

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 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	Psychosis
Acetylcholine	Plays a role in learning and memory, regulates mood, mania, sexual aggression, stimulates the parasympathetic nervous system	Depression	Alzheimer disease, Dementia, Parkinson 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
Frontal Lobe	voluntary movement, expressive language and for managing higher level executive functions
Parietal Lobe	vital for sensory perception and integration, including the management of taste, hearing, sight, touch, and smell
Temporal Lobe	processing auditory information and with the encoding of memory. The temporal lobes are also believed to play an important role in processing affect/emotions, language, and certain aspects of visual perception.
Occipital Lobe	visuospatial processing, distance and depth perception, color determination, object and face recognition, and memory formation