

Fact Sheet

Cocaine

Cocaine affects many different parts of the brain, including the brain stem, limbic system, and cerebral cortex. Cocaine makes the heart beat faster and makes blood pressure go up. It can change the way someone feels and acts. It also makes it harder for people to make smart decisions. Cocaine changes the way neurons talk to each other. It fools the brain into thinking there's too much of the neurotransmitter dopamine, so the brain doesn't make as much dopamine as it should. Then there isn't enough dopamine in the brain, and the neurons need cocaine to work correctly. Cocaine is a very addictive drug, so when people use it, they often find it really hard to stop.

Think about . . .

1. What parts of the brain and nervous system do cocaine affect?
2. How could you use your model of the brain to show how cocaine affects the brain?
3. How could you use your neurotransmission model to show how cocaine affects communication?
4. What kind of poster could you make to show how cocaine affects the brain?
5. If you could write one message about the dangers of cocaine, what would it be?

Fact Sheet

Marijuana

Marijuana affects several parts of the brain, including the limbic system, cerebral cortex, and cerebellum. Marijuana can make it harder to remember things, think clearly, and solve problems. It also changes the way neurons talk with each other. Marijuana can also have some negative effects on health. When a person uses marijuana, he or she increases the risk of harming the lungs. Marijuana is an addictive drug that changes the way the brain functions. Once the brain has been changed by marijuana, it may not work normally without it.

Think about . . .

1. What parts of the brain does marijuana affect?
2. How could you use your model of the brain to show how marijuana affects the brain?
3. How could you act out how marijuana affects the brain?
4. If you could write one message about marijuana, what would it be?

Fact Sheet

Alcohol

Alcohol affects many parts of the brain, including the brain stem, cerebral cortex, and limbic system. Alcohol makes it harder to think clearly and remember things. It blocks messages going to the brain from other neurons, and it interferes with balance. It also changes the way someone feels and acts. After consuming alcohol over a long period of time, a person may start to need it to keep from feeling bad. When that happens, the person most likely has a disease called alcoholism.

Think about . . .

1. What parts of the brain and nervous system does alcohol affect?
2. How could you use your model of the brain to show how alcohol affects the brain?
3. How could you use your neurotransmission model to show how alcohol affects communication?
4. If you could write one message about alcohol, what would it be?

Fact Sheet

Nicotine

Nicotine affects several parts of the brain, including the brain stem and limbic system. It causes the heart to beat faster and the lungs to work harder. It also affects the neurotransmitters acetylcholine and dopamine. Scientists think that nicotine's effect on these neurotransmitters causes addiction to nicotine. Smoking is a bad habit to avoid because it can cause many serious diseases, including cancer and heart disease. For many people, it's very difficult to stop smoking once they've started.

Think about . . .

1. What parts of the brain and the nervous system does nicotine affect?
2. How could you use your model of the brain to show how nicotine affects the brain?
3. If you could write one message about nicotine, what would it be?