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Neuron

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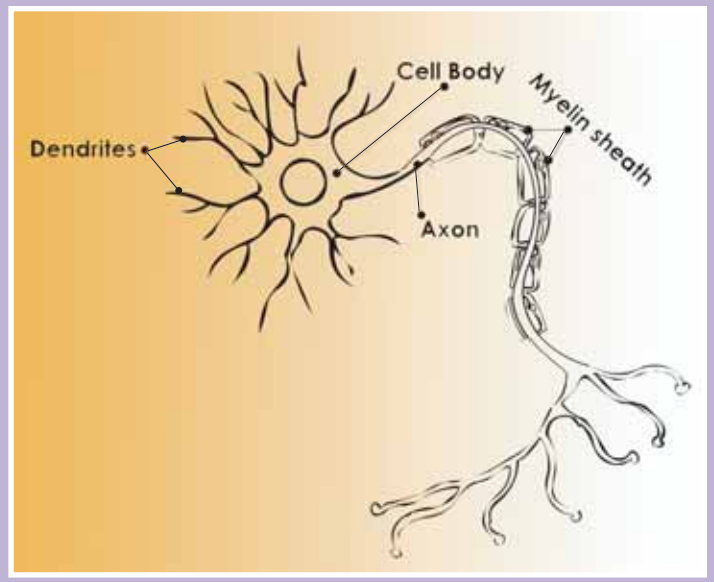

Neurons are the cells in the brain. Neurons send messages all over the body that help you to move, hear, see, taste, smell, remember, feel, and think. Two parts of the neuron are the dendrites and the axon. Neurons are so small you need a powerful microscope to see them. They are very important to your brain.

Neurotransmitters

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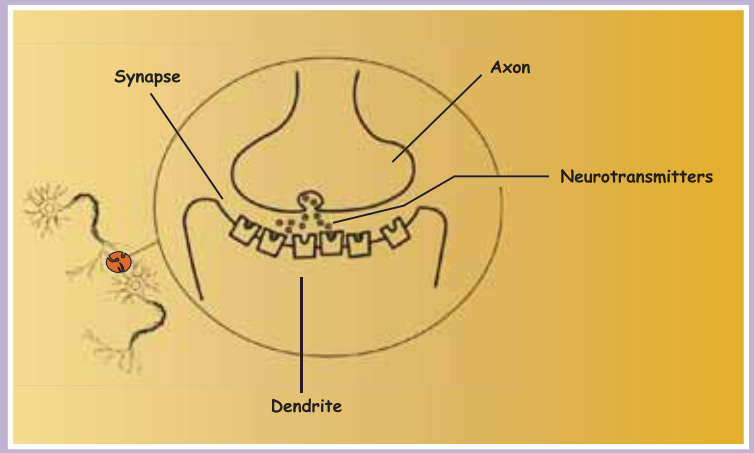

Neurotransmitters are chemicals in the brain that carry messages from one neuron to another. They are released from one neuron, move across the synapse, and attach to another neuron. Different kinds of neurotransmitters are used for different functions. For example, dopamine is a type of neurotransmitter associated with feelings of pleasure.

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Disrupted Neurotransmission

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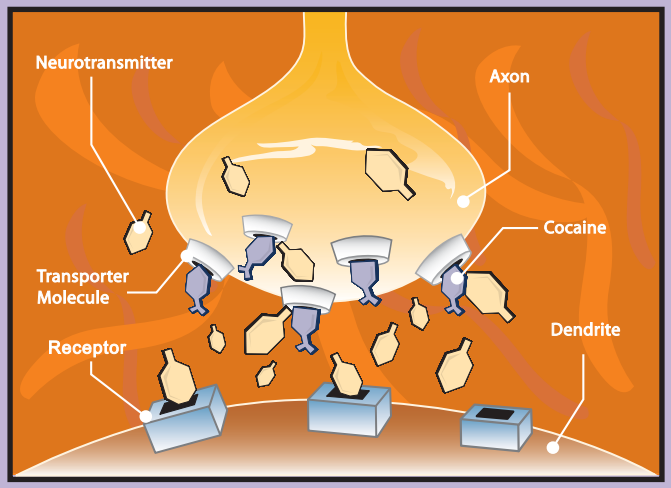

Drugs can attach to receptors meant for certain neurotransmitters. Drugs can also stop neurotransmitters from being broken down or reabsorbed by preventing them from being picked up by the neuron that released them. Drugs can stop the neurotransmitters, keeping them from doing their job causing problems in normal brain and body functioning.

Neuroscientist

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Neuroscientists study the different parts of the brain and how they all work together. Because the brain has so many parts, neuroscientists usually focus on one specific part or function. They do this to learn how diseases and drugs affect the brain, and how to keep the brain healthy. A person has to go to school for a long time to become a neuroscientist.

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Synapse

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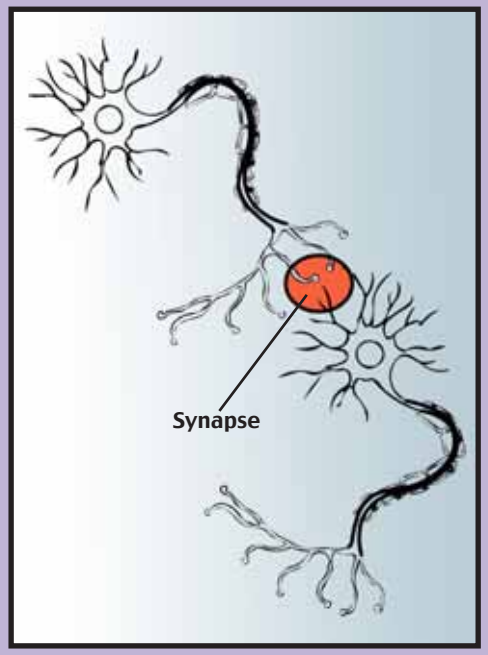

The space between neurons is called the synapse. Neurotransmitters cross the synapse to send messages to neurons on the other side. The word "synapse" comes from the Greek: "syn" meaning "together" and "haptein" meaning "to clasp."

Normal Neurotransmission

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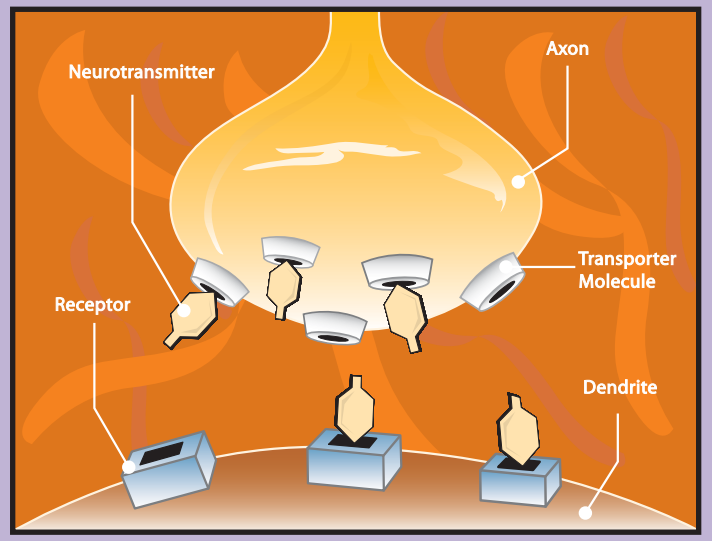

Each kind of neurotransmitter attaches to a specific set of receptors, like a key fitting into a lock. During normal neurotransmission, neurotransmitters are released into the synapse and attach to specific receptors, where they send a message. Then, the neurotransmitters are released from the receptors and broken down or reabsorbed by transporter molecules into the neuron that released them.