

## Neurotransmitters and Their Functions Quiz Answer Key

Neurotransmitter	Function	Effects of abnormal production
<u>dopamine</u>	<ul style="list-style-type: none"> <li>▪ affects the brain synapses in the control of body movements</li> <li>▪ is linked to <u>sensations</u> of pleasure, such as eating</li> </ul>	<ul style="list-style-type: none"> <li>▪ excessive production linked to schizophrenia, a disorder in which the individual's perception of reality is greatly distorted</li> <li>▪ inadequate production linked to <u>Parkinson's</u> disease, a progressive disorder that destroys neurons, causing tremors, slurred speech, and other coordination problems</li> </ul>
<u>serotonin</u>	<ul style="list-style-type: none"> <li>▪ regulates <u>temperature</u> and sensory perception</li> <li>▪ is involved in mood control</li> </ul>	<ul style="list-style-type: none"> <li>▪ inadequate amounts in the brain synapses linked to <u>depression</u></li> </ul>
<u>endorphins</u>	<ul style="list-style-type: none"> <li>▪ act as natural <u>painkillers</u> in synapses in the brain</li> <li>▪ also affects emotional areas of the brain</li> </ul>	<ul style="list-style-type: none"> <li>▪ deficiency linked to an increased risk of <u>alcoholism</u></li> </ul>
<u>norepinephrine</u>	<ul style="list-style-type: none"> <li>▪ is used by the brain and some autonomic neurons</li> <li>▪ complements the actions of the hormone epinephrine, which readies the body to respond to <u>danger</u> or other stressful situations</li> </ul>	<ul style="list-style-type: none"> <li>▪ overproduction linked to high <u>blood pressure</u>, anxiety, and insomnia</li> <li>▪ deficiency linked to hunger cravings and <u>exhaustion</u></li> </ul>