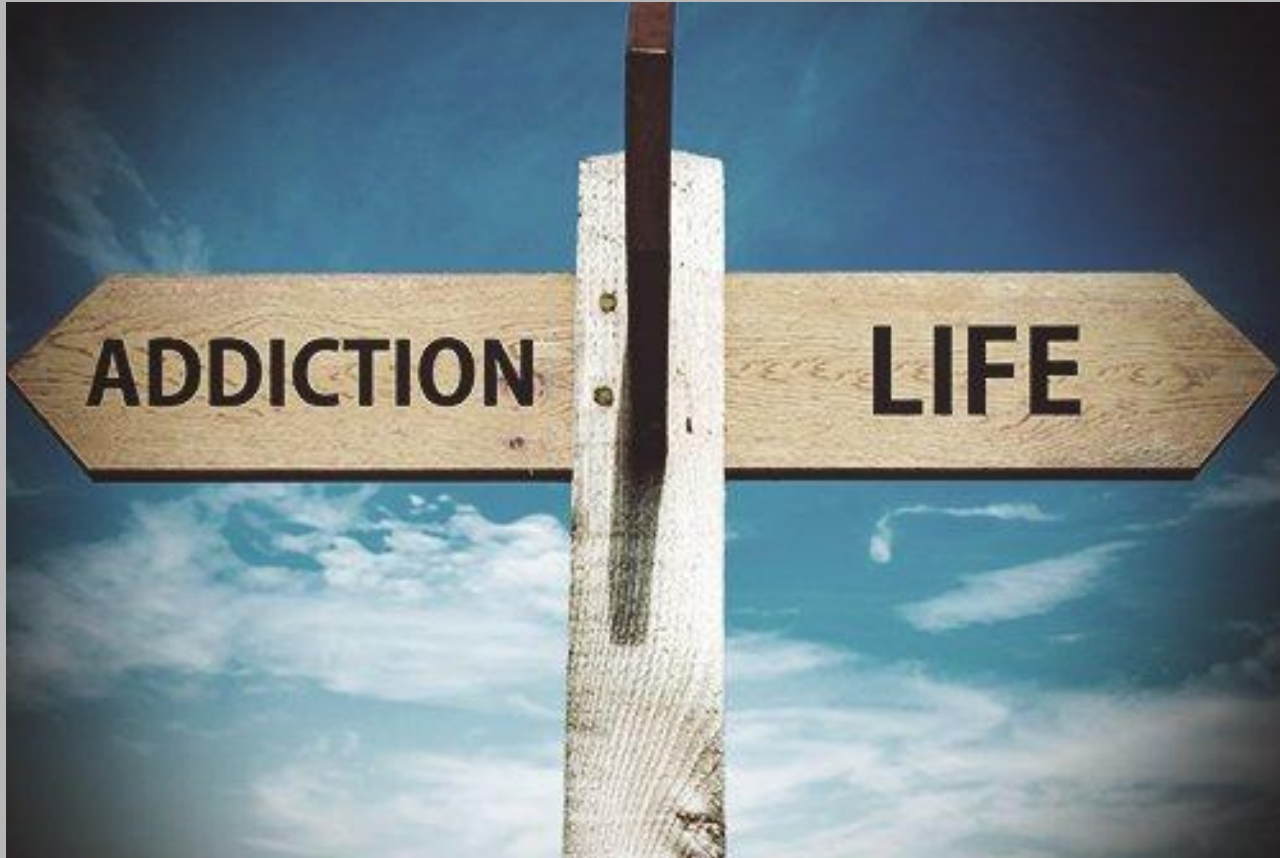


# Drug Abuse





# Physical View of Drug's Devastating Effects



cbsnews.com



nbcnews.com



cbsnews.com



nbcnews.com



cbsnews.com



# Downward Spiral

What are your goals in life? Do drugs help a person to achieve their goals, or prohibit them?



What does your future look like, based on the decisions you are making right now?



**“MAKE SURE THE PATH YOU’RE ON  
IS THE RIGHT PATH,  
OR YOU’RE GOING TO END UP  
IN THE WRONG PLACE.”**

*~Scottie Somers*



# Facts about Drug Use

- Over-the-Counter Drugs
  - Medicine that is sold WITHOUT a doctor's prescription.
  - Can be harmful if directions are not followed.
- Prescription Drugs
  - Can only get with a written order from a doctor.
  - Higher potential for harm than OTC drugs.
- Illegal Drugs
  - Chemical substance that people may to make, possess, buy, consume, or distribute
- Drug Misuse
  - Improper use of medicine.
- Drug Abuse
  - Drug that is INTENTIONALLY used improperly.





# Drugs Abuse and The Brain

- The “Reward Pathway”
  - Psychoactive drugs create a pleasurable feeling that the user wants to repeat.
  - See page 428 in textbook

## Reward Pathway in the Brain

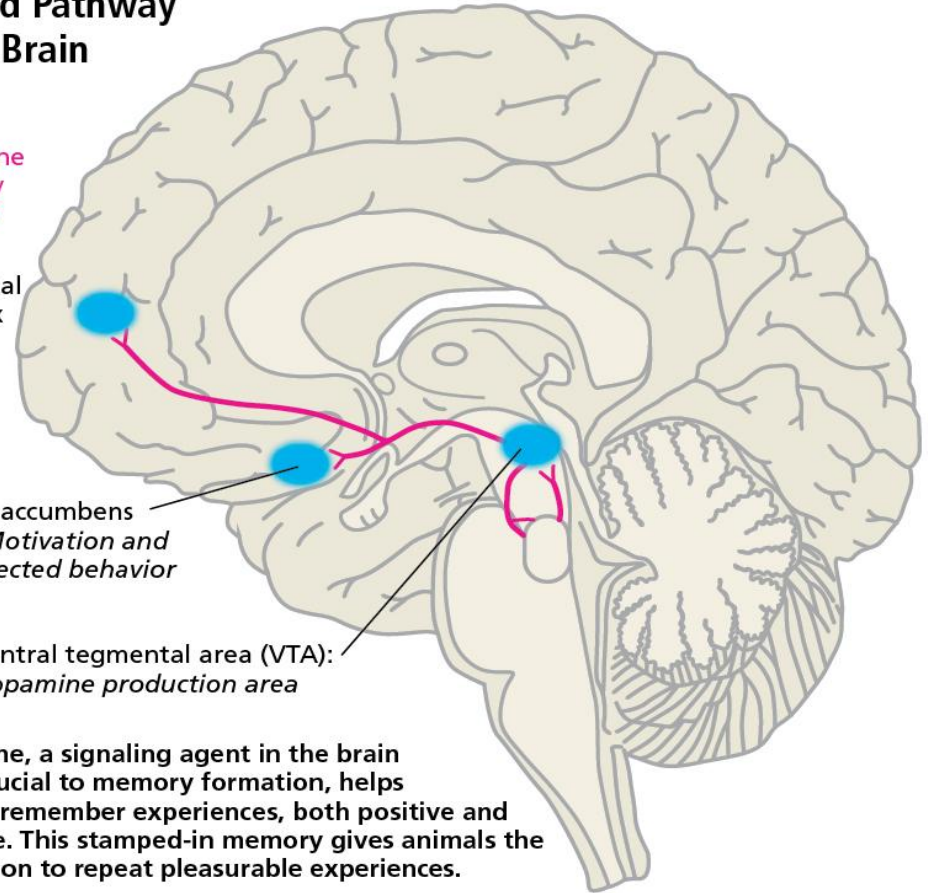
Dopamine  
pathway

Prefrontal  
cortex

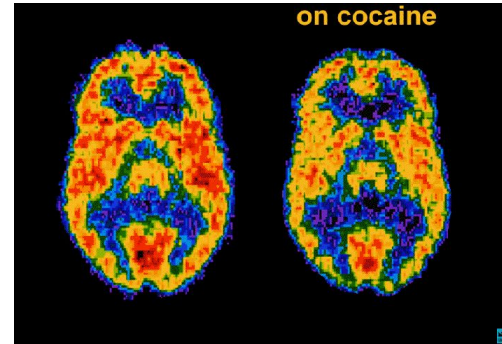
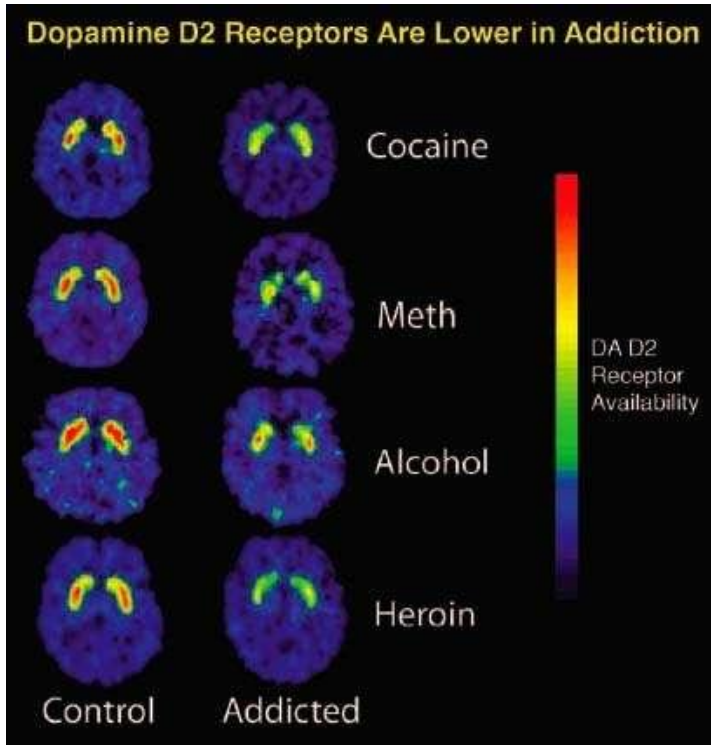
Nucleus accumbens  
(NAc): *Motivation and  
goal-directed behavior*

Ventral tegmental area (VTA):  
*Dopamine production area*

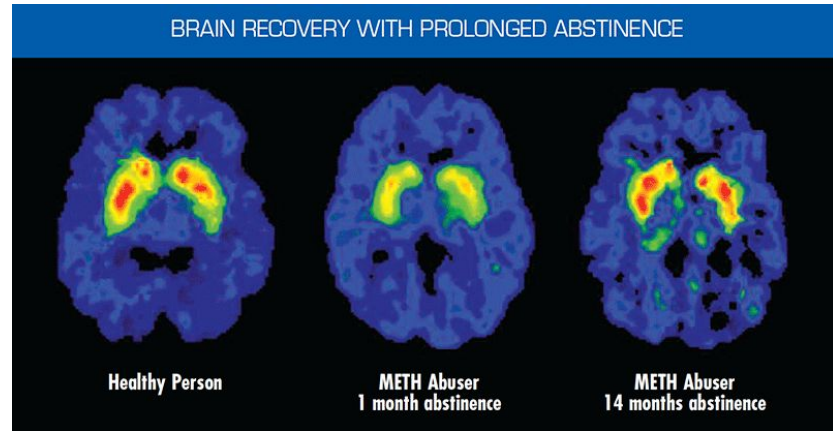
Dopamine, a signaling agent in the brain that's crucial to memory formation, helps animals remember experiences, both positive and negative. This stamped-in memory gives animals the motivation to repeat pleasurable experiences.



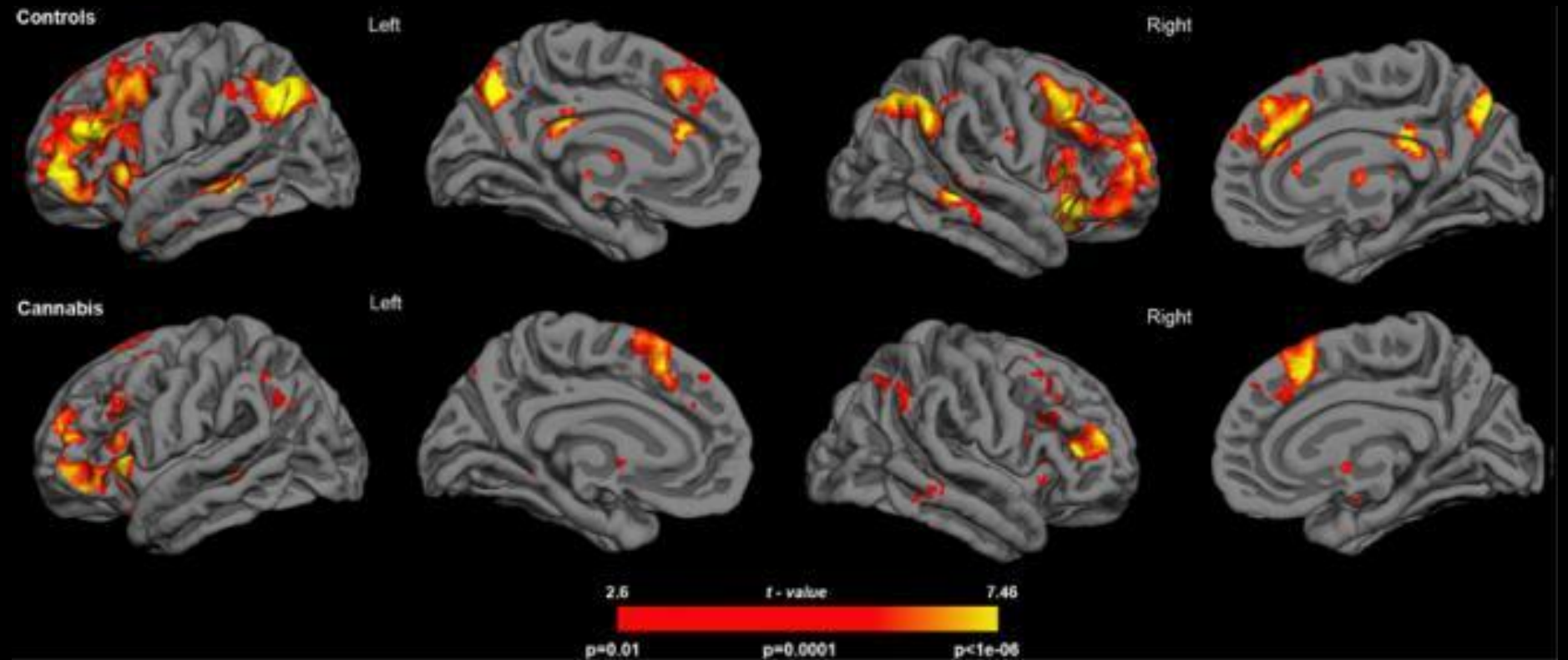
# Brain Scans from the National Institute on Drug Abuse



Brains use of Glucose - Left is normal, right is brain scan of a cocaine user.



Source: *The Journal of Neuroscience*, 21(23):9414-9418. 2001. These images showing the density of dopamine transporters in a brain area called the striatum illustrate the brain's remarkable potential to recover, at least partially, after a long abstinence from drugs.



MRI scans showing brain activity of marijuana users compared to a control group. Each group was given various memory tasks during this study. As seen in these scans, the control group significantly outperformed the marijuana users. (Source: Journal of Molecular Psychiatry) [Study Link](#)

# Effects on Family, Friends, and Society

- Relationships become strained
  - Personality changes in user
  - Interests and activities that were once shared, often change with the drug user.
- Effects on Society
  - Cost to imprison
  - Medical costs for treatment programs, HIV/AIDS, drug related illness, and injuries
  - Lost work productivity



Released police photo of a heroin overdosed couple, with a child in the backseat.

# How Does Drug Use Send a “Ripple Effect” Throughout a Community?



# Depressants



- Depressant
  - A psychoactive drug that slows the brain and body reactions
  - **Barbiturates**
    - Small doses act as a sedative
    - Large Doses will induce sleep
    - Abuser
      - Walks slowly, and will slur speech.
  - CNS Depressant
    - Slows the central nervous system
    - Used to be called a tranquilizer
    - May be prescribed to treat:
      - Anxiety
      - Muscle spasms
      - Sleep disorders

# Depressants (cont.)



- Opiates
  - Drugs made from the seeds of poppy plants
  - Medically used to relieve pain and dull senses.
  - Heroin
    - An opiate that is made from morphine.
      - Highly addictive, and a high rate of overdose.

# Stimulants





# Stimulants

- Stimulants

- Speeds up activities of the central nervous system.
- May be prescribed to treat various disorders
- Amphetamines
  - Prescription drugs that can be sold illegally
  - “Speed”, “uppers”
  - Hard crash when the drug wears off
    - User wants to take another to get “up” again.
- Methamphetamine
  - Made from various over-the-counter ingredients in a meth lab
  - Highly addictive, with devastating side effects.
- Cocaine
  - A powerful, short-acting stimulant
  - Highly addictive
  - May cause seizures, heart attack, respiratory failure
  - “Free-basing”
    - Turns cocaine into crack



SKIN



FACIAL MUSCULATURE AND FAT



TEETH AND GUMS



INCREASING ESTIMATED AGE



Methamphetamine Users

[Rehabs.com](https://www.rehabs.com)

# Hallucinogens

- Drug that distorts, perception, thought and mood.
  - No medical use
- Three main kinds
  - LSD
  - Psilocybin (mushrooms)
  - PCP



# Marijuana



- Marijuana
  - Flowering tops of the hemp plant (*cannabis sativa*).
  - Can be smoked or eaten.
  - Source from which the illegal drug hashish comes.
  - Effects
    - Distorts perception
    - Diminishes thinking and problem solving
    - Increased heart rate
    - Anxiety and paranoia
    - Loss of ambition
  - Considered the “gateway drug”.
    - Leads users to more potent drugs.

# Club Drugs

- Club Drugs
  - Name is derived from their wide usage at dance clubs.
  - Strength and quality are highly unpredictable.
  - Common Types
    - Ecstasy (MDMA)
    - Rohypnol (roofies)
      - Also known as the date rape drug
    - Gamma-Hydroxybutyrate (GHB)
    - Ketamine



Ecstasy Pills

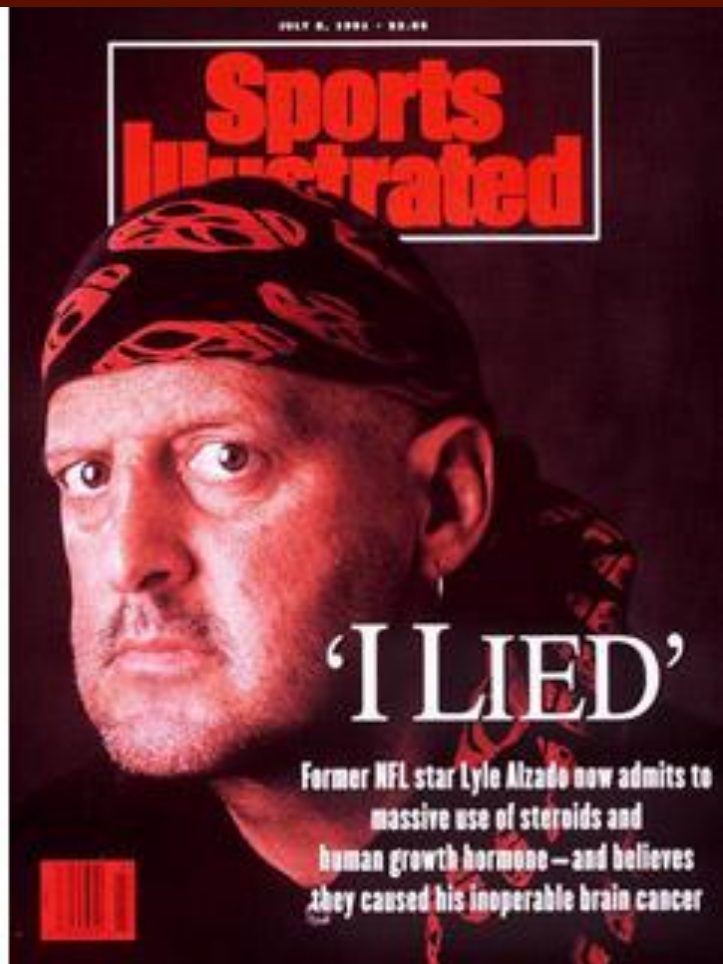
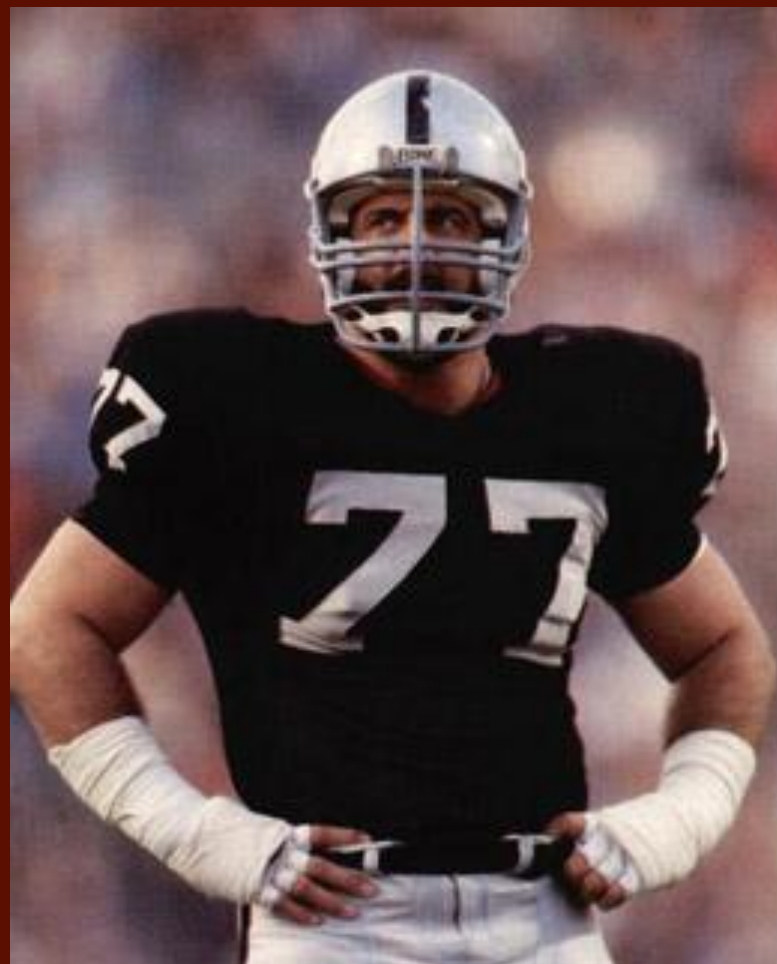
# INHALANTS

VAPORS FROM TOXIC SUBSTANCES TO REACH A QUICK HIGH.

# Anabolic Steroids

- Steroids
  - Synthetic drug similar to testosterone.
  - Usually abused by athletes.
  - Side effects
    - Enlarged Heart
    - Cancer
    - Personality changes
      - “Roid rage”
    - Testicles Shrink
    - Breast tissue in men.
    - Masculine features in women
    - Acne
    - Depression





Choosing to be drug free, means living your life at  
212 Degrees....

