Cocaine is a powerful and addictive stimulant that can be snorted, smoked, or injected. Cocaine stops dopamine from re-entering neurons, so dopamine stays in the synapse longer. This causes dopamine to overstimulate neurons. This then causes the brain and spinal cord to speed up activity and the heart to beat faster. Sometimes the heart stops working! Cocaine also makes a person not want to eat or sleep, which are things the body needs to stay healthy.

Ritalin is a stimulant prescription drug that some people take for medical reasons, like ADHD. Only a doctor can prescribe Ritalin. It is illegal to take a prescription drug that is not prescribed for you. For people who don’t need to take Ritalin as a medicine, it can have similar effects as cocaine: increased heart rate, sleeping problems, and loss of appetite. This is not healthy!
Brain Power!

NIDA

Junior Scientists

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Nicotine is a mild stimulant drug found in cigarettes and chewing tobacco. When nicotine is smoked, chewed, or inhaled, it gets in the blood stream and causes the heart to work harder to do its job. In the brain, nicotine attaches to specific receptors for the neurotransmitter acetylcholine. This increases the activity of the receptors. Smoking and chewing tobacco can cause cancer of the lungs, throat, and mouth. Nicotine is a very addictive drug, but it's actually the tobacco or smoke in these products that is harmful and can cause cancer.

Caffeine is a stimulant found in coffee, tea, cocoa, soft drinks, and some medicines. A little bit of caffeine can cause a person to feel more awake, but in larger doses it can disrupt sleep patterns and make a person not want to eat. Caffeine can also cause headaches, dizziness, nervousness, and irritability. Caffeine is addictive.
Amphetamine is a powerful stimulant drug that affects the brain in many ways. It causes increased heart rate and blood pressure, sleeplessness, decreased appetite, decreased tiredness, shaking, cloudy thinking, and violent behavior. This can be dangerous! In the brain, amphetamine increases the amount of the neurotransmitters dopamine and norepinephrine in the synapse (space between the neurons). Ecstasy is a drug that has effects that are similar to amphetamine.