

Helping Wire the Infant Brain

The Quality of Environment and Types of Experiences Infants have are vitally important to the way their brains develop. Recent research has given us new and unimaginable insights into the wiring of the infant brain. As recently as 15 years ago, our most eminent scientists were sure that the brain was completely determined by genetics. However, we now know differently. Babies are born with billions of brain cells. Synapses connect these cells to each other. At birth, an infant has 50 trillion synapses, but over the next few months this number grows to over 1,000 trillion - enough to be proficient in about 3,000 languages. Once the synapses exist, they must then be “hard wired”, or activated, or they become unusable. The baby’s environmental exposure and quality of interaction is so critical that any wiring not activated may not be correctable after the age of 5 years. For instance, kittens are born with their eyes closed. When they open their eyes a few weeks later, their brains are ready to hard wire the sense of sight. If kittens are blindfolded during this time and for the duration of the “window of opportunity” lasting a few months, even after the blindfold is removed, the kitten or cat will be blind for life. This is how most of the brain is connected, or not, within windows of opportunity. Most of these windows occur in the first 5 years, with a few extending into the 8th or 9th year. Given this new and vital information, what then, can parents do to positively impact the phenomenal potential of the infant brain? Meet these ten essential needs, as outlined by Graham Baldwin:

1 **Interaction**-consistent long-term attention from caring adults actually increases a child’s capacity to learn.

2 **Touch**-holding and cuddling does more than just comfort your baby-it helps his/her brain grow.

3 **Stable Relationships** with parents and other care givers buffer harmful stress. New and potentially stressful situations for children are more easily dealt with in the presence of a trusted adult.

4 **Safe, Healthy Environments** should be free of lead, loud noises, sharp objects, and other hazards. Variety can help stimulate brain development.

5 **Self-Esteem** is grown with respect, encouragement and positive role models from the beginning.

6 **Quality Care** from trained professionals when you can’t be with your child.

7 **Play** helps your child explore his/her senses and discover how the world works.

8 **Communication**-talk with your baby builds verbal skills needed to succeed in school and life.

9 **Music** expands your child’s world, teaches new skills and offers a fun way to interact with your child. (Rhythmic music, and especially classical with Mozart, wires the analytical, or mathematic part of the brain.)

10 **Reading** to your child from the earliest days of life show importance and creates a lifelong love of books.

Infant swimming classes with parent participation can easily include 9 of the above 10 needs on a regular basis, as well as helping your infant’s physical and emotional development and teaching a lifelong skill.

For more information about INFANT SURVIVAL & BABYSWIM classes, please call the Santa Clarita Swim Club at (661)255-1438 or 702-8585.

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