

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	Anxiety disorders, schizophrenia, mania
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	Involved in our behavioral and emotional responses, especially with behaviors such as: feeding, reproduction and caring for our young, and fight or flight responses.
Frontal Lobe	Responsible for voluntary movement, expressive language and for managing higher level executive functions.
Parietal Lobe	Responsible for sensory perception and integration, such as the management of taste, hearing, sight, touch, and smell. It also houses the brain's primary somatic sensory cortex.
Temporal Lobe	Responsible for processing auditory information and with the encoding of memory. The temporal lobes also play an important role in processing affect/emotions, language, and certain aspects of visual perception.
Occipital Lobe	Present in the back of the head, these lobes are responsible for visual perception, including color, form and motion.