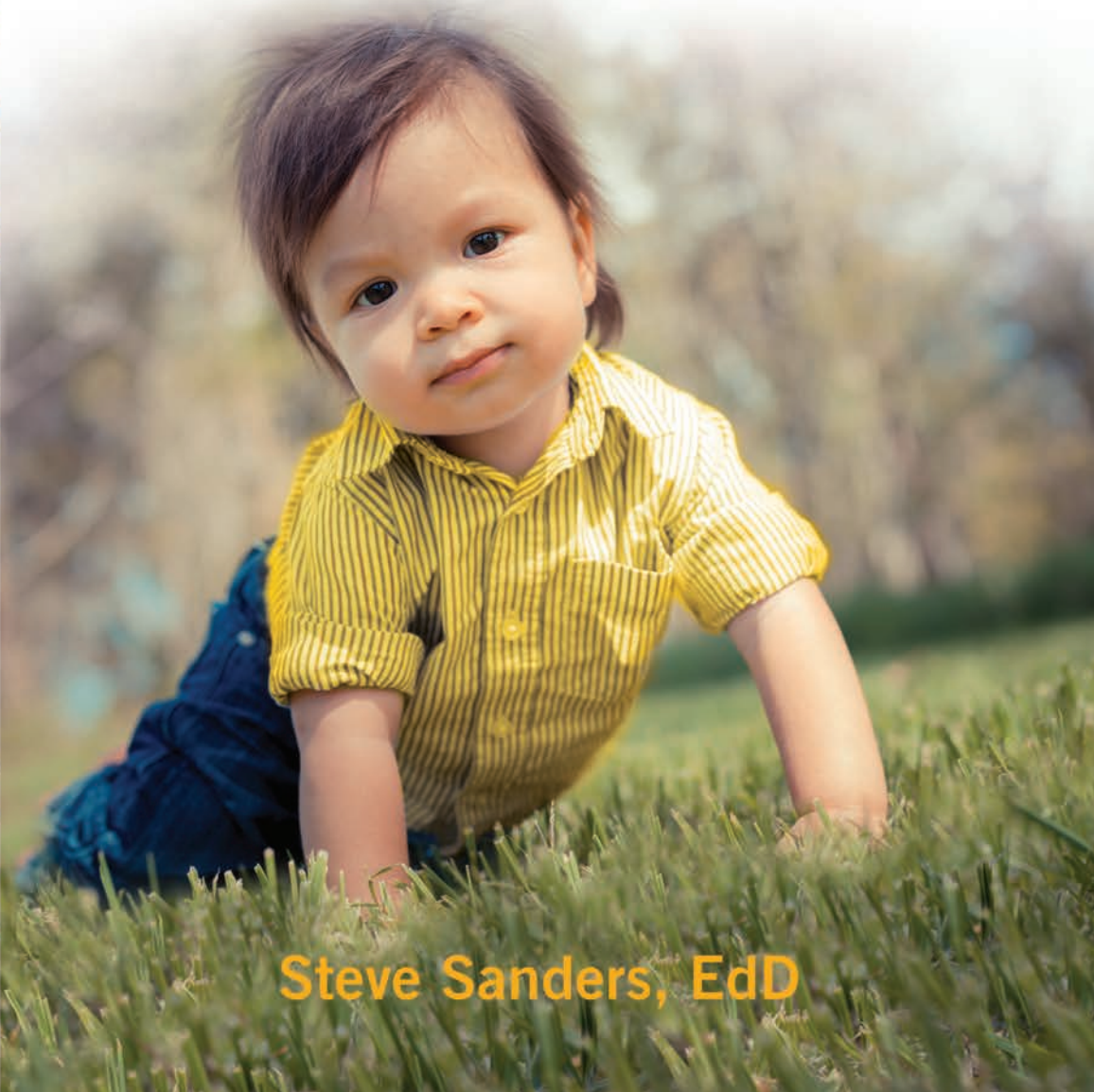


Encouraging Physical Activity in **Infants**



Steve Sanders, EdD

Encouraging Physical Activity in Infants

Moving Matters Series

Steve Sanders, EdD

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P. O. Box 10, Lewisville, NC 27023
800.638.0928; 877.638.7576 (fax)
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Library of Congress Cataloging-in-Publication Data

The Cataloging-in-Publication Data is registered with the Library of Congress for ISBN: 978-0-87659-245-8.



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The Importance of Physical Activity for Infants

CHAPTER

1



You are wise to explore the physical development needs of the infant in your care. Naturally, babies need physical activity too—a child is never too young to move and learn about

her body's capabilities. A newborn will undergo the greatest rate of physical development during her first year of life, and being physically active every day is important for her healthy growth and development. The physical skills that an infant acquires and masters now will serve as a foundation for skills such as running, jumping, throwing, catching, and striking that she will develop as a toddler and as a preschooler. Cultivating a base of physical skills gives children the tools to help them become physically active and healthy throughout life.

As in other areas of life, children rely on their caregivers and parents as role models and teachers when it comes to physical development. As you

take on this role, this book will provide ideas for helping infants form a strong foundation for future physical activity. The activities presented are simple and straightforward—you will not need a lot of equipment—and they are also fun! You and the baby in your care will have a great time.

Please take note, however, that this book is not about making children into miniature athletes. If you help children develop some physical skills that someday help them participate in sports, then that is a bonus. Note that some parents want to push their children to become the best at throwing, catching, or kicking. Beware of this tendency because pushing children to achieve physical skills they are not ready for is developmentally inappropriate and may even be harmful.

During the first five years of life, movement plays an important part in all of a child's learning. Simply put, children learn about the world around them through movement, so those who are more efficient at moving are better able to explore and learn about their environment. Playing with and being physically active with an infant every day will help her develop critical movement skills. Experts agree that a baby whose muscles and senses are stimulated will become more receptive to her surroundings, leading to a fuller intellectual, emotional, and physical life.

For the purposes of this book, we define an infant as a child from birth to the age when she is able to walk. The skill of walking is a developmental



milestone that almost all children attain; however, all children do not walk at the same time. Most children will walk independently sometime between twelve and eighteen months of age. When a child stands up and begins taking her first steps, she becomes a toddler. Caregivers and parents then need a new set of guidelines and different kinds of activities to help promote the development of physical skills.

Guidelines for Infant Physical Activity

Guidelines for infant physical activity suggest that babies should be physically active several times daily, particularly through floor-based or tummy-time activities. The National Association for Sport and Physical Education (NASPE) has developed the *Active Start Physical Activity Guidelines for Children from Birth to Age 5*. NASPE advises that infants should have the following to promote healthy activity and movement:

- Daily interactions with parents or caregivers in physical activities that encourage them to move and explore the areas around them
- A care environment that promotes movement and active play for short periods several times daily
- Movement activities that encourage the infants to develop their physical skills
- The ability to move around in settings that at least meet, and ideally exceed, recommended safety standards for activities that exercise the body's large muscles
- Caregivers who understand the benefits of physical activity and foster the development of movement skills during structured and unstructured play

For further information, NASPE is now known as Shape America, and the guidelines are available via the website www.shapeamerica.org. You can find information on safety guidance for infant programs on the National Association for the Education of Young Children (NAEYC) website at <http://families.naeyc.org>.



CONCERNS ABOUT DISABILITIES

What if a baby has a physical disability?

Certainly, parents should check with the infant's doctor for advice. But keep in mind that children with disabilities will go through the same developmental progression as children without disabilities. If it is possible for a child with special

needs to develop the same physical skills as other children, then that should be your goal. However, you may need to approach the activities in different ways to adapt to the child's abilities. Select the movements that are appropriate, and encourage development in those areas. The activities discussed in this book show caregivers and parents how to make play time and physical activity a constructive experience for all infants.

Learning How to Move

You may think an infant is too small or too young for physical activity; however, babies are naturally very active and should begin physical activity with parents and caregivers by six weeks of age. Physical activity for infants is all about learning how to move, and this is how they begin to learn about their world.

Your primary focus during these activities should be on establishing babies' motor skills, specifically balance and the promotion of muscle strength. Motor-skill development begins at birth with involuntary reflexes that take over the body and ensure that the baby starts to move. These reflexes go away as an infant gains voluntary control over his body. Without daily physical stimulation and movement, infants adopt more sedentary behaviors and tend to roll over, crawl, and walk later than babies who enjoy daily physical activity with a caregiver or parent.

Before an infant learns to crawl, physical activity will include reaching for and grasping objects, pulling and pushing, and moving the head and other body parts. Early physical exertion will also include stimulation of

reflex movements by adults along with supervised routines and physical activities to promote balance and development of strength.

According to research discussed by educators Carl Gabbard and Luis Rodrigues in *Early Childhood News*, physical activity supports children's brain development and ability to become successful learners. Children use their bodies to explore their world. NASPE suggests that early motor skills serve as building blocks for future motor skillfulness; therefore, skill-building activities are important for children birth to age five.



As a baby nears his first birthday, he is likely to begin crawling. Several months later, he will begin walking. The activity sections of this book provide a number of specific ways to help infants strengthen their muscles and develop balance in anticipation of crawling and walking. Movement activities at this age should encourage children to explore and experiment with how their bodies move.

Research and experience have shown that active babies are more likely to sleep better at night, grow strong bones and muscles, and reach and maintain a healthy weight, as noted on the Active for Life (activeforlife.com) and KidsHealth (kidshealth.org) websites.. In addition, physically active infants are more likely to have an active lifestyle when they are older.

Supervise the infant at all times when working on gross motor skills, and make sure he has a safe space to practice movements. As the child grows, continue to revisit activities he enjoyed when he was younger,

especially tummy-time activities. Introduce the child to new activities for developing gross motor skills when you feel he is ready. Remember, not all children progress at the same pace. Parents should talk to a pediatrician about any concerns about the child's motor development.

Infant Motor-Skill Milestones

The first year of a baby's life will be fast paced; you will be busy and active. Change happens daily. By the end of the first year, infants tend to almost triple their birth weight and grow 10 to 12 inches. During this time, most babies will advance from depending on reflexes for movement to being able to voluntarily move as they learn to roll over, crawl, sit up, stand, and maybe even walk. Exploring a new world and developing the physical skills to do so will consume the majority of the baby's time.

WHAT IS A DEVELOPMENTAL MILESTONE?

A *developmental milestone* is a skill infants acquire within a specific time frame—for example, sitting up without support. Most children learn the skill between the ages of five and seven months. Another developmental milestone for infants is walking, which typically occurs at about twelve to eighteen months of age.





Motor development can be divided into a discussion about gross motor skills and fine motor skills. Babies develop fine motor skills to control the movement of the small muscles of the body, specifically their hands and fingers. Fine motor skills include such actions as holding a spoon, grasping small objects, turning pages in a book, or even using the lips and tongue to taste food. The infant's developing vision directly relates to learning fine motor skills, which we will discuss in more detail in the section on tracking and vision skills.

Gross motor skills are the movements infants learn to control the large muscles of the body, including moving the arms, legs, and feet. These skills provide infants with opportunities to move and interact with their environment. They will learn to sit without support and pull up to a standing position while holding onto furniture. As children get older, they will learn more advanced gross motor skills: walking, running, climbing, jumping, rolling, kicking, throwing, catching, and striking. Most gross motor skills are acquired during childhood over a relatively short period of time between birth and about age twelve. However, most experts agree that the foundation of gross motor skills in children typically is learned by about age six, and after that time children are working to become more efficient with the motor-skill patterns they have developed.



The first year of life lays the foundation for further development of gross motor skills as a toddler and preschooler. Having a good basis of these skills will eventually help children participate in the sports and recreational activities needed to be physically active and healthy as they grow. Motor skills don't just develop on their own. Infants must learn to engage in motor activities in combination with their physical growth.

As you plan activities and incorporate them into the infant's daily routine, keep them fun and appropriate. If the baby shows frustration, stop and come back to the activity at a later time. Because you are the infant's role model and teacher, make sure you play with her and are physically active together every day.

**NOT WALKING,
BUT MOVING—
DID YOU KNOW?**

Infants who are not yet walking need exercise, too! The physical activity that caregivers and parents do with infants who are not yet walking can help with the following:

- Maintaining a healthy weight
- Developing good posture, strength, balance, and tracking skills
- Keeping their bodies active and learning about their new environment
- Developing their senses of hearing, sight, and touch

Strengthening Muscles for Coordination

Growth and development start from the head and move downward, and from the center of the body and move outward. At birth, a child's head is about 70 percent of its adult size. To gain control of her head, the infant will first need to strengthen her neck and shoulder muscles. As that process moves forward, she will also begin moving to strengthen muscles in the trunk, then the legs, the feet, and the hands. By the end of the first year, most infants will have developed the muscle control and strength to begin walking.

During the first year of life, muscles and bones grow quickly, and children who are active can increase their coordination and strength. At birth, physical movements will appear random and without purpose. By the time an infant is six months of age, however, movement will become more purposeful and focused.

Infants develop their motor skills in a specific and predictable sequential order. But the rate at which a particular infant reaches developmental milestones likely will be different from other infants the same age. No two babies go through these physical milestones at exactly the same time. Infants may also spend different amounts of time at each stage before moving on to the next stage.

Developmental charts can help you see the averages for when infants tend to reach motor milestones. Remember, however, that the figures are only averages, and a specific infant's achievement of the milestones

HEAD SIZE— DID YOU KNOW?

At birth, a child's head is about one-third the size of her entire body. By age two, the proportion changes, and the head is about one-quarter the size of the body. By adulthood, the head is about one-eighth the size of the body.



might vary by several months in either direction, depending on genetics and on the child's daily movement experiences. Experts note that the environment plays a major role in infant physical development. What parents and caregivers do to enrich the infant's play environment often can affect the time it takes for the child to reach developmental milestones. However, adults should not push their infants to perform skills before they are developmentally ready. This type of pressure can lead the infant to become frustrated. Babies should be allowed to acquire motor skills at their own pace. Parents and caregivers need to provide physical activity and play opportunities for infants every day in a fun, stress-free environment. This helps form the strength and balance needed to develop physical skills.

Developmental Progression

What is the progression of learning an infant will go through in reaching developmental milestones? The following list outlines the developmental motor highlights of the first year and the average time it takes for an infant to reach these milestones:

- Two months—is able to lift head up while lying on stomach
- Three months—can roll over
- Four months—can sit propped up without falling over
- Six months—is able to sit up without support
- Seven months—begins to stand while holding on to things for support
- Nine months—can begin to walk using support
- Ten months—is able to momentarily stand without support
- Twelve months—begins walking alone without support

To reach these milestones, babies need to start moving. Get ready! It is time for the infant's first exercise class.



Get those little bodies moving!

Babies are naturally active, and their movements help them explore their environment. They first move involuntarily, based on reflexes, and then learn to move more independently as their bodies grow stronger and they begin to investigate the world around them.

You can encourage their muscle development, strength, and balance with simple activities done with infants as young as six weeks old.

From tummy time to crawling, scooting, and standing, your active involvement will benefit infants in the following ways:

- Maintaining a healthy weight
- Developing good posture, strength, balance, and tracking skills
- Keeping their bodies active and learning about their new environment
- Developing their senses of hearing, sight, and touch



As a professor and early childhood consultant for more than 30 years, **Steve Sanders, EdD**, focuses on preparing the next generation of teachers to help children become physically active and healthy for life. He is the recipient of the Margie

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Gryphon House
www.gryphonhouse.com

GH10057

U.S. \$19.95

ISBN: 978-0-87659-245-8

5 1995



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