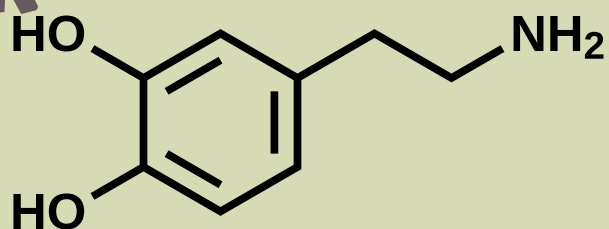


# NEUROTRANSMITTER

# DOPAMINE



## EFFECTS ON BEHAVIOR

- mood regulation
- motivational control
- Controls general level of arousal

## EFFECTS ON BEHAVIOR

- Curious about ideas
- Reward-seeking loops

## INHIBITORY OR EXCITATORY

Dopamine has both inhibitory and excitatory behaviors. Dopamine can become excitatory causing impulsiveness and aggression. When it is inhibitory you are in a relaxed state.



## AFFILIATED MENTAL HEALTH DISORDERS

- Depression
- Schizophrenia
- psychosis
- ADHD
- OCD
- Addiction



In general, dopamine gives you that sensation of motivation, satisfaction, and pleasure.

brought to you by:  
**LEO AVILA**

# NEUROTRANSMITTER

# ACETYLCHOLINE



## EFFECTS ON BEHAVIOR

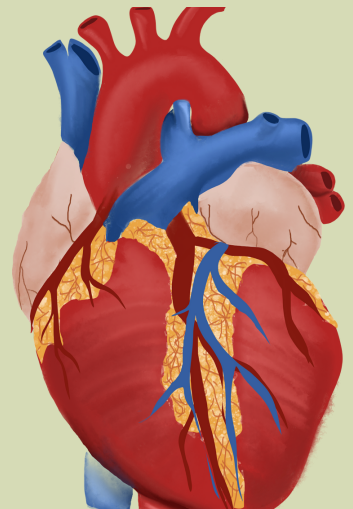
- Motivation
- Arousal
- Attention-learning
- Memory

## EFFECTS ON BEHAVIOR

- Promoting REM sleep
- Involuntary muscle movement

## INHIBITORY OR EXCITATORY

It's responsible for making you in action since it has to control those involuntary muscles and constantly be in action when pumping the heart.



## AFFILIATED MENTAL HEALTH DISORDERS

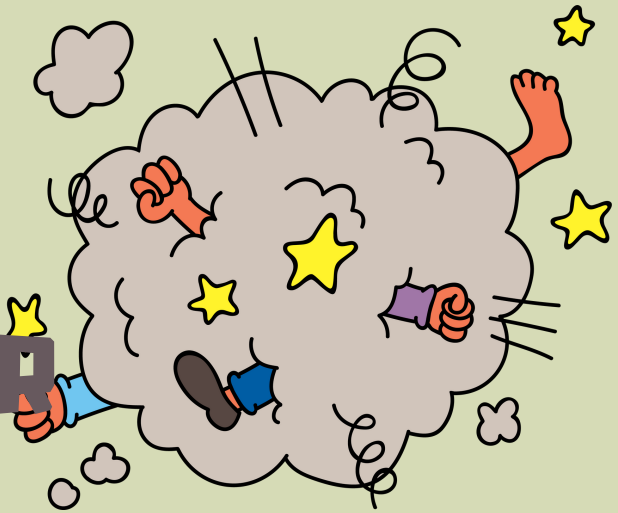
- PTSD
- Bipolar Disorder
- Schizophrenia



An excess causes headaches, confusion, and drowsiness. A deficiency causes issues recalling memories.

brought to you by:  
**LEO AVILA**

# NEUROTRANSMITTER



# NOREPHINEPINE

## EFFECTS ON BEHAVIOR

- Mediate behavior
- “Fight or flight”
- particularly aggression

## EFFECTS ON BEHAVIOR

- Increases arousal, attention, and alertness

## INHIBITORY OR EXCITATORY

Norephinepine is an example of an excitatory neurotransmitter. However, it can be inhibitory or excitatory based on the type of adrenoceptor involved.



## AFFILIATED MENTAL HEALTH DISORDERS

- Anxiety
- ADHD
- Depressive Disorders

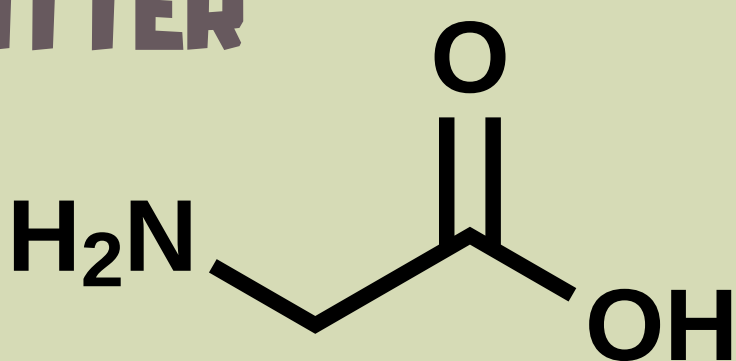


An excess of norephinpine may cause anxiety. A deficiency may cause depression. Your body needs just the right amount to maintain function and alertness.

brought to you by:  
**LEO AVILA**

# NEUROTRANSMITTER

## GABA



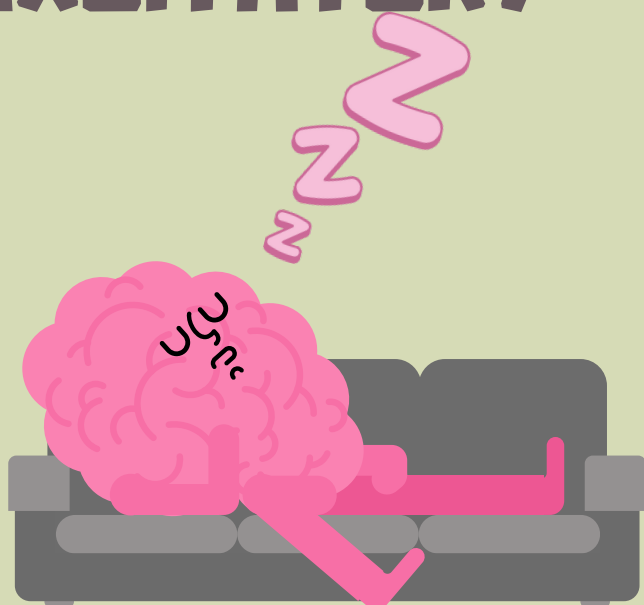
## EFFECTS ON BEHAVIOR

- Major role in maintaining order control of the nerve cells which control our anxiety, stress, and fear
- Calming effect



## INHIBITORY OR EXCITATORY

GABA, otherwise known as Gama-aminobutyric acid, is known for being an inhibitory neurotransmitter. It is responsible for slowing down the brain.



## AFFILIATED MENTAL HEALTH DISORDERS

- Schizophrenia
- Autism-spectrum disorder
- Panic Disorder
- ADHD
- major depressive disorder



An increase in GABA may cause mania or depression. A deficiency may result in insomnia, and mood disorders.

brought to you by:  
**LEO AVILA**

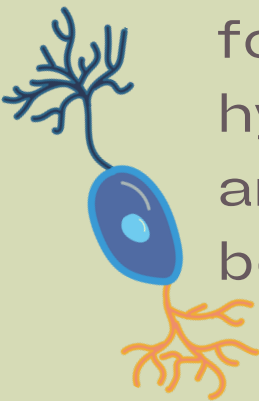


# NEUROTRANSMITTER

# GLUTAMATE

## EFFECTS ON BEHAVIOR

- Responsible for hyperactive and asocial behavior



## EFFECTS ON BEHAVIOR

- Helps with managing stressors, as well as, regulating your mood

## INHIBITORY OR EXCITATORY

Glutamate is an excitatory neurotransmitter. It's main principals include memory, cognition, and mood control



## AFFILIATED MENTAL HEALTH DISORDERS

- Schizophrenia
- Treatment-Resistant Disorder
- Bipolar Disorder



An excess causes the brain cells to become too excited, resulting in the termination and damage of those cells. A deficiency may cause chronic disorders and pain.

brought to you by:  
**LEO AVILA**



# NEUROTRANSMITTER

# SEROTONIN



---

## EFFECTS ON BEHAVIOR

Effects prosocial and antisocial behaviors. Including grooming, cooperation, aggression, and social isolation.



---

## INHIBITORY OR EXHIBITORY

Serotonin is an inhibitory transmitter. Maintaining balance in this transmitter is really important since it has a large role on our behavior.



---

## AFFILIATED MENTAL HEALTH DISORDERS

- attention deficit hyperactivity disorder
- Major depressive Disorder
- Anxiety Disorders
- Schizophrenia
- Addiction
- Autism



---

An excess of serotonin causes shivering, fever, and seizures. A deficiency may cause depression and mania.

---



brought to you by:  
**LEO AVILA**