

Class Preparation: Mental Health #1

Directions: Fill in the charts below. Identify what mental health disorders can occur when each neurotransmitter is increased or decreased.

	Functions	Increase	Decrease
Dopamine	Fine muscle movement, integration of emotions and thoughts, decision making, stimulates hypothalamus to release hormones	Schizophrenia, Mania	Parkinson's Disease, Depression
Norepinephrine	Mood, attention and arousal, fight or flight in response to stress	Anxiety, Mania, Schizophrenia	Depression
Serotonin	Mood, sleep regulation, hunger, pain perception, aggression and libido	Anxiety	Depression
GABA	Reduces anxiety, aggression, pain perception, anticonvulsant and muscle-relaxing properties	Reduction of anxiety	Anxiety disorders, schizophrenia, mania
Acetylcholine	Plays a role in learning and memory, regulates mood, mania, sexual aggression, stimulates the parasympathetic nervous system	Depression	Alzheimer's Disease, Dementia, Parkinson's Disease, Huntington's Chorea

Structures of the Brain

Brain Structure	Function
The limbic System	process and regulate emotion and memory while also dealing with sexual stimulation and learning. Behavior, motivation, long-term memory, and our sense of smell also relate to the limbic system and its sphere of influence
Frontal Lobe	higher cognitive functions such as memory, emotions, impulse control, problem solving, social interaction, and motor function
Parietal Lobe	sensory perception and integration, including the management of taste, hearing, sight, touch, and smell. It is home to the brain's primary somatic sensory cortex, a region where the brain interprets input from other areas of the body
Temporal Lobe	managing your emotions, processing information from your senses, storing and retrieving memories, and understanding language
Occipital Lobe	visuospatial processing, distance and depth perception, color determination, object and face recognition, and memory formation