

Name _____

Nicotine: A Tricky Addiction

Open-Ended Response Answer Key

1. Nicotine activates the brain's reward system by releasing chemicals that create pleasurable feelings. When nicotine is used, it stimulates the release of dopamine, a neurotransmitter associated with pleasure and reward. This flood of dopamine reinforces the desire to use nicotine, leading to addiction as individuals seek that pleasurable sensation repeatedly.
2. Nicotine addiction, particularly through smoking, is associated with numerous health risks, including an increased risk of cancer, heart disease, and respiratory problems. Smoking is a leading cause of preventable death worldwide, contributing to millions of premature deaths each year. Quitting smoking is essential for reducing these risks and improving overall health.
3. To help a teenager quit using nicotine successfully, it's important to provide support and resources. Recommending counseling or therapy, offering nicotine replacement therapies (NRTs) like nicotine gum or patches, creating a quit plan, and identifying triggers and coping strategies can all be effective approaches. Encouraging the teenager to seek support from friends, family, or support groups can also be beneficial.
4. Public awareness campaigns and education are crucial in preventing nicotine addiction, especially among young people. These campaigns can provide information about the risks of nicotine use, highlight the consequences of addiction, and promote healthy choices. By raising awareness and providing accurate information, these efforts can empower individuals to make informed decisions about nicotine use and encourage a smoke-free lifestyle.

