Drugs and Consciousness

- **Psychoactive Drug**
  - a chemical substance that alters perceptions and mood (change consciousness)

- **Physical Dependence**
  - physiological need for a drug
  - marked by unpleasant withdrawal symptoms

- **Psychological Dependence**
  - a psychological need to use a drug
  - for example, to relieve negative emotions

- **Addiction** – compulsive drug craving and use
Dependence and Addiction

- **Tolerance**
  - diminishing effect with regular use

- **Withdrawal**
  - discomfort and distress that follow discontinued use

**Effective Anti-Drug Advertisement?**

- Drug dose:
  - Little effect
  - Big effect

- Drug effect:
  - Response to first exposure
  - After repeated exposure, more drug is needed to produce same effect
How do they work?

- Drugs change the way our neurotransmitters work.

1. **Agonists**: bind to receptor sites and mimic neurotransmitters
2. **Antagonists**: bind to receptor sites and prevent neurotransmitters from binding
3. Others work by increasing or decreasing release of specific neurotransmitters
Types of Psychoactive Drugs

Depressants

- Slow down the activity of the central nervous system
  - Includes alcohol, barbiturates, opiates
Depressants

- Alcohol
  - Most widely used and abused recreational drug in America.
  - Loss of inhibition, Memory problems, poor coordination, suppress breathing, reduces self-awareness, permanent brain and liver damage
  - High potential for physical and psychological addiction.
Depressants

- **Barbiturates (tranquilizers)**
  - drugs that depress the activity of the central nervous system, reducing anxiety but impairing memory and judgment
    - Nembutal, Seconal, Amytal, Valium
    - Prescribed as sleeping pills - reduce anxiety, reduce respiration, reduce blood pressure, reduce heart rate and reduce REM sleep.
Depressants

- **Opiates**
  - opium and its derivatives (such as morphine and heroin)
  - opiates *depress neural activity, temporarily lessening pain and anxiety*

- Analgesic – painkiller / drug that relieves pain.
Types of Psychoactive Drugs

Stimulants

- excite behavioral and mental activity
- speed up body functions
  - caffeine, nicotine, amphetamines, cocaine
Stimulants

- Amphetamines
  - drugs that stimulate neural activity, causing speeded-up body functions and associated energy and mood changes
  - Adderall, Ritalin, Dexedrine
    - Prescribed for ADHD, weight loss, narcolepsy, decongestion
Stimulants

- Methamphetamines
  - Crystal-like powdered substance, usually rock-like solid chucks
  - Amateur production – Acetone, chloroform, ammonia, chloric acid, ether used to break down ephedrine
  - Short rush/flash usually creates long binges
Stimulants

Cocaine

- **Causes self-confidence, euphoria, optimism**
- Short high increases short term tolerance
- Crack (cocaine, ammonia, water, baking soda) is fast-acting, potent, solid
- High potential for physical and psychological dependence
- [Anti-Crack Cocaine PSA](#)
- [Anti-Crack Cocaine PSA - 2](#)

**Did you know?** The recipe for Coca-Cola originally included an extract of the coca plant, creating a cocaine tonic for tired elderly people. Between 1896 and 1905, Coke was indeed “the real thing.”
Stimulants

- Ecstasy (MDMA)
  - Hallucinogenic amphetamine
  - **Visual hallucinations, hyperactivity, fatigue, poor concentration**
  - Long term effects include permanent brain damage and panic disorder
  - Low potential for physical and psychological dependence
**Stimulants**

- **Caffeine**
  - Reduces drowsiness, improves problem-solving ability, induces anxiety, causes tremors, elevated moods, improved memory, increase in attention
  - A moderate potential exists for physical and psychological dependence

![Caffeine Concentrations in Common Beverages](image)
Stimulants

- Nicotine
  - Elevated moods, improved memory, increase in attention
  - Major risk for cancer and heart disease
  - Strong psychological and physical withdrawal symptoms

Did you know? Each cigarette you smoke will, on average, reduce your lifespan by about 12 minutes—ironically, just about the length of time you spend smoking it.
Types of Psychoactive Drugs

Hallucinogens (Psychedelics)

- psychedelic (mind-manifesting) drugs that **distort** perceptions and evoke sensory images in the absence of sensory input
  - LSD, Psilocybin, Marijuana
Hallucinogens

- **LSD (acid) – lysergic acid diethylamide**
  - most powerful hallucinogenic drug
  - Short term memory loss, paranoia, flashbacks, panic attacks
  - Low potential for physical or psychological dependence
Hallucinogens

- PCP (Angel Dust)
  - Euphoria, hallucinations, violent tendencies, masking of pain
  - High potential for physical and psychological dependence
Hallucinogens

- Psilocybin Mushrooms
  - Nausea first, then distorted perceptions, paranoia, nervousness
    - Depends on user’s mood, expectations, surroundings, frame of mind, etc
  - Flashbacks, HPPD
    - Hallucination Persisting Perception Disorder
Hallucinogens

- Mescaline (isolated from Peyote)
  - Euphoria, hallucinations, anxiety, vomiting, headaches, rapid temp fluctuations
  - Low potential for physical dependence
  - Cool Story, Hansel!
Hallucinogens

- THC
  - the major active ingredient in marijuana
  - triggers a variety of effects, including mild hallucinations, euphoria, relaxation, time distortion, short term memory loss
  - Originates from hemp plant
  - Low potential for physical and moderate potential for psychological dependence

**Did you know?** Studies have demonstrated a correlation between marijuana use and an increased risk for developing schizophrenia.