

Why Stimulate Children's Brains?

The brain never ceases to amaze us. It is the seat of thought and memory and the control center for many bodily functions. The brain is also the hub of our many senses, interpreting information that comes from both inside and outside the body.

Our brain functions the way it does largely because of its complex chemistry and intricate networks of neurons, the primary brain cells. The human brain has many billions of neurons, which communicate with one another through long fibers called axons. From these, a single neuron may make many thousands of connections with other neurons by way of branching fibers called dendrites. As a result, the total number of connections in the brain is astronomical! What is more, this dense forest of neurons and dendrites is, not chaotic, but precise. It is an amazing feat of "wiring."

The wiring progresses in a most orderly way during a baby's development in the womb as well as postnatally. Neurons send out fibers to target neurons that may be a few centimeters away – a vast distance on the cellular level. The target of a fiber, by the way, may be not just a specific cell but a specific part of that cell.

As a new fiber branches out from a neuron, it is guided by chemical signposts that say such things as "stop," "go," or "turn" until the fiber reaches its target. Without clear instructions, growing fibers would soon get lost. The whole process is brilliantly orchestrated, starting with instructions written in our DNA.

That said, we are far from understanding fully how the brain develops and functions, including how it forms memories, emotions, and thoughts.

Dr. Rajesh Kalaria, Brain Pathologist, New Castle University, England

At The Children's Spot we let children explore with their eyes, ears, mouths, noses, and fingers. Our curriculums are developed for brain development, and emotional and social skills. Children are curious and need to investigate. We start life with 100 billion neurons. Let's use them. A child's first year of life is when

their brain is growing at the fastest rate that it ever will! As a child grows repetition is used to learn and remember new information. When toddlers play they are developing life skills like interacting with peers, discovering creativity, developing new skills, developing motor skills and learning all about emotions. As a young child, we nurture social and emotional skills. Here is a check list for your child's brain:

- Prenatal care, check-ups, immunizations and use car seats.
- Show children you care and let them feel safe.
- Hold and touch children, play and stimulate.
- Have positive expectations and understand their uniqueness.
- Surround them with language with songs, books and talking.
- Encourage safe exploration and play.
- Teach discipline by explaining rules and consequences.
- Establish routines for mealtime, nap time and bedtime.
- Become involved in child care knowing that the relationships they form outside of the home are among the most important relationships they have.
- Limit television or screen time. Read more.
- Love your child and spend quality time with them...without a cell phone!