sleeping pills





**SIGN UP AT BOOTH #833** 

#### Raw Cannabis is therapeutic: Mixtures

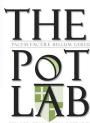
#### **SYMPATH**

**Denied Pain Management?** 

- Study in-progress
- Pain-specific
- Open recruitment
- CBDA, THCA, CBD, CBGA, CBNA blend
- Numerous botanical oils\*
- Check with your physician!







# When to use Raw Cannabinoids? When pharmaceuticals fail.

"Golden Earth has

provided significant

control of myoclonic

seizures after seven

prescription medications

failed to provide control."



### When to use Raw Cannabinoids?

When CBD/THC does not work or is working partially.

"CBD was tried for 8 months with no noticeable change. Golden Earth alone-has shown significant impact in decreasing intensity and frequency of seizures. We have a while to go with the CBD dosing and the THCa but it certainly hasn't increased her seizure activity."



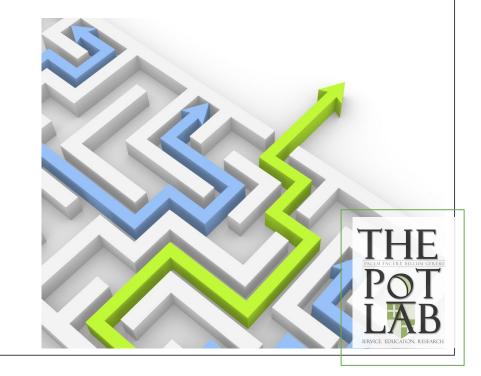


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# When to use Raw Cannabinoids? When it is a complex of co-existing conditions.

"My son has a severe seizure disorder with severe episodes of neurological "storming".

He has not had these episodes since about 1 week using the thc-a. Absolutely no meds have worked for these episodes. We had tried depakote, phenobarbital, Ativan, clonidine, risperidone. Ritalin. Nothing helped until this. [Raw cannabinoid treatment with Golden Earth XL & Blue Planet)."



#### When to use Raw Cannabinoids?

When you want to foster independence!

"We just started and have noticed a *great increase in* physical activity, attention and mental stabilization. It has also lessened seizures!"



# **Acknowledgements**

THE MEDICAL CANNABIS PATIENTS!

Abilities Expo & YOU!

Smart Pharm Research Group & The Pot Lab

Collaborators & Colleagues

#### More Info

www.**SmartPharmResearch**.com www.**ThePotLab**.com











**Abilitie** 







## Summary

- Major raw cannabinoids like THCA and CBDA are readily available in raw hemp/Cannabis
- These molecules 10-20X more effective per milligram than THC or CBD for treating many symptoms.
- Ongoing research shows mixtures suitable for severe & chronic pain.
- Legislation of this plant is illogical, unethical, and just plain MEAN!
- Join us at Booth #833 for more info!



# THANK YOU! QUESTIONS?

#### More Info:

www.SmartPharmResearch.com

www.ThePotLab.com







