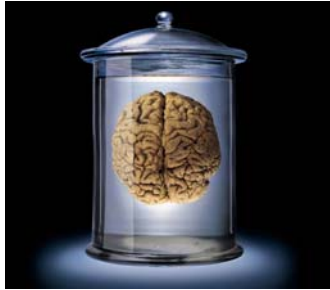


# NERVOUS SYSTEM & DRUGS



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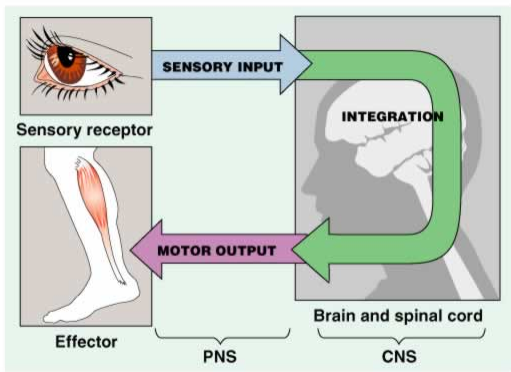
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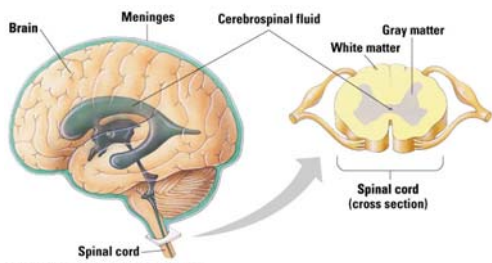
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## Central Nervous System



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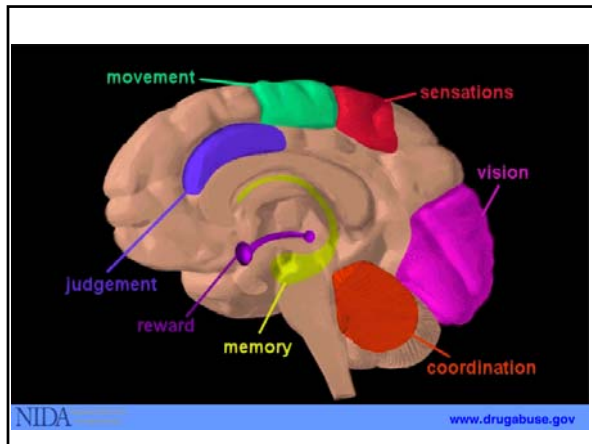
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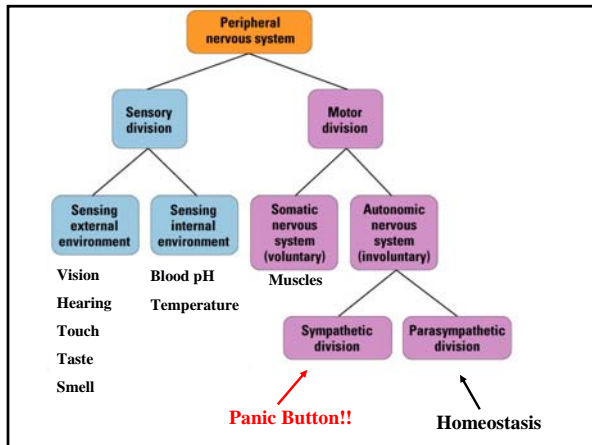
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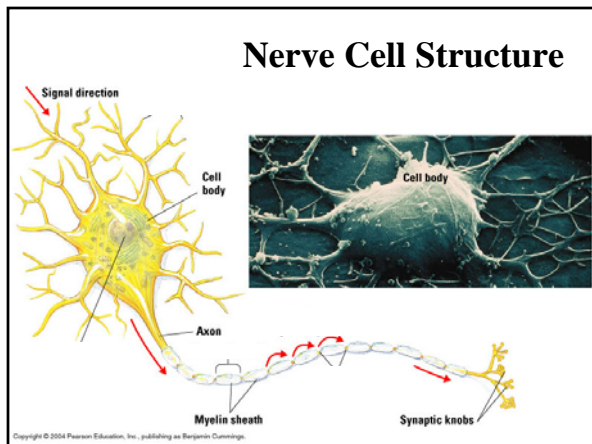
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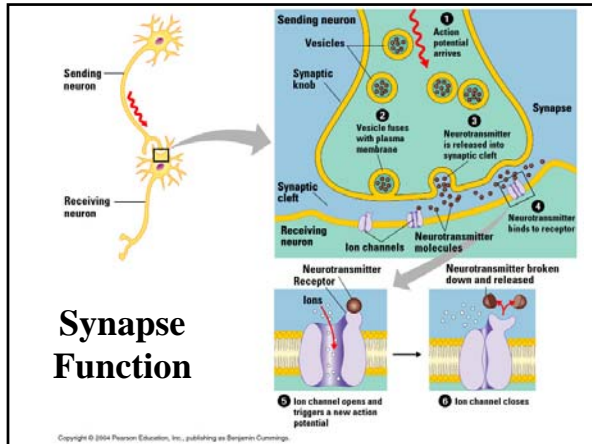
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### Neurotransmitters

- Epinephrine (aka: adrenaline)
- Nor - epinephrine
- Dopamine
- Somatostatin
- Glutamic acid
- Glycine
- Histamine
- Serotonin
- Acetylcholine
- GABA
- Anandamide
- Dozens more...

**Dopamine**

NCC1=CC=C(O)C=C1O

**Anandamide**

CCCCCCCCCCCCCCCC(=O)N

**Serotonin**

NC1=CC=C2C(=C1)C(=O)N=C2

**Acetylcholine**

CC(=O)N(C)C

**GABA**

NC(=O)CC1=CC=CC=C1

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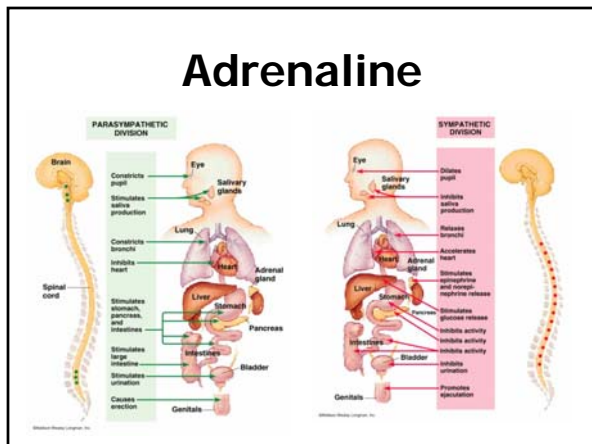
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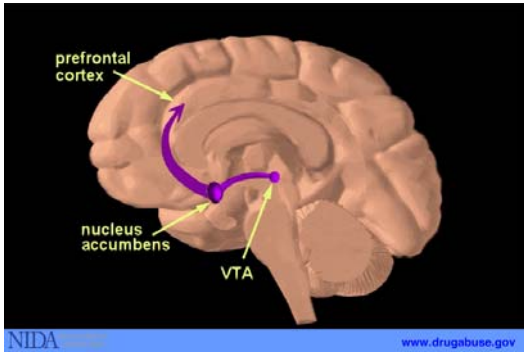
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# Dopamine



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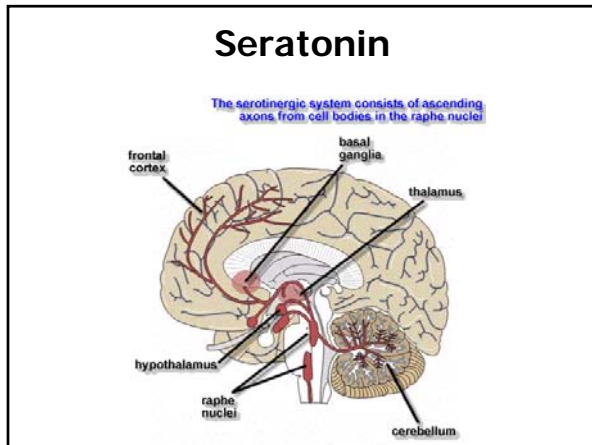
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# Serotonin



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# Cocaine



- 22 million "have tried it"
- 3.6 million people are chronic users
- Use is on the rise
- Extremely addictive
- High incidence of ER visits related to cocaine use



Bolivian leaf (*Erythroxylon coca*) and the other known as the Peruvian leaf (*Erythroxylon novogranatense*).

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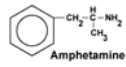
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## Methamphetamine



- Crystal meth, speed, crank
- 10 million "have tried it"
- 731,000 current users (2006)
- Rates declining
- A major problem in Oklahoma
- HIV, Hep B & C risk



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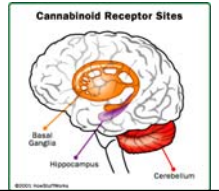
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## Marijuana



- Weed, grass, pot
- Mimics anandamide
- Short-term memory loss
- Coordination, learning



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## Opiates: Heroin

- Horse, junk, blacktar, brown sugar
- highly addictive
- HIV, Hep B & C risk
- Morphine, codeine, opium
- dopamine



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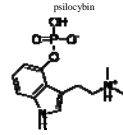
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## Hallucinogens: LSD & Psilocybin



- Acid, dose, shrooms
- acts on serotonin receptors
- trip lasts several hours
- non-addictive (probably)



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## Hallucinogens: Phencyclidine & Ketamine

- PCP, angel dust
- Sweating, flushing, drooling, aggression, confusion, psychosis



- Green, K, special K, super K, vitamin k, Kit Kat
- Disassociation, numbness, muscle weakness, panic attacks, depression, coma
- Similar to PCP
- Sometimes sold as ecstasy (MDMA)

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