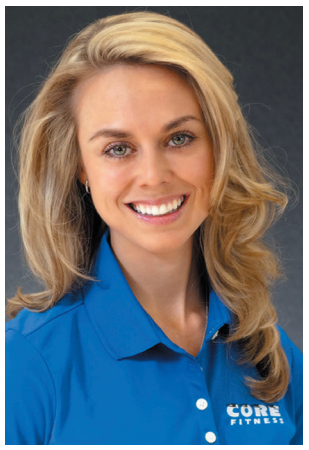

What Can We Learn From Children About Functional Movement?

By: Arianne Missimer

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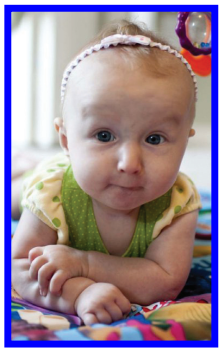
Everything. The most fundamental activities of life revolve around simple and basic patterns of movement. There is a developmental sequence that starts at infancy and develops through childhood. Motor development, the sequence of events through which a child grows, changes, evolves, and matures, is one of life's most fascinating progressions.

At birth, a child exhibits a spine that resembles a "C." This increased physiological flexion is due to their position in utero. This is also a position of comfort. Throughout life, we frequently revert to this position during illness, fatigue, sitting, sleeping, and in old age. Motor development occurs in the cephlacaudal direction, implying children begin to have control of their head before the rest of their body. Initially, newborns move their head with their eyes. At about three to five months, they begin to move their eyes independent of their head. They learn to lift their head up with control before they can initiate rolling, an optimal core milestone. Where your eyes lead, your head will follow; and where your head goes, your body will follow as well. Hence, during your training, positioning your head and eyes with proper alignment throughout the body, is critical.

Visualize a newborn with lots of mobility. Mobility is defined by Lee Burton as "the ability of the neuromuscular system to allow movement through a full non-restricted, pain-free range of motion." In essence, babies have no restrictions. They can put their feet in their mouth at about six months old and can assume almost any position comfortably. Children learn to balance themselves through feel. Gravity begins to pull their ribs down, and their limber frames begin to develop stability through primitive, or fundamental movement patterns.

The touch and tactile system is the first sensory system to develop and is the most mature system at birth. Children learn through feel, or propriocpetion. They do not learn through a great deal of verbal cues. A sensory- rich experience, such as riding a bike or learning to crawl or walk, is rehearsed through sequential developmental stages. So, don't skip the basics!

From zero to two months, babies are first able to momentarily lift their head and progress to lifting it about 45 degrees from prone (stomach) to be able to see the world. They also begin to weight bear on their forearms and hands.



At three to five months, they elevate their heads about 45 to 90 degrees and weight bear on their arms to see toys. They also begin rolling, a critical milestone, where they begin to develop stability and motor control. Aggressive core training begins at this time. Infants at this stage also have no delay in reaching in supported sitting.

Babies six to eight months can push themselves high onto their hands and weight shift on to one arm. Their primary means of getting around at this age is creeping (crawling), another important milestone. Additionally, they sit upright without support. They need to have stability in sitting before they begin crawling or standing.

At 10 to 12 months, children develop the "S" curve in their spine, and at 12-15 months, they stand briefly alone without support and begin walking with arms held high in the air for balance. A child who is 18 months will begin throwing balls and climbing into chairs. At around 21 months, they deep squat to play and stand on one foot with support briefly.

Around 2 years of age, children begin to run and jump. At three years, they run, turn, stop, and dodge, pedal a tricycle, can tolerate unilateral stance for greater than 35 seconds, and jump forward with two feet.

In summary, over time, many of us have lost the ability to move as we once could. We have assumed poor postures, "positions of comfort," sedentary lifestyles, and have trained inefficiently. But, children can teach us a thing or two about movement. One, if we have poor mobility, we sacrifice stability, and, therefore, our movement patterns are inefficient. Most people have fundamental flaws in the most basic patterns of movement like squatting, lunging, stepping, reaching, pushing, and twisting, the foundation for human movement. When there are deficits in mobility or stability, compensatory movement patterns occur to overcome functional deficits which predispose individuals to excessive wear and tear, leading to injury.

We can't run and jump before we learn how to roll, crawl, and walk. We need to train our bodies the way they were meant to move. We need to be mobile before we can be stable. A perfect example is a runner. If a runner's hips lack adequate mobility, his or her lumbar spine will always sacrifice stability, regardless of how many planks and other core stabilization exercises are performed. To train smarter and perform better, ensure your movement patterns at basic levels of movement are flawless before you build fitness on dysfunction.

About Arianne

Arianne Missimer, Physical Therapist, Registered Dietitian, and Certified Strength and Conditioning Specialist, has her Doctorate of Physical Therapy from Neumann University. She is also the owner of CORE Fitness, an exclusive fitness center located in North Wilmington. CORE Fitness specializes in one-on-one personal training for performance enhancement and injury prevention. CORE Fitness is a revolutionary approach to fitness training that provides strength and conditioning exercises to support how you move, work, and play every day. This training method utilizes functional movement patterns for a complete fitness program, addressing movement efficiency, balance, flexibility, strength, coordination, speed, power, and endurance. Arianne trains a diverse group of clientele, including recreational and competitive athletes at all levels, to improve their game through proper core conditioning and functional training. With Arianne's eleven years of experience in the field, she is committed to restoring optimal health and fitness to people of all ages, with acute and chronic conditions, functional limitations and disabilities.

About CORE Fitness

At CORE Fitness we are committed to not only enhancing your performance and preventing injury but also improving your life. If you want to be pain-free, strong, and healthy, our team of performance specialists, using our scientific methodology of training beginning with our thorough assessment designed to identify faulty movement patterns, asymmetries, and imbalances, will help you.

Proper nutrition, corrective exercise, regeneration, and recovery supporting a model of foundation, functional movement, and skill encompass our proven system. To ensure sustainable excellence, the CORE team of specialists will analyze and assess your individual needs, rehabilitate and restore efficient movement patterns, train and condition you to meet the demands of your lifestyle, and ultimately maximize your performance. CORE Fitnessis a revolutionary approach to fitness training that supports how you move, work, and play every day. It is an intelligent training system that corrects imbalances and strengthens and stabilizes weak muscles from the inside out. Lastly, we strongly believe in a mind-body approach because presence and awareness in your training are vital to moving with subtlety and ease, creating more efficient movement, leading to greater motor control. Train smarter, perform better.