

HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



Your Brain At-a-Glance

Using drugs changes the way the brain works. The brain is very important. It controls body functions such as breathing, walking, and thinking. Discover the different parts of your brain and the jobs they do. Then, learn how drugs can get in the way. After reading, complete the diagram activity below.

The largest part of your brain is the **cerebral cortex**. When it's functioning normally, this section takes care of thinking, seeing, hearing, and the sense of touch.

Next is the **cerebellum**. The cerebellum coordinates movements you do everyday, such as brushing teeth and riding a bike.

Just above the spinal cord, a small section of your brain called the **brain stem** controls basic functions, such as breathing, digesting food, and maintaining your heartbeat.

Then, there's the **limbic system**, also known as the emotional brain. This is where feelings like fear and passion are born.

Scientists have identified a "reward pathway" in the brain that includes the **nucleus accumbens**. When we do something that is key to survival, such as eating when we are hungry, the reward pathway is stimulated. Most addictive drugs also stimulate this reward pathway, often more than natural rewards, such as food.

How do drugs affect your brain? Once in the brain, drugs of abuse are similar in size and shape to brain chemicals called neurotransmitters. Brain cells release and absorb these natural chemicals in order to send and receive messages to and from each other. Drugs disrupt this delicate communication system, and can hurt your brain.

PARTS OF THE BRAIN: WHAT ARE THEY GOOD FOR?

For each brain part, write one of the functions it performs. Plus, include one way you've used this part of your brain recently.

LIMBIC SYSTEM

CEREBRAL CORTEX

CEREBELLUM

NUCLEUS ACCUMBENS

BRAIN STEM

