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“Building Baby’s Brain”

“Early experiences affect the development of brain architecture, which provides the foundation for all future learning, behavior, and health. “

Center on the Developing Child at Harvard University

Can an ordinary parent, without a background in psychology or neuroscience, help their child build a solid brain? The answer is a resounding “YES”!



Thanks to the remarkable research that has taken place in the fields of neuroscience and developmental cognitive neuroscience (examines the impact of the physical brain on the mind and of the mind on the physical brain) it is now known how brain development takes place and why positive early experiences are critically important. Many factors influence brain development but the most impact comes from a parent’s interactions with a child from early in life.

The brain is made of brain cells called neurons. These create connections called synapses. Every new experience creates new connections in the brain. When

experiences are repeated the connections are strengthened. This happens whether the experiences are positive or negative.

Life is stressful for most parents. However, try to keep early experiences mostly positive – for two reasons: the brain development that takes place early in life is “imprinted” and hard to change later in life. Not impossible, but hard; and early connections set the stage for higher-level skills later in life, life skills such as being able to focus, learn, self-regulate (behave), plan, problem-solve, and get along with others. Babies and toddlers who are nurtured early in life acquire benefits that can be seen throughout the lifespan.

So how does a parent create positive early experiences for their child?

Fortunately, building a solid brain is not “rocket science”. It begins before a baby is born and then continues from the first day of life through simple, every day, caring interactions.

Before birth

You support your baby’s healthy growth and brain development when you do the following:

- Have regular prenatal care
- Take time to rest, exercise and minimize stress
- Eat a variety of healthy foods
- Sleep
- Avoid alcohol, other drugs and tobacco

After baby is born

You can help your baby’s brain develop through

- Nutrition
- Nurturing
- Sleep

Nutrition

Breastfeeding is good for your baby's developing brain and is the only food your baby needs for the first 6 months (along with vitamin D). You can continue to breastfeed long after you introduce solid foods. If you are unable to breastfeed or need to supplement your breast milk, you can still nurture your child when feeding and ensure they have good nutrition. Hold your child close (skin-to-skin is great) and look into their eyes. Watch for their feeding cues. Your little one will let you know when they have eaten enough or just want a break. When you begin to introduce solids learn which foods are ideal and how to bring your baby to the family table.

Try to keep mealtimes low stress by focusing on enjoying the food and conversation. Avoid forcing your child to eat. Don't let mealtimes become battlegrounds. Over a 24-hour period children will get the nutrients they need through regular meals and healthy snacks (that are really mini-meals.)

(elsewhere in the magazine: Check out the KidCareCanada TV Talk Show with dietitian Kristen Yarker to learn more details about this and how to avoid turning mealtimes into battle fields. <https://kidcarecanada.org/videos/conversations-kidcarecanada-bringing-baby-family-table-kristen-yarker-season-2-episode-5/>.)

Nurturing

Your baby needs a dependable relationship with a responsive and loving caregiver, especially for the first two years of life. Positive, stable and caring interactions help your child feel safe and secure. When children feel safe they can thrive. Kids want the same thing in their relationships as we do – to feel adored, respected and listened to. They like predictability. Nurturing includes: loving touch (essential for brain development), back-and-forth interactions, lots of smiling and play.

Singing and reading to your baby or simply storytelling are wonderful ways to nurture. As your child develops, introduce play. You can get down on the floor with your baby. Have tummy time every day and provide interesting, safe objects

your baby can reach for or look at. Invent silly games or songs with their fingers and toes, and have fun.

Follow your child's gaze to learn what captures their interest and build on that. Through play your child develops socially, emotionally and physically. Outdoor play provides fun, stimulation, exercise and fresh air. It also contributes to a strong and healthy network of brain connections.

Sometimes parents have barriers that prevent them from being emotionally "present". They may have experienced trauma or neglect in their early life. It is most helpful for them to seek help from a trusted health provider. They can learn to be nurturing parents. Often, what it takes is learning to make sense of what has happened to them."

Sleep

Chances are that over a 24 hour period your infant/child gets enough sleep. They may not do this on a schedule you would choose. Some babies learn to sleep right through the night from early in life while others seem to wake several times every night. Creating a sleep routine from the start of life is helpful. This can include putting babies to bed while they are still awake so they learn to fall asleep. It is thought that those babies also learn how to fall back asleep when they wake up in the night. Good luck with this one!

What to do about screens? Children are always watching you. If you are fixated on your smartphone rather than on them, the message is clear. And you are modeling a behaviour they are sure to adopt when they have the opportunity. Babies NEED your eye contact to develop a healthy brain. While they are awake in your arms look into their eyes. It is best for children under the age of 2 not to watch TV or screens. After that, minimal screen time is advised, ideally with you by their side. Encourage children to learn from interactions with objects and people.

By age 3 your child's brain is almost 80% the size of an adult brain. Your caring interactions with your child during the first years of life give your child the gift of a lifetime, a solid brain that provides the foundation for lifelong learning.