

COUNSELING AND MENTAL HEALTH

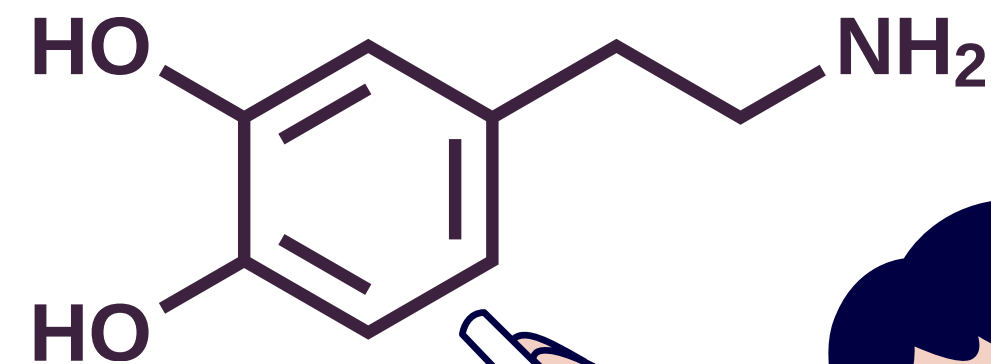
NEUROTRANSMITTER REFERENCE GUIDE

JESSIE CHEN



DOPAMINE

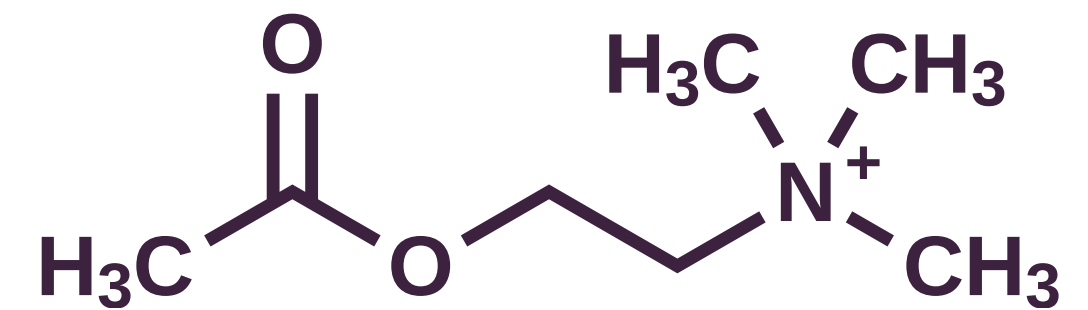
- Inhibitory AND Excitatory
- Effects on Behavior:
 - Makes us more sociable & extroverted
 - Reward/pleasure center
- Mental Disorders Associated with It:
 - Depression
 - ADHD
 - Restless Legs Syndrome
- Excess: Schizophrenia & Drug Addiction
- Deficiency: Parkinson's Disease



ACETYLCHOLINE

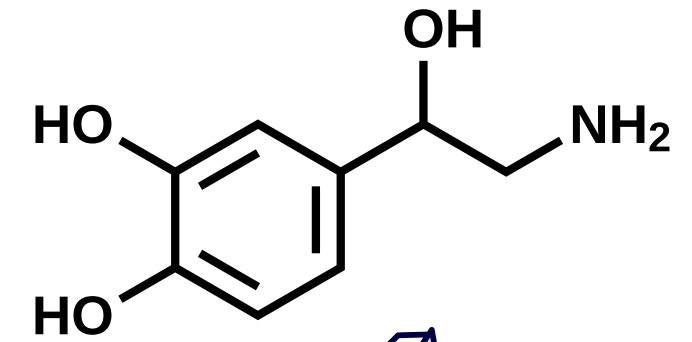


- Excitatory
- Effects on Behavior:
 - Plays a role in motivation, arousal, attention, learning, and memory
- Mental Disorders Associated with It:
 - Lambert-Eaton Myasthenic Syndrome (LEMS)
 - Myasthenia Gravis (MG)
- Excess: Cholinergic Crisis
- Deficiency: Alzheimer's Disease



NOREPINEPHRINE

- Excitatory
- Effects on Behavior:
 - Fight-or-flight Response
 - Mediate behavior--- particularly aggression
- Mental Disorders Associated with It:
 - High/Low blood Pressure
 - ADHD
- Excess: Anxiety
- Deficiency: Depression



GAMMA-AMINOBUTYRIC ACID

Inhibitory

Excess: Epilepsy & Huntington's

Deficiency: Sleep & Eating Disorders



EFFECTS ON BEHAVIOR

- Regulates Sleep/Wake Cycle
- Has a calming Effect
- Controls anxiety, stress & fear

MENTAL DISORDERS ASSOCIATED WITH IT

- Autism Spectrum Disorders
- ADHD
- PTSD
- Panic Disorder



GLUTAMATE



Excitatory

Excess:
Migraines &
Seizures

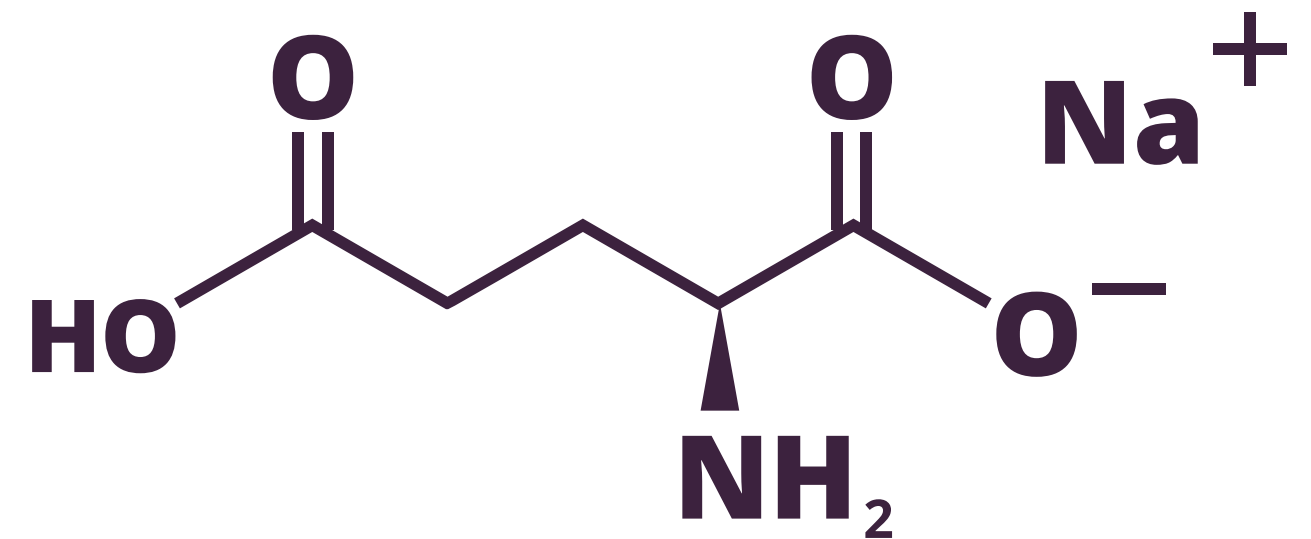
Deficiency:
Depression &
Schizophrenia

MENTAL DISORDERS ASSOCIATED WITH IT

- Anxiety
- PTSD
- OCD
- Mania

EFFECTS ON BEHAVIOR

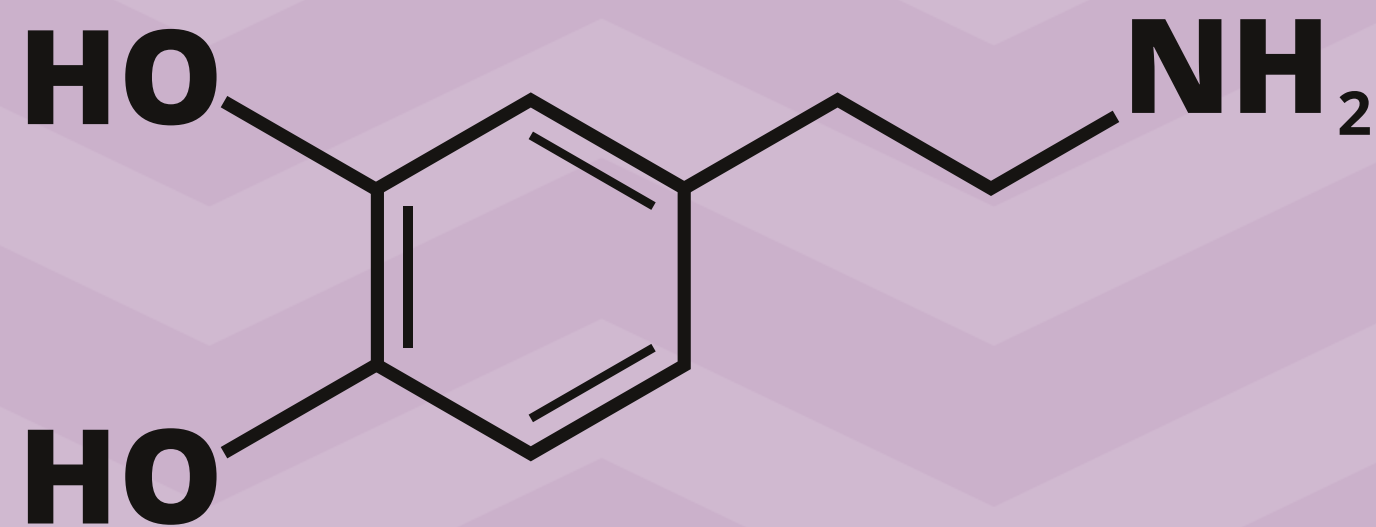
- Hyperactive
- Asocial



SEROTONIN

MENTAL DISORDERS ASSOCIATED WITH IT

- OCD
- Anxiety Disorders
- PTSD
- Epilepsy



INHIBITORY

EFFECTS ON BEHAVIOR

- Regulates Body temperature
- Sleep
- Sexual Behavior
- Hunger

Excess: Hallucinations

Deficiency: Depression & Mood Disorders

