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Amplifying Life

Shandi Andres, Family and Consumer Sciences Agent
K-State Research and Extension, Flint Hills District

Brain Awareness Week

Next week is Brain Awareness Week from March 12-18. Our brain is something that we use every day, need to survive, but is often taken for granted. Let's learn about the parts of the brain and how it functions. We can't learn about all of the parts of the brain in one article, but we can gain an understanding why it is so important. There are many terms used when talking about the brain and sometimes they all flow together.

The brain has four parts. There is the brain stem, cerebellum, limbic system, and the cerebral cortex. The brain stem is responsible for basic survival functions such as breathing and heartbeat. The cerebellum is responsible for reflexive movements such as blinking the eyes. The limbic system is responsible for processing emotions. The cerebral cortex is responsible for conscious, voluntary actions.

Brain development happens in a specific sequence. The basic parts develop first followed by the most complex. The brain stem develops first, followed by the cerebellum, the limbic system, and the cerebral cortex. It is important to remember that the limbic system develops for the cortex. The brain can process and store emotional experiences before a child has language skills to discuss emotions. The infant's brain can store and remember a frightening experience and can react to similar events later, even if they are not able to talk about the experience. The limbic system is the foundation for positive memories as well. This helps to build attachments to adult caregivers.

Another term used to describe the brain is to speak in terms of hemispheres. The right hemisphere controls overall general impressions and puts together the big picture. The left hemisphere focuses on specific details. The corpus callosum is the part of the brain which allows the hemisphere to communicate with each other.

Each hemisphere is then divided into four sections called lobes. These are called the frontal lobe, temporal lobe, parietal lobe, and occipital lobe. The frontal lobe controls thinking, planning, and reasoning processes. The temporal lobe is responsible for processing hearing and some language. The parietal lobe is responsible for the perception of touch, smell, and taste. The occipital lobe is the brain's vision center.

Neurons are cells in the brain considered to be the basic building blocks. As a child, you are essentially born with all of the neurons you will ever need. The cell

body tells the neurons to send an electrical signal. The signal travels out through the axon. The signal passes across the synapse. The synapse is the space between neurons where chemicals work to transmit the electrical signal. The dendrites are the component on the neuron which receives the electrical signal from the other neuron. Each time learning happens connections are made in your brain. Repetition of an activity makes that path stronger in the brain. This is why brain development is critical in infants and also explains why it is important to keep learning and practicing skills throughout life!!

Information was taken from the Better Brains for Baby information through Georgia. Look at it for more information www.bbbgeorgia.org. If you have any questions, feel free to call or email them in. Shandi Andres, Flint Hills Extension District, 501 W Main, Council Grove, KS 66846. (620) 767-5136 or sdandres@ksu.edu