



Develop your child's genius... with swimming!

No matter how old your children are, you have the power to affect their development and even their success in life. By selecting activities for them that contribute to the development of their brain, you are

helping them achieve their dreams and assisting them with becoming self-confident and optimistic adults.

Swimming is wonderful for a child's brain.

Fascinating new research shows that a baby's brain develops through bilateral cross patterning movements similar to the movements done in swimming. That cross patterning increases the communication between the two hemispheres of the brain, thus increasing the functionality of the brain.

- The spinning, rotating, somersaulting and harmonic movements involved in swimming activate the vestibular system, which organizes the nervous system.
- The active motor skills of swimming increase memory capacity.
- Swimming instruction involves complex motor planning that lays the groundwork for a child's sensory/motor development. The early sensory experience of the skin touching the water aids in the child's overall organization of the nervous system.

The more tactile stimulation of nerves the child experiences, the more interconnections and neural pathways develop in the brain cells. Many studies have shown that children who have experienced early stimulation in water training develop earlier in many different ways.

Earliest learning is stimulated by reflexes, which develop into movement exploration. When the exploration experiences are repeated, nerve pathways set down intricate neural networks that direct a child's higher-level brain development. The more plentiful and diverse the experiences, the more complex patterns for memory, learning and reasoning will be established.

Scientific studies of young swimmers at the German Sports College in Cologne have shown that early water movement develops the child in three key areas: physically, mentally and emotionally. As compared with a control group that did not take year-round lessons, the children who swam consistently from infancy (three months) were significantly stronger and more coordinated when tested at 2-4 years.

The children also scored higher for intelligence and problem solving, which carried over into excellence in academic achievement. Emotionally, they were found to be more self-disciplined with greater self-control and an increased desire to succeed.

From consistent goal setting and skill achievement in swimming, they rated higher in self-esteem. Finally, the children were more independent and comfortable in social situations than the control groups.

More recent research has shown that swim lessons for babies advanced their physical development. Studies conducted at Norwegian University of Science & Technology with Dr. Hermundur Sigmundsson and his colleagues found baby swimmers developed better balance, movement and grasping techniques than non-swimmers.

Research in Australia has demonstrated that early participation in swim lessons can accelerate a child's cognitive development. Starting in 2009, Griffith University embarked on a four-yearly Early Years Swimming Research Project with 45 swim schools across Australia, New Zealand and the United States.

The preliminary results show that children under the age of 5 who are involved in learn-to-swim programs are more advanced in their cognitive and physical development than their non-swimming peers.

In 2011, researchers in Melbourne, Australia reported intellectual and physical benefits for early swim lessons. The scientists determined that children who were taught to swim by 5 years of age had statistically higher IQ's. The research also showed that moving in the high-water resistance strengthened the child's muscles more rapidly than playing on the floor because swimming activates more large muscle groups.

Scientific studies have shown participation in swim class helps to strengthen a child's self-confidence. In a longitudinal study, Dr. Liselott diem and her colleagues reported that children who took part in baby swim lessons from the age of 2 months to 4 years were better adapted to new situations and had better self-confidence and independence than non-swimmers. In swim class, the child cooperates within a social structure to take turns, to share and to cooperate. This fosters a sense of belonging, which builds self-esteem and develops social confidence.



Benefits of early swim lessons:

Swimming helps a child in the following ways:

1. Motor development.

By giving a child so many sensory experiences in swim class, his neural memories of motor skills become more precise. The child will have an accurate base so that his proprioceptors (sensors of where body is in space) can update the brain with information, so the brain can plan the next movement. The result is a stronger, more coordinated child.

2. Cognitive development.

More stimulation causes a child's neurons to grow interconnecting fibers and twigs reaching out to other neurons. Each new synapses adds to the child's perceptions. The more synapses a person has, the more capable he is of learning.

3. Emotional development.

If the sensory-motor processes are well organized, a child will have an easier time learning emotional control. The more organized the brain is, the easier it is to instill self-control and self-discipline. The easier the emotional, cognitive and complex skills are, the greater the feeling of success and self-esteem experienced by a child. Parents and educators should take advantage of the power of movement and early participation in swim lessons to facilitate children's physical, cognitive and emotional development. The children will know they are splashing around and just having fun! Parents and teachers will know they are actually becoming stronger and smarter.