

CBD * KRATOM

HOOKAH * CIGAR

GLASS PIPE

2624

VAPE CBD

OPEN

TOBACCO

Dr. Natasha
Swalve

Grand Valley State
University

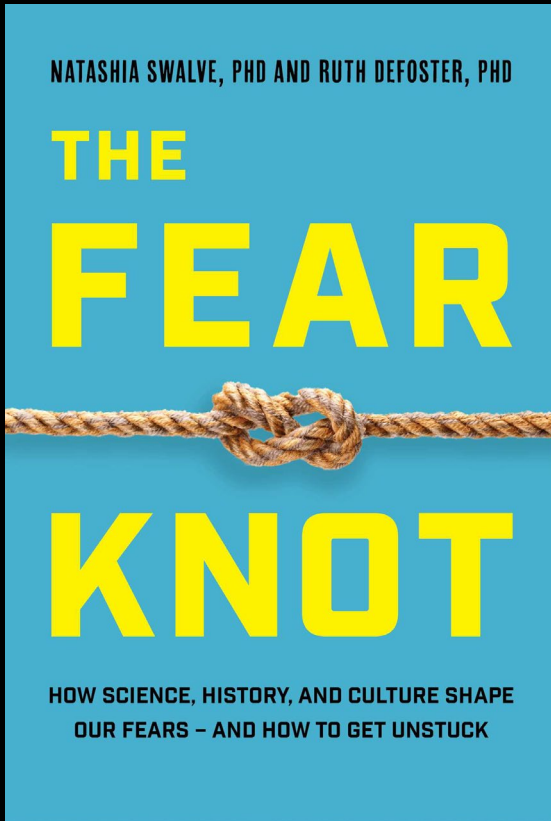
*Everything Is
Edible at Least
Once, Right?*

Agenda: What's In the Shops?



- Introduction
- Kratom and 7-OH
- Kava and Feel Free
- Deltas and CBD
- Mushrooms and whippets
- Questions

Why Am I Speaking To You?



- Neuroscientist
- TikTok on drug education
- Book on things we should fear, including drugs

Kratom: Basics

- From a tree
- Leaves in tea, powder, capsules
- Opioid addiction and pain
- Legal
 - Tried to reschedule
 - Doesn't show up on drug tests
 - 3-5 million people in US use



Kratom: How It Works

- Opioid
 - Partial agonist
- Mild stimulant effects
- Side effects:
 - Nausea, seizures, liver toxicity
- Mitragynine
 - Less likely to cause respiratory depression
- Not only chemical



Kratom: Safety

- Route of administration
- Side effects: constipation and dizziness
- Very few reports of overdoses
 - None?
 - 21:1



7-OH: Basics

- One of the components of kratom
- Relaxation, mood improvement
- Legality?
 - Currently legal but FDA is angry
 - Not regulated
 - Doesn't show up on drug tests



7-OH: *How It Works*

- Kratom: 2% 7-OH
- Opioid
- More potent than morphine
- Side effects:
 - Nausea, constipation, sweating, respiratory depression



7-OH: Safety

- Synthetic
- Respiratory depression
- More deaths reported



Kratom and 7-OH: Addictive?



- Animal studies
- Terrible withdrawals
- Faster and more powerful effects, more likely to be addictive
- Case studies of people transitioning from high dose kratom to 7-OH
 - \$60/day, eight tablets every 2 hours

Kava

- Used to be used in ceremonies
- Now sold as drink
- Anxiety and relaxation



Kava: How It Works

- Hard to study
 - What part of plant
 - Which component
- Increases GABA
- Increasing dopamine and norepinephrine, too
- Side effects
 - Dizziness, drowsiness, nausea



Kava: Safety

- Hard to study
- Basically all short-term studies
- Liver damage?
- Rash
- Combination effects
 - Alcohol



Feel Free: Basics

- Unregulated supplement
- Kratom plus kava
 - Kratom not dangerous but likely addictive
 - Kava not dangerous but potentially addictive
 - Together?



Feel Free: Danger

- Unregulated
- Liver damage? Both linked
- No studies



Delta 8 and Delta 10

- Started up because made delta 9 THC (main component) illegal
- Loophole in farm bill

What is Delta?

Delta-8

- Known as 'THC light'
- Found in hemp and derived from CBD.
- Offers a mild, smooth experience.

Delta-9

- Most common THC.
- Strongest of the three.
- Delivers classic cannabis effects.

Delta-10

- Newest and rarest variant.
- Energizing and uplifting.
- Great for a lighter experience.

Delta 8

- Diet weed
- No research
- Child died from taking 15 gummies (allegedly)
- Side effects
 - Paranoia, hallucinations, psychosis



CBD

- Relatively safe
- No psychoactive effects
- Not really good evidence for anything it claims to be



“Legal” Mushrooms: Basics

- Found OTC
- Amanita muscaria or other “proprietary blends”



Legal Mushrooms: How They Work

- Muscimol
- GABA agonist
- Not true hallucinogen but people think it is
- Side effects:
 - Dizziness, nausea, hallucinations
 - Others?



What's Actually In Them?

- Caffeine, ephedrine, mitragynine
- Psilocybin
- 5 MEO DMT
- Who knows?



Whippets: Basics

- NOS
- Mild euphoria and dissociation
- No drug tests and no hangovers



Whippets: How They Work

- Inhalants
- Fast-acting
- Opioid: partial agonist
- NMDA receptor- ketamine



Whippets: Danger

- 77% of people don't think they're dangerous
- Short-term:
 - Frostbite
- Long-term:
 - Tingling
 - Nerve weakness (demyelination)
 - Psychosis
 - Vitamin B12 (vegans)



Smoke Shop Info

- THC: good for pain, insomnia, and mental health conditions
 - Psychosis
 - Drug test
- Kratom: opioid withdrawal
 - Major risk: dependence
 - Listing 7OH as kratom



Conclusion

- Many new drugs are being sold as unregulated supplements
- Commonly opioids
- Whack a mole
- Brightly colored packages, psychological claims
- Not for human consumption, no information on how to take it



Questions?

Natasha Swalve, PhD

swalven@gvsu.edu

DrTashaSwalve

