

NEUROTRANSMITTERS

Neurotransmitters are chemicals suspended in fluid between the synaptic terminals. They are inside neurons and help transmit messages.



NEUROTRANSMITTERS

Reuptake is like a suction device that allows for the next stimulation to occur. It clears the synaptic terminal for the next release of neurotransmitters



NEUROTRANSMITTERS

Agonists may mimic a neurotransmitter and bind to its receptors site to produce the effect of the neurotransmitter



NEUROTRANSMITTERS

Antagonists block a receptor site inhibiting the effect of the neurotransmitter or agonist



FUNCTIONS OF NEUROTRANSMITTERS

NEUROTRANSMITTER	FUNCTION	MALFUNCTION
Acetylcholine (ACh)	Arousal, attention, memory	Alzheimer's Disease – lack of Ach-producing neurons
Dopamine	Control of movement, sensations of pleasure	Excess dopamine – Parkinson's Disease, schizophrenia
Serotonin	Sleep, anxiety, appetite	Lack of Serotonin – depression. SSRI drugs block serotonin production.
Norpinephrine	Alertness, arousal	Undersupply can cause depression
Glutamate	Learning, memory	Oversupply can cause headaches, seizures (MSG/Chinese food)
Gamma-aminobutyric acid (GABA)	Sleep, inhibits movement	Undersupply can cause insomnia, seizures
Endorphins	Pain relief	Undersupply can cause depression, headaches