



### **The Early Years: Brain Development and Infant Attachment**

The quality of a baby's early care has a lasting impact on the child's brain development. At birth, a newborn baby has an estimated 100 billion nerve cells called *neurons*. Each neuron forms many *synapses*, or connections made between the brain cells. Frequently used synapses become permanent, while those less frequently used may be lost. Scientists now believe that there are "windows of time" when particular parts of the baby's brain are growing rapidly. If the baby is not getting enough of the right foods or appropriate stimulation during those times, the baby's brain growth might be affected.

*Infant attachment* is a term used to describe the ability of a baby to seek comfort from a parent or caregiver. This is the person that the baby will turn to when she is hungry, afraid, tired, ill, or simply in need of attention. Healthy attachments for most babies will occur with their parents, brothers or sisters, and a familiar caregiver. These attachments encourage both the baby's brain development and the baby's ability to grow and form good friendships later in life. You can encourage your child's brain development and emotional attachment in a variety of ways, including:

- *Getting good prenatal care.* Pregnant women who do not abuse drugs or alcohol but eat properly, take prenatal vitamins, get plenty of rest, and have regular check-ups throughout their pregnancy tend to give birth to healthy babies.
- *Responding to your baby.* When you hold and carry your baby—when you talk to him, sing to him, cuddle him, and take time to learn the unique ways he is trying to communicate—you are helping your baby grow into a loving, caring child.
- *Providing good nutrition.* Some parents breastfeed and some parents bottle-feed, but all babies need appropriate amounts of food to enhance their brain's growth and healthy development. When you work with your baby's doctor and get regular check-ups on your baby's growth, you are helping your child to get a good start in life.
- *Offering stimulating activities.* Babies need a balance of sleep and stimulating activities to enhance their development. When your baby is awake, you can help her brain grow by playing with her, reading to her, taking her for walks, and talking to her about what she sees.

If you have concerns about your child's brain development and emotional attachment, you can contact a preschool teacher, pediatrician or other health care professional, parenting educator, early intervention specialist, or family counselor.

*The information contained in this summary is taken from the Early Years chapter of the Violence Prevention Resource Guide for Parents by Peggy Patten and Anne S. Robertson (Champaign, IL: ERIC Clearinghouse on Elementary and Early Childhood Education, 2001).*

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