Parenting Exchange

# Brain Basics: Making the Most of Children's Minds

By Karen Stephens

Are the kids running circles around you? Are you constantly on your mental toes trying to anticipate what little ones will get into or come up with next? Well, don't take it personally; it's nature's design. When in good health, young minds are engineered to work 2½ times faster than an adults'. YIKES! No wonder you're exhausted!

With high-tech at their fingertips, scientists have shed light on how the brain develops, what it can do, and why. Thus today's parents hear a lot about brain biology than we ever expected. The debate over whether children develop more due to nature or nurture is obsolete. Brain research reveals it's both! Genetic birthright and environmental blessings interlace in infinite ways to weave a lasting and visible imprint on children's developing minds. That in turn affects their lifelong ability to function in society and create a dignified, fulfilling life. In other words, the quality of early brain development is pretty important.

In this column I share the basic, fundamental first steps in nurturing children's normal brain development. These steps should be applied by parents and others who daily care for and love kids. To learn specifics about neurons, axons, dendrites, synapses, neurotransmitters, and assorted hormones that impact the brain, take time to explore the library or Internet; there's lots of information out there.

> "Infants flourish when parents are head over heels in love with them."

Here are some great ways to give your child's brain a great start in life. Follow them; you'll be proud you did.

**Mom's good pre- and post-natal physical health makes a difference.**

Good health, including adequate sleep, is important as the fetus forms. It continues to be important during infancy, especially if a mother breastfeeds. Well-nourished moms help the fetus grow. Insults to maternal physical health to avoid include: poor nutrition, smoking, overexposure to some pesticides and herbicides, alcohol, and other drug use. Drugs also include prescription medicine, thus the importance of pre-natal doctor visits during the first trimester.

**Mom and Dad's good mental health counts, too.**

Relaxation and stress management is important to a developing fetus. Adequate sleep relieves stress, too. It's hard to get, but tag-teaming between two parents or caregivers helps. If a mother's body is continually flooded with stress hormones from anxiety or depression, they also negatively affect a baby.

**Stable, responsive, predictable and warm attachments to parents and caregivers support brain development.**

*The most critical time for establishing secure bonds of attachment is the first year of life.* When infants experience a strong attachment, hormones are secreted that induce relaxation and a sense of well-being. Promote attachment and bonding by taking full advantage of parental leave benefits. Three months of leave to be home with your baby is a good goal; the whole first year even better.

Infants flourish when parents are head over heels in love with them. Being gently held, cuddled and cradled, hearing soothing language (including songs and lullabies), and frequent, loving touch all feed the brain.

**Good child care is critical for children with working parents.**

Research child care options thoroughly. Seek out programs that boast a stable, well-educated, and trained staff. The more regular staff to provide children with individualized attention and playful stimulation, the better. These factors promote secure attachments that allow children to freely explore their expanding social and physical world.

**Consistent child health and nutrition is a requirement.**

Adequate amounts of proteins, minerals, vitamins are needed. Fresh and clean fruits and vegetables and whole grains should be eaten daily. And don't forget the water and 100% juices.

Immunizations ward off diseases that undermine normal development. Regular medical check-ups help catch illness before it impairs development.

**Adequate sleep builds brains**.

To develop well, children regularly need about 11 hours of sleep a day, including daytime naps. That gives the brain time to repair and reorganize itself for a new day of learning.

**The young child's brain is resilient, but don't put it under long-term stress.**

Promote children's physical and emotional safety at home, child care, school, and within the community. To an amazing degree, the brain can sometimes compensate if it is injured or under-stimulated. And if *short-term stress* is endured, the brain can bounce back in spite of the experience. However, *prolonged stress* undermines the brain's natural ability to rebound. Such stress includes ongoing domestic violence, violent neighborhoods, extreme poverty, persistent poor nutrition, or enduring punitive discipline at child care or school. Utilizing community resources can reduce the impact of such situations.

**Resources to Explore**


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About the Author — Karen Stephens is director of Illinois State University Child Care Center and instructor in child development for the ISU Family and Consumer Sciences Department. For nine years she wrote a weekly parenting column in her local newspaper. Karen has authored early care and education books and is a frequent contributor to *Exchange*.