



BRAIN POWER NEWS

Parent Newsletter

Volume 1, Number 4

Medicines and Drugs:

What's Helpful, What's Harmful

The goal of module 4 of the NIDA Junior Scientists Program is to introduce children to the topic of medicines and other drugs. During the first three modules, we introduced the parts of the brain and the process of neurotransmission so that now, by module 4, the children have some understanding of the complexity of the central nervous system. Children are learning information about the effects of drugs on the body. Drugs can be divided into two categories: helpful medicines and harmful drugs. One group of drugs, with a beneficial effect on the body, includes medicines that they have probably taken— aspirin/Tylenol, antibiotics, immunizations, and fluoride. The other category, which can have harmful effects on the body, includes alcohol, nicotine, and illegal drugs, such as marijuana and cocaine.

One of the points we emphasize in the module is that all these substances are powerful. Even helpful drugs must be taken under the right conditions and given by trusted individuals—parents or health care professionals, for example. If too much medicine is given, that can be just as dangerous as taking an illegal substance. For example, the drug Adderall is an effective treatment for ADHD, but when it is taken in doses higher than prescribed or without a prescription, it can cause many harmful effects and even death. Drugs and medicines can be both helpful and harmful. Therefore, all substances must be handled with care.

We encourage you to ask your child about this learning experience. Try to find out how much he or she understands and what is still fuzzy. Work with your child to clarify points that he or she hasn't yet grasped. Help provide your child with more knowledge so that when the time comes, he or she will make a solid, science-based decision not to take drugs.

continued



Science at Home

Discuss certain lifestyle choices made in your home. For example, if you have a glass of wine with dinner, explain that your choice is okay because you are an adult, are drinking in moderation, and are not doing anything dangerous, such as driving after drinking. Emphasize that adults can make these choices, while children are not yet old enough. By learning about how the brain works and about drugs, however, your child is getting a foundation to make thoughtful decisions in the future.



What Does Your Child Think?

Have your child draw or write something about drugs.

Additional Resources

The books and Web sites listed below have more information about drugs.

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.

NIDA Drug Pubs
drugpubs.drugabuse.gov, 1-877-NIDA-NIH (1-877-643-2644)
Drug Pubs is NIDA's research dissemination center. Visitors can order hard copies of NIDA publications or download electronic versions in multiple formats.

National Institute on Drug Abuse (NIDA)—Mind Over Matter
<http://teens.drugabuse.gov/mom/index.asp>
This site is designed specifically for young people to learn about the effects of drug abuse on the body and brain.

National Clearinghouse for Alcohol and Drug Information (NCADI)
<http://store.samhsa.gov>, 1-800-729-6686

NCADI provides information and materials on substance abuse. Many free publications are available here.

Friedman, D. *Focus on Drugs and the Brain*. Frederick, Maryland: Twenty-First Century Books, 1990. This book provides a good overview of the brain, neurotransmission, the effects of drugs on the brain, and addiction.

Neuhaus, D. & DeStefano, S. *Focus on Medicines*. Frederick, MD: Twenty-First Century Books, 1990. Part of the "Drug-Alert Book" series. Gives a good overview of medicines and how various medicines work with the body and brain to help heal.

Perry, R. & Nehaus, D. *Focus on Nicotine and Caffeine*. Frederick, MD: Twenty-First Century Books, 1990. Part of the "Drug-Alert Book" series. Gives a good overview of nicotine and caffeine and how each of these drugs affect the body and brain.

Neuroscience for Kids
<http://faculty.washington.edu/chudler/neurok.html>
This site contains information on the brain and neurotransmission, activities, experiments, pictures, and other resources.