

Drug Action

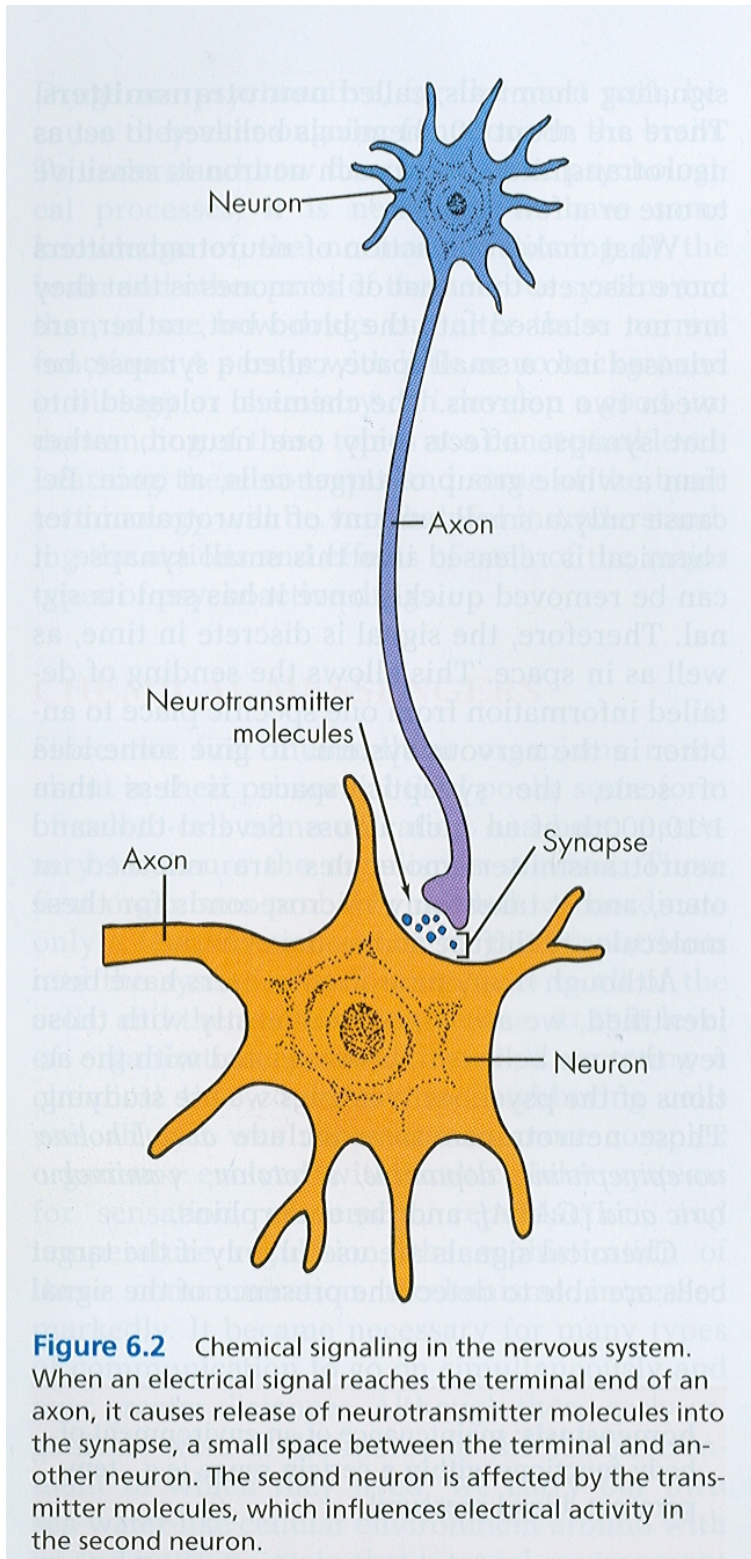


Figure 6.2 Chemical signaling in the nervous system. When an electrical signal reaches the terminal end of an axon, it causes release of neurotransmitter molecules into the synapse, a small space between the terminal and another neuron. The second neuron is affected by the transmitter molecules, which influences electrical activity in the second neuron.

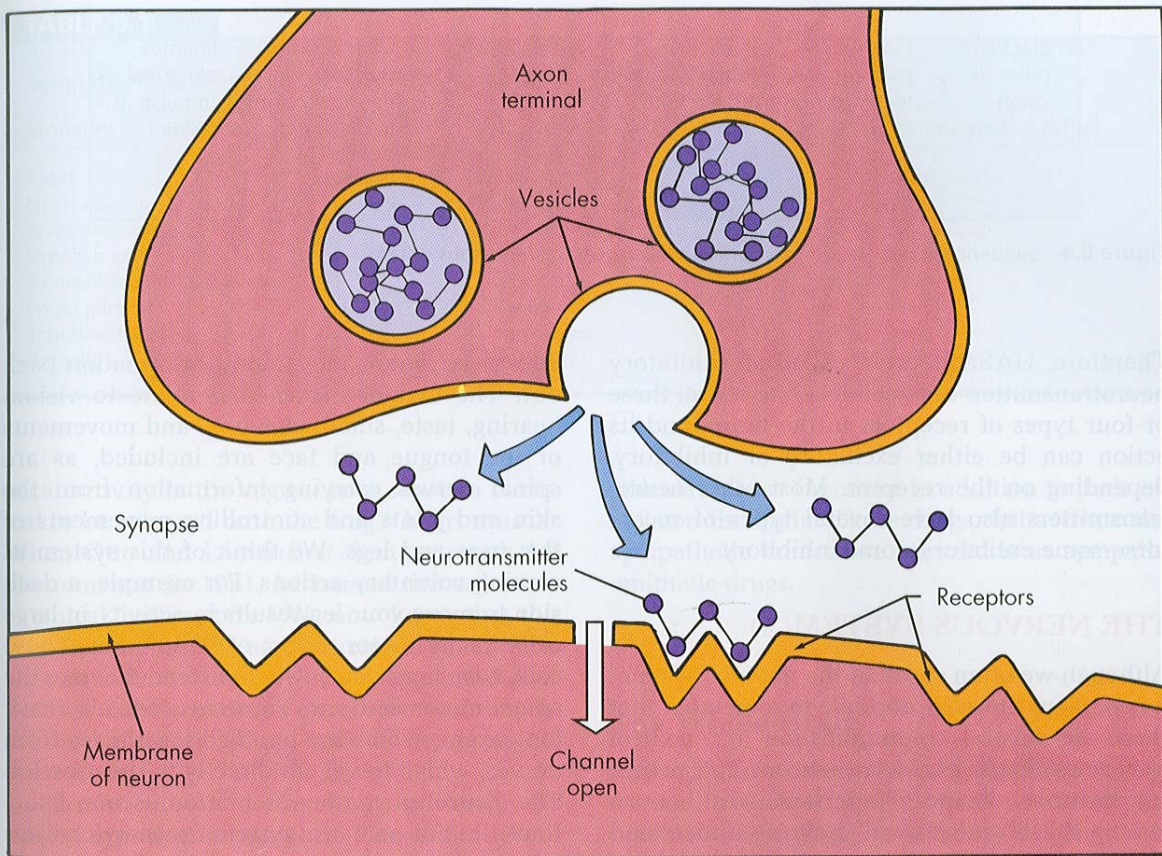


Figure 6.3 Schematic representation of the release of neurotransmitter molecules from synaptic vesicles in the axon terminal of one neuron and the passage of those molecules across the synapse to receptors in the membrane of another neuron. A neurotransmitter molecule has bound to the center receptor and has distorted it so as to open a channel through the membrane of the second cell. This channel allows the flow of electrically charged ions through the membrane, thus altering the electrical charge on the membrane of the second cell.