



Magic Mushrooms

Aka Shrooms, Mushies, Boomers

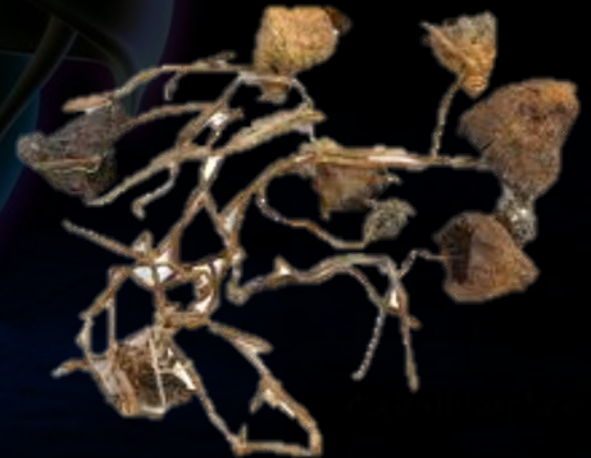
Psychedelics

- Drug category
- Types
 - Lysergamides (eg. LSD aka acid)
 - Indolealkylamine (eg. **Shrooms**)
 - Phenylethylamine (eg. Molly)
- Primary Receptor
 - 5-HT_{1A}: serotonin-like
 - Mood, Hallucinations



Mushrooms

- Indolealkylamine (eg. DMT)
- Contain **psilocybin and psilocin**
 - primary **hallucinogenic** component
 - Isolated by Albert Hoffman in 1958
- Used in ancient times for spiritual rituals
- **Schedule 1** (most illegal) since 1970
- Potency varies between:
 - Species
 - Same Crop
 - **Same mushroom** (eg. Cap v Stem)



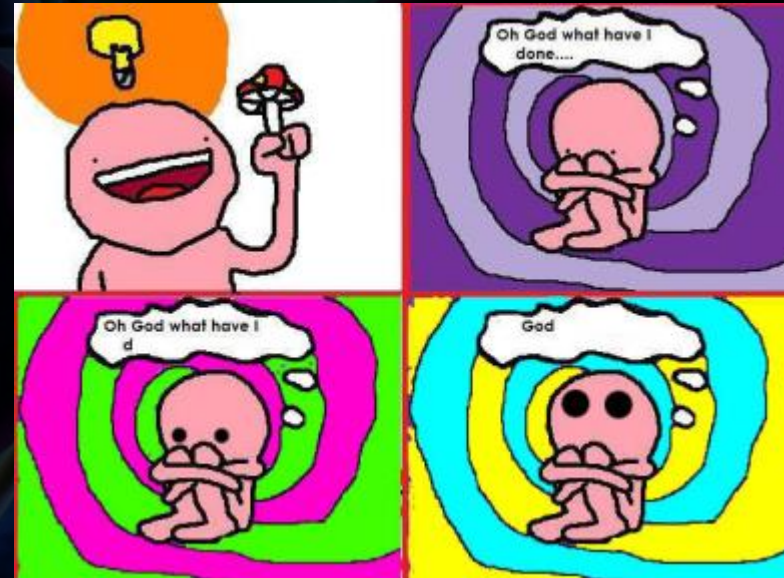
Pharmacokinetics

- Predominantly **ingested**
 - Fresh mushroom, dried, powdered, encapsulated
 - **Slower onset** compared to smoking, injecting
 - 10-40 min onset
 - **Longer lasting** compared to smoking, injecting
 - Lasts 3-8 hours



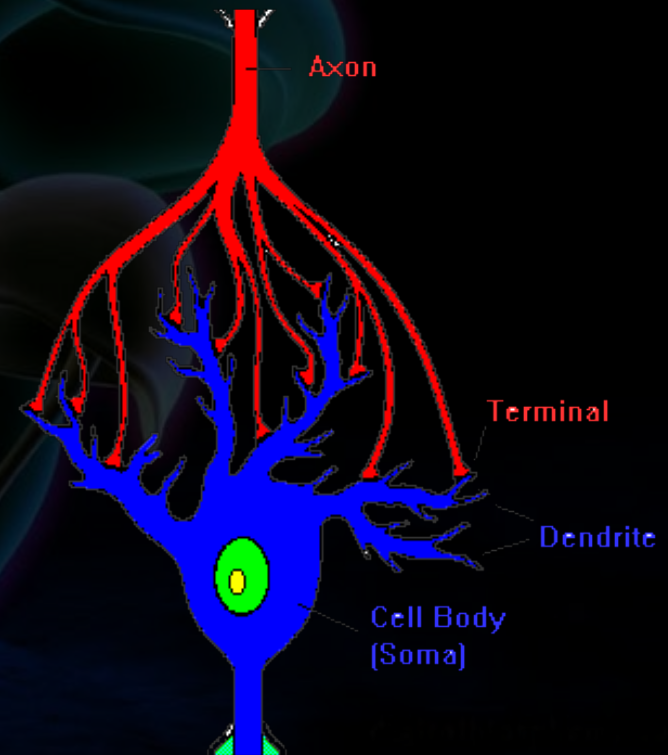
Acute Effects

- Elevated sense (auditory, visual, emotions)
- **Hallucinations**
- Altered time perception, disorientation
- Euphoria at lower doses
- Anxiety at higher doses
- Limited **dopamine** release



Mode of Action

- Psilocin binds to the **5-HT_{2a} receptor**
 - Agonist: causes an increase in action
- **Cross tolerance** with LSD
- Also 5-HT_{1A}, 5-HT_{1D}, 5-HT_{2C}



Withdrawal

- Hallucination Persisting Perception Disorder (HPPD)
- No significant long-term health effects
- Insignificant withdrawal relatively
- **Flashbacks**



Treatment

- Acute (right away, for overdose)
 - No immediate way to undo “bad trip”
 - Benzodiazepines can be used for agitation
- Chronic (long term)
 - Considered not addictive