



Learning to Grow

MAKING A DIFFERENCE TOGETHER

UNIVERSITY OF HAWAII ♥ WINDWARD COMMUNITY COLLEGE

Build Large Muscle Activities into Everyday Routines



Our large muscles help us carry out simple everyday activities such as walking, running, kicking, sitting upright, and lifting. To ensure the healthy development of large muscles, children need daily opportunities for active play.

Physical activity builds muscle strength, muscle tone, endurance, balance, coordination, and promotes overall physical fitness and the healthy development of the whole child.

In addition to building their large muscles, daily physical activity also builds children's brains! During the first five years of life, the brain goes through remarkable growth as neurons (brain cells) connect with other neurons to form the wiring of the brain. Neuroscience has confirmed that physical activity stimulates this wiring, which is critical for learning. Thus, movement is essential for laying a strong foundation for brain development. According to neurophysiologist Dr. Carla Hannaford, "In studies where children spent extra time in daily physical activity, they showed a higher level of academic success."

Here are some things you can do to ensure your child has ample opportunities for daily physical activity:

- ♥ **Build large muscle movement activities into his everyday routines.** Do activities such as

taking your child out to your backyard, a playground, or a park, and give him plenty of time to run around and play.

- ♥ **Give opportunities to move during sedentary activities.** During story time, encourage him to imitate movements or role play a character from the story.
- ♥ **Incorporate physical activity in times of transitions.** For example, when walking to the bathroom to wash his hands say, "Show me how you jump like a bunny (flap like a bird, etc.) to the bathroom."

In this newsletter, we will discuss how large muscle movements build children's brain at each age level – infants, toddlers, and preschoolers – and offer tips for incorporating these activities into everyday routines.

This newsletter includes:

- ♥ **Age-specific information and suggestions** about activities to do with your infant, toddler, or preschooler,
- ♥ **Featured activities** for each age group,
- ♥ **How This Helps:** a summary of your child's development by doing these activities together,
- ♥ **Resources:** for more information about this topic, and
- ♥ **Suggested Books:** a list of books to read with your child.

4-7-5/18

Infants

Although the movement capabilities of infants are limited, physical activity is critical at this age. Infants are born with over 100 billion neurons in their brain, but most are not yet connected at birth. Since we know that physical movement stimulates these connections, it is important to intentionally give young children, beginning at birth, opportunities to be physically active.

Furthermore, a nervous system named the vestibular system, is highly activated by movement



activities from conception through the first fifteen months of life. This system is vital for healthy brain development and is responsible for our ability to maintain balance, and our awareness of our spatial orientation.

Here are some tips for incorporating physical activity into the everyday routines of infants:

- ♥ **Limit the amount of time your infant is restrained in a car seat, high chair, carrier, swaddle, etc.** Gently move and stretch baby's arms and legs, allow baby to crawl over cushions, or hold his hands while he's practicing walking.
- ♥ **Incorporate "tummy time" into your infant's everyday routines.** While he is awake and supervised, engage your child in tummy time. Put an interesting toy just out of his reach and encourage him to crawl or move to get it.
- ♥ **Move with baby.** Carry your baby frequently and rock him, dance to music, or bounce him gently on your lap.

Activity for Infants: *Motorboat, Motorboat*

What You Need: Nothing

What to Do:

1. Lay your infant on his back on a soft surface such as a changing table, carpeted floor, or a comfortable blanket.
2. Take hold of his feet in your hands.
3. Start moving his feet back and forth, slowly at first and then faster.
4. Recite the following rhyme as you move his feet:

Motorboat, motorboat, go so slow (while moving his legs slowly)
Motorboat, motorboat go so fast (move his legs a little faster)
Motorboat, motorboat step on the gas! (move his legs even faster)

5. Watch to see if your infant starts to move his legs with you or push against you.
6. Do it over again as long as he seems to enjoy it

(See page 5 for information on how doing these kinds of activities with your child helps his development and school readiness.)



Toddlers

Toddlers are beginning to gain more control of their bodies. They enjoy their new ability to move around and love to explore their surroundings. Encourage his increasing mobility and curiosity by providing him with a large safe area indoors and out, where he can move about freely and use his large muscles to run, hop, climb, crawl, jump, balance and perform other large motor tasks.

Giving your toddler ample opportunities to engage in physical activity continues to be critical for healthy brain development. For example, crawling, walking, running, and hopping, builds strong connections between the left hemisphere and the right hemisphere of the brain, which continue to help children learn later on in life.

Here are some tips for incorporating physical activity into the everyday routines of toddlers:

♥ **Make up games that involve different types of movement.** For example, get your child to walk along cracks in the cement, bend to gather shells or leaves, and jump over puddles.



- ♥ **Go on walks.** Explore nearby places like the library, park, farmer's market, or store.
- ♥ **Use music.** Incorporate body movement to familiar songs or put on music and encourage the child to hop, march, or dance and when the music stops, call out "stop."

Activity for Toddlers: *Mama or Papa Animals*

What You Need:

Book about mother animals and their babies

What to Do:

1. Look through the book with your child.
2. Point out an animal that walks on all four legs.
3. Get down on all fours and playfully pretend to be a mama or papa animal with her baby.
4. Ask your child to crawl and follow you around on all fours.
5. Explain the habits of each animal and act out their life styles. For example, climb over cushions as if climbing hills or mountains; crawl under tables and chairs like animals burrowing in the ground.

(See page 5 for information on how doing these kinds of activities with your child helps his development and school readiness.)



Preschoolers

As your child reaches the preschool years, he will become more coordinated in activities such as running, climbing, aiming and throwing a ball and even pedaling and steering a tricycle. Give your child many opportunities to reinforce these large muscle skills by providing him space and materials such as balls, a tricycle, and something to balance on.

During this age, your child will also begin to increase his ability to use both sides of the body in an organized manner. This bilateral skill, known as crossing the midline, is important because it helps the right and left sides of our brains to communicate. The midline is an imaginary line drawn from the head to the feet that separates the left and the right halves of the body. Crossing the midline is a pre-requisite for reading and writing - reading requires crossing the midline with our eyes; writing requires crossing the midline with our eyes and hands.

The following are some crossing the midline activities:

- ♥ **Rise and stretch!** Start the day by doing some quick morning stretches together. Do “windmills” by having your child reach out to the side with his arms straight, then have him

take his right arm and touch his left foot. Stand up, then repeat with his left hand to right foot.

- ♥ **Marching.** Give him a challenge as he marches to a favorite song – have him tap his right hand to his left knee and his left hand to his right knee.
- ♥ **Floor play.** Create a path with masking tape with lots of turns and waves and have your child push toy trucks or cars while crawling on the floor.



Activity for Preschoolers: *Picker-Upper Vacuum Cleaner*

Adapted from Sesame Street: We have the Moves!

What You Need:

Toys to be put away

What to Do:

1. When it's time to clean up, say, “Vroom! Vroom! It's time to become a vacuum cleaner and clean up!”
2. As you clean up together, encourage your child to bend, reach and grab in all kinds of directions: forward, backward, above, below, around, and through, as well as, directions that cross the midline



(See page 5 for information on how doing these kinds of activities with your child helps his development and school readiness.)

How This Helps

The activities suggested in this newsletter help promote many different aspects of development:

Physical Development

- ♥ Use and strengthen large muscles such as neck, arms and legs
- ♥ Develop eye-hand coordination

Social and Emotional Development

- ♥ Learn to cooperate with others
- ♥ Feel important and good about himself

Language and Literacy Development

- ♥ Increase his listening and understanding skills, and attention span
- ♥ Develop verbal skills, vocabulary, and use of descriptive language

Cognitive Development

- ♥ Develop his creativity and imagination
- ♥ Develop his thinking and problem-solving skills

Kids in the Kitchen

Cooking teaches valuable lessons such as math and science concepts, fine motor skills, and language development. As you make this recipe with your child, ask questions throughout the process to encourage his thinking skills. Talk about kitchen safety. Show him how to handle items safely and allow him to do as much as he is capable of. Most of all, have fun!

Soft Pretzel

Adapted from UH Cooperative Extension Service <https://www.ctahr.hawaii.edu/new/resources.htm>

Ingredients:

- 1 Tbs. active dry yeast
- ½ cup lukewarm water
- ½ tsp. salt
- 1-½ cups flour (unbleached *or* bread)
- 1 tsp. pancake syrup
- extra flour
- waxed paper
- cooking spray
- 1 egg

Directions:

1. In a medium bowl, dissolve yeast in lukewarm water. Let sit for 3–5 minutes or until bubbles form.
2. In a small bowl, have your child thoroughly mix salt and flour.
3. Add pancake syrup, and flour mixture to yeast. Mix to form dough.
4. Place some extra flour on a large piece of waxed paper and on top of dough.
5. Knead dough on waxed paper for about 5–8 minutes (until dough becomes elastic). Use just enough flour so dough doesn't stick to hands. Talk about how the dough feels.
6. Divide dough into 4 pieces and together roll dough into pretzel shape or any shape.
7. Place pretzel-shaped dough onto a greased pan.
8. In a small bowl, beat egg and brush the beaten egg on the pretzels.
9. Bake at 400 degrees for 10–15 minutes.



Resources

Sesame Street: We Have the Moves!

https://www.sesamestreet.org/sites/default/files/media_folders/Images/We%20have%20the%20moves%20-%20Providers.pdf

A physical activity resource for children ages 2–5 that provides fun ideas on boosting children’s activity during everyday routines.

Go Smart!

<https://gosmart.nhsa.org/>

A digital resource developed by National Head Start Association with engaging developmentally appropriate physical activity ideas for children age 0–5.



Suggested Books

Discover these books and more at the **Hawai‘i State Public Library** www.librarieshawaii.org.

Infants and Toddlers

From Head to Toe by Eric Carle

This book invites children to copy the movements of animals as they stomp, thump, and bend. Its repetitive text of, “Can you do it?” and “I can do it!” makes it a great book for encouraging physical activity.

Bounce by Doreen Cronin

Bounce with a bunny, frog, or bee. Let your child get up and get bouncing as he hops, leaps, pounces and bounces to his heart's content.

Preschoolers

Up, Down, and Around by Katherine Ayres

This rhythmic text follows children in the garden. They discover that some vegetables grow underground, some shoot up above it, and some grow on vines that twine around and around. The children use movement to pick some vegetables and pull some to have some lunch.

Move by Lolly Hopwood

This book was written to help your child foster a love of reading and physical activity. It was meant to introduce movement to children in an imaginative way. The author designed the book for children to hold it as they engage in large muscle movement. For example, hold it to your face like a big pair of jaws and roar and stomp like a dinosaur.



Learning to Grow is a project of the University of Hawai‘i, Windward Community College, with funding from the Hawai‘i Department of Human Services. Visit our website at www.learningtogrowhawaii.org or visit us on Facebook at www.facebook.com/learningtogrowhawaii