

BRAIN POWER NEWS

PARENT NEWSLETTER

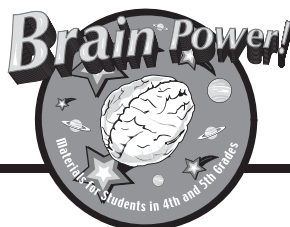
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Alcohol, Marijuana, and Inhalants

In *Module 4*, your child learned about stimulants, which make up one group of drugs. During this module, he or she will focus on three more drugs—alcohol, marijuana, and inhalants. Students find out how alcohol, marijuana, and inhalants affect the brain and the nervous system. Alcohol and marijuana affect the nervous system in different ways, but both can result in memory loss, impaired motor coordination, impaired thinking and problem solving, and changes in emotional behavior. Inhalants are chemical fumes that are sniffed and have a powerful effect on the brain. They can result in decreases in coordination and alter thinking, memory, and the ability to learn.

Drug	Source	How the Drug is Used	Negative Effects on the Body	How the Drug Works
Alcohol	Found in beer, wine, and liquor	Consumed by drinking	Impairs concentration, slows reflexes (impaired reaction time), reduces coordination, and causes drowsiness when used in excess	Depresses the central nervous system and can kill neurons when used in excess
Marijuana	From the dried leaves and flowers of the cannabis plant	Smoked, baked into brownies or cookies, or brewed like tea	Impairs memory, concentration, perception, and movement	Acts on receptors in the brain, causing increased blood pressure and heart rate, sleepiness, and disruption in attention
Inhalants	Found in rubber cement, paint thinner, fingernail polish remover, and pressurized cans of hair spray and whipped cream	Fumes are either sniffed or inhaled	Decrease coordination and cause a kind of stupor: thinking, memory, and the ability to learn are affected	Suppress nerve action, kill neurons, and change the structure of the brain

This activity aligns with the following standard identified in the NSES: science in personal and social perspectives. The students observe the effects that these three drugs have on the brain and the nervous system. They discuss the impact this information has on their lives and how they can use it to make wise decisions about their own health.



Science at Home

Talk to your child about the different types of drugs and how they affect the brain and body. Revisit the issue regarding the reasons people would use drugs when they know how harmful they can be.

Additional Resources

National Institute on Drug Abuse (NIDA) — www.drugabuse.gov
301-443-1124

This Web site contains information about drug abuse and a section designed specifically for parents, teachers, and students. Publications and other materials are available free of charge.

National Institute on Drug Abuse (NIDA): Mind Over Matter —
www.nida.nih.gov/MOM/TG/MOMTG-index.html

This Web site was developed to educate children about the biological effects of drug abuse on the brain and body.

National Clearinghouse for Alcohol and Drug Information (NCADI) —
www.health.org
1-800-729-6686

NCADI is the world's largest resource for information and materials concerning substance abuse. Many free publications are available here.

Drug Abuse Sourcebook. Health Reference Series, Vol. 14. [Bellenir, K., ed.] Detroit, MI: Omnigraphics, Inc., 1996. Basic health-related information about the abuse of legal and illegal substances, such as alcohol, marijuana, and inhalants.

Focus on Drugs and the Brain. [Friedman, D. & Neuhaus, D.] Frederick, MD: Twenty-First Century Books, 1990. This book, part of the "Drug-Alert Book" series, describes the function of the brain and nervous system, and how drugs affect the body.

Inhalant Drug Dangers (Drug Dangers). [Monroe, J.] Berkley Heights, NJ: Enslow Publishers, Inc., 2002. This book explains the serious risks associated with abusing chemical substances, including sections on how these chemicals work on the human body and sections on societal pressures put on children that lead to abuse.

Bottled Up. [Murray, J.] New York, NY: Dial Books for Young Readers, 2004. This book is the story of a 16-year-old boy that has come into problems with alcohol and marijuana. The book describes the issues he faces as a result of substance abuse.

The Encyclopedia of Drugs and Alcohol (Reference). [Roza, G.] New York, NY: Franklin Watts, Inc., 2001. Written for ages 9 through 12, this book covers more than 250 commonly used and abused, legal and illegal drugs, including prescription and over-the-counter drugs.