### Play – the work of childhood

It is through play that children learn competence in all areas – social and emotional competence, cognitive skills, language, and motor skills. With your help and support, all children can learn and grow. By providing children a strong foundation in fundamental motor skills and movement concepts, they are more likely to enjoy participating in physical activities, and are more willing to attempt new skills and activities!

Physical activity, or movement that results in energy expenditure (Ganley et al., 2011), is an important component in preventing obesity and obesity-related illnesses. Children do not typically engage in physical activities to develop physical fitness. Instead they develop physical fitness through engaging in a variety of moderate to vigorous physical activities. Children are most likely to engage in intermittent bursts of activity followed by rest periods. With regular exposure to physical activity opportunities, these intermittent bursts of activity will last longer and longer, leading to increased cardiovascular endurance.

### **Fundamental motor skills**

Common movements such as running, jumping, catching, throwing, and balancing, that serve as building blocks for more advanced activities. These fundamental motor skills are typically categorized as either locomotor, non-locomotor (non-manipulative), and manipulative and definitions of these categories can be found in the glossary at the end of this resource. Most skills used in sports and physical activity are refined versions of fundamental motor skills. Children normally develop motor skills in a sequential manner. Children's mastery of these skills is necessary if optimum development of higher-level skills is to occur. In order to move confidently, children must first develop basic fundamental motor skills.

See Appendix F for a complete list of motor skills and movement concepts.

Children are natural movers, meaning they typically want to move all of the time. However, moving is not the same thing as **moving for exercise or to gain health benefits**, such as increased heart rates or cardiovascular endurance. Adults assume that if children are presented with an opportunity to be physically active, such as unstructured free play and recess, they will do so and at a high level of intensity. Research tells us that for children in child care settings, this frequently is not the case. A recent study found that preschoolers don't move around a lot, even when they're playing outside (Brown et al, 2009).

- Preschoolers were inactive for much of their preschool day: 89% of activity was characterized as sedentary.
- Even when outside, a time when children are expected to move and be physically active, 56% of children were engaged in sedentary activities.
- Teachers very rarely encouraged children to be physically active.

Moreover, we know that obesity is a growing problem in the United States. North Carolina ranks 17th in adult obesity, 18th in childhood obesity (ages 10-17), and 7th in childhood obesity (low-income 2-4 year olds) among all states (Trust for America's Health, 2013). According to statistics reported by the NC Legislative Task Force, (2010):

- Of children 2-4 years old, 15.8% of children were overweight; 15.4% were obese.
- Of children 5-11 years old, 17.1% of children were overweight; 25.8% were obese.
- Of children 12- 18 years old, 18.1 % of children were overweight; 28% were obese.

One strategy for **preventing obesity** is for children to be physically active. We know that physical inactivity is a contributing factor to the obesity epidemic. It is essential to get kids moving early and for children to have fun while moving. Establishing movement as part of everyday life at an early age will help children establish habits for life long fitness. **Importantly, children should have fun while playing and moving so that they want to do more of these activities each day and throughout their lives.** The desired outcome of the Be Active Kids program is to help child care providers influence behaviors and habits of young children in their care by providing fun and regular physical activity opportunities.

There is also a link between children's physical activity, fitness and play and other areas of development such as cognition, behavior, attention and stress. In a review of research on physical education and other school behaviors, 11 of 14 studies found one or more positive associations between physical education and indicators of cognitive skills and attitudes, academic behavior, and/or academic achievement (CDC, 2010).

#### So let's get kids to BE ACTIVE AND MOVE MORE!

# Be Active Kids aims to get young children moving and help:

- Develop mature fundamental movement skills.
- Develop physical fitness.
- Reduce the likelihood of becoming overweight/obese.

### **Basic Concepts of Physical Development**

How do children develop motor skills? Children grow and acquire new abilities as their body systems develop. They develop control of their large muscles before they develop control of their small muscles (moving arms before holding a spoon). The center of the body (torso) develops before the outer regions (arms and legs). For example, children can roll over before they can walk. Development also occurs from the head to the toes (holding head up before crawling). Development can be divided into different periods.

Age Range	Period	Development
Birth – 2 weeks	Reflexive period	Rely on innate reflexes and spontaneous movements
2 weeks – 1 year	Pre-adapted	The onset of voluntary movements. The goal is the achievement of independent function. Develop physical skills such as reaching, rolling over, sitting, creeping, and walking as body grows and develops
1 year – 7 years	Fundamental Motor Period	The goal of this period is to develop movement patterns that are building- blocks for later motor skills. There is the development of basic skills: Locomotor skills (locomotor coordination patterns) such as running, jumping, skipping, and hopping; game-related manipulative skills such as ball-throwing, and catching; and fine motor manipulative skills such as cutting and writing.
7 years	Context-specific motor learning	Refinement, elaboration and combination of specific motor skills leading to more advanced movement activities and organized sports.
11 years — adulthood	Skillful period	Adept at specific physical activity following years of practice. Activities are consistently performed, efficient and adaptively versatile.
	Compensation period	Compensates for physiological changes due to injury or age.

### Recommendations and Best Practices for Physical Activity

Several organizations have developed recommendations for the amount of physical activity that should be incorporated into a child care program. Active Start is a widely accepted set of age-specific recommendations developed by the National Association for Sport and Physical Education (NASPE). Active Start recommends that infants be encouraged and stimulated for short periods of time several times a day, toddlers should engage in at least 60 minutes of unstructured and 30 minutes of structured activity daily, and preschoolers should have 60 minutes each of structured and unstructured physical activity daily. "These recommendations should be implemented so that all children, including those with special needs or disabilities, are able to be included to the greatest extent possible (NASPE, 2009)."

Position Statement: All children, birth to age 5, should engage daily in physical activity that promotes movement skillfulness and foundations of health-related fitness. (NASPE, 2009)

For specific NASPE guidelines, refer to Appendix A.

### **Getting Started with NAP SACC**

The Nutrition and Physical Activity Self-Assessment for Child Care (NAP SACC) is a toolkit for quality improvement professionals and early care and education programs interested in building healthy eating and physical activity habits in children. NAP SACC is based on a set of best practice recommendations. The NAP SACC 5 step process and tools help Early Childhood Education programs improve their nutrition and physical activity practices, policies, and environments and meet these best practices. NAP SACC is flexible and allows child care centers and homes to make the improvements that are important to them. The 5 step process includes self-assessment, goal-setting and action planning, education, technical assistance, and evaluation. Using NAP SACC can provide the foundation for making sustainable and long lasting changes in child care centers and homes. In supporting physical activity in early childhood settings, be sure to utilize the Infant & Child Physical Activity and the Outdoor Play & Learning Self-Assessments. In 2015, an interactive online version of this program was released and can be found at gonapsacc.org.

For specific NAP SACC physical activity best practices, refer to Appendix A.

(adapted from Clark, 2005; Clark & Metcalfe, 2002)

### **Physical Activity and Child Care**

Teachers and child care providers play a key role in getting children active by incorporating both adult-led (structured) and child-led (unstructured) physical activities into the child's day. Remember, both adult-led and child-led physical activity should be planned for both indoors and outdoors each and every day.

- Unstructured physical activities are those that children do on their own. This free play may include riding bikes, climbing, running, chasing. Your role as the teacher is to provide a safe, inviting setting that encourages children to move. You can help by encouraging children to play, though the children should select the activity. Your encouragement can keep them moving.
- Structured physical activities are those that are teacher-lead and should involve planning goals for all children. These activities should also aim to provide moderate-vigorous activities and help children to learn motor skills and/or movement concepts.

When planning physical activities for children, activities should:

- Be developmentally appropriate.
- Be sequenced so the simplest is first.
- Allow for repetition.
- Keep children moving.
- Be fun and interesting to keep children engaged.
- Progress from rudimentary movement skills (basic skills such as walking) to fundamental movement skills (such as galloping).
   Refer to Appendix F.
- Develop health-related physical fitness (e.g. cardiovascular endurance and muscular strength).
- Be adapted as needed using Universal Design for Learning (UDL) and recognize the abilities of all students.

#### **Physical Activity and Other Areas of Development**

Children do not develop personal health, motor skills or cognitive skills in isolation — they grow simultaneously in all areas. Physical activity helps children develop in other areas, such as cognitively and socially. Physical activities can reinforce other learning: motor development can be linked to verbal fluency, pre-writing, pre-math, pre-reading, working memory, and kindergarten readiness. Here are some examples of incorporating other areas of development while promoting physical activity. Some of these suggestions are appropriate for all children (naming body parts) and others should be incorporated when developmentally appropriate (count how many times a child can jump).

Developmental Area	Sample activities
Early numeracy	<ul> <li>Count how long children can balance on one leg</li> <li>Count how many times children jump</li> <li>Measure how high children can jump</li> <li>Count how many times children can kick the ball into the basket</li> </ul>
Language/early literacy	<ul> <li>Follow directions and sequence actions</li> <li>Improve listening skills</li> <li>Move like different animals while naming different animals</li> <li>Name body parts in the warm-up</li> <li>Use different relational concepts such as over, under, around</li> <li>Name letters on the dots that children are jumping on</li> <li>Use colored markers to sit or with jumping activities – and name or have children name the colors during the activities</li> <li>Have children move between activities by designating colors</li> </ul>
Social development	<ul> <li>Play with partners or in groups</li> <li>Cheer for friends as they run a race</li> <li>Pair up with a friend to roll the ball</li> <li>Learn to wait, take turns, share, and cooperate</li> <li>Feeling empathy and supporting others if they get hurt or are left out</li> </ul>

### North Carolina Child Care Rules and Rating Scales Rules Related to Physical Activity

Individuals in North Carolina caring for more than two children who aren't related and provide care for more than four hours a day, should be licensed. All child care programs are required to meet child care requirements. Child care requirements ensure that programs are meeting the minimum standards for care in North Carolina. Some of the child care licensing requirements that are checked in a program's compliance history are: supervision of children, condition of equipment and materials, discipline practices, child/staff ratios, sanitation practices, and staff education and training development. These rules and regulations help to make practices known, understood and supported by staff and families. Think about developing your own policy statements for your handbooks and orientation materials that will help ensure that your physical activity efforts become permanent and lasting, even with changes in your center or staff.

Refer to Appendix G for specific child care rules related to physical activity.

The Environment Rating Scales (ERS) are observation-based measurement tools that assess the quality of group care provided for children of various ages, in various child care settings. The rating scales consider many characteristics of children's learning environments including the physical characteristics of the environments indoors and outdoors, health and safety practices, as well as children's exposure to language, positive interactions with staff and other children, and the variety of learning opportunities that are provided. Higher scores on the environment rating scales have been linked to positive educational outcomes for children. In each of the rating scales certain constructs are considered to be very important for positive child outcomes and therefore these issues are weighted across multiple items. The frequency and facilitation of active, physical play is one of these constructs, as is children's safety, indoors and outdoors and other physical characteristics of the outdoor spaces used by the group of children. In North Carolina, the rating scales are completed during an observation that lasts for at least 3 hours which is then followed by an interview with the classroom teacher or home provider.

Refer to Appendix H for specific rating scale indicators related to physical activity, play, and motor skill.

# Tips for Including Daily Physical Activity in Child Care

Here are some strategies to promote physical activity in your classroom.

- Provide praise and encouragement. Every child will be at a different point – lead them from where they are.
- Make activity fun! Sing songs, play music.
- Demonstrate the activities. This means you should be participating and moving, too!
- Keep the information and directions clear and simple.
- Plan your indoor space to encourage physical activity.
- Keep kids moving during inactive parts of activity have waiting children be cheerleaders or have them jump in place.
- Give children plenty of time outside in both free and structured play.
- Offer physical activity opportunities in more realistic time spans for children If you have 40 minutes, make it two 20 minute periods.
- Have lots of portable rather than fixed equipment so children can explore and use their imaginations.
- Talk to children about physical activity and their health (our hearts are a muscle, sweating is good to keep our bodies cool while we are active).

- Don't be too worried about getting sweaty or dirty. Just have fun!
- A little risk can lead to challenge, confidence, and learning! Don't bubble wrap all the fun, learning and exploration away!
- Include colorful or noisy props in physical activities. Remember, children 0-5 years old are still developing their body systems and use auditory, kinesthetic, and visual senses to be successful and gain important feedback (reinforcement).
- Let children create some of their own rules when playing games.
- Include activities that teach skills, build muscular strength, muscle endurance (stamina), and flexibility.

Prior to choosing and setting up an activity **know what you want to achieve.** For example, are you looking for an activity to promote cardiovascular endurance? If so, choose an activity that uses lots of open space. If you want to work on motor skills, play with loose parts in lots of different ways. Knowing this will help you choose what to do on a particular day.

# Classroom Management Tips/Tips for Adapting Activities

Being prepared and knowing how to manage potentially chaotic play and movement environments is essential to success; Not only the success of the teacher but also the success the child. Providing an appropriate play and movement environment for young children should be fun while also being developmentally appropriate. If we cause too much frustration, embarrassment or lack of success with the opportunities we provided, there is a good chance that the children will lose interest in physical activity. This loss of interest can then lead to future and long lasting habits that may discourage them from participating in similar types of activities.

When planning for or thinking about managing an active environment, think about who and what can be managed. A few things that you can manage include people, space, time, equipment/materials, and behavior. While thinking about these management things, also think about the child's movement exploration, practice opportunities, success and/or failure, risk and challenge, clothing, and potential safety issues. By managing these things, you can help provide an enriching, enjoyable and appropriate play movement experience for **ALL** young children.

For more detailed information on managing an active play environment, refer to Appendix B.

### How Else Can I Make Moving Fun For Children?

There is no limit to how these activities can be adapted and changed. **The desired outcome is to get kids moving while having fun.** Be creative and adapt any of the Be Active Kids activities to fit the theme your class is currently working on. For example are you studying dinosaurs? Instead of playing Dragon Tail Tag play Dinosaur Tail Tag. Is it winter? Skate on a paper plate to ice skating music. Is it fall and you're talking about trees losing their leaves? Instead of Jumping for Sky, have leaves on a tree that children jump up to get and make fall down.

Another great way to get kids involved is to tie the activity to a story or a book. Read about frogs when introducing Jumping in the Lily Pond or read a book about dogs or seals catching balls when you introduce Catching. Make up a story – have the children make up parts and act them out.

A wonderful way to get kids excited and moving is through the use of music. Children will naturally move to music and adding to activities as start/stop cues or background is fun for everyone. There are many recordings of activity songs such as Head Shoulders, Knees and Toes (one of the warm-up activities). Other recordings include musical games, incorporate a parade with instruments, and other prompts that encourage children to be active.

### Jazzing It Up: Making what you already do more active.

Think about things you are already doing in the classroom. Are there ways that you can jazz them up and encourage kids to increase their intensity level and length of physical activity? Many of the songs and activities that you already do in in your classroom can be modified to be more active. Here are some examples:

- 1. When singing Wheels on the Bus have children jump up and down or have children move around the room; have the children act out the words they hear in the song, while you demonstrate
- 2. When reading a book such as Going on a Bear Hunt, have the children act out all the action words throughout the story while moving around the room and in their personal space.

- 3. When playing games like Duck Duck Goose, try to find a way for the sitting children to stay active such as clapping hands, stomping feet, or walking in place instead of sitting.
- 4. Turn any concept for teaching into active engagement! For example, instruct children to jump up in the air on each count when working with numbers. Or, to review colors, turn on the music and instruct children to run across the room to touch an object of a specific color by the time you stop the music. Be creative!

### **Weather Considerations**

The weather conditions across the state vary greatly throughout the year and it is important to think about this when planning for and providing physical activity and play opportunities for children. To be prepared for getting kids active in all types of weather, think about the following things:

- What is your backup plan for weather that doesn't allow you to take your children outdoors?
- Can our children go outdoors even in "bad" weather? What exactly is bad weather and why is it so bad?
- Do our children have the appropriate clothing?
- What are the benefits and liabilities for being physically active indoors and outdoors?
- Do you have enough information about outdoor related condition?

Visit the North Carolina Rated License Assessment Project (NCRLAP) at www.ncrlap.or for more helpful information on weather conditions.

### **Get Them Outdoors**

Think outside the box (or classroom) and get children outside in different types of weather conditions. This may take a little more planning and preparation but here are a few things to think about:

- Create a policy for your center or home that lets parents know their children will being going outside to play and learn in all weather conditions that are safe (i.e. – rain, snow, etc). Include things like suggested clothing to keep at school or to bring in during these weather condition.
- Send home a letter ahead of time letting parents know of plans to go outside during these weather conditions and let them know they will likely get wet and dirty.
- Acquire a variety of weather appropriate clothing through donation, thrift stores, sales, etc and keep them stored in your classroom for those who need appropriate clothing (rain coats, rain ponchos, boots, galoshes, snow pants, snow jackets, gloves, hats, scarves, etc)
- Be prepared and plan for getting ready to go outside and cleaning up when they come back inside.
- Utilize appropriate weather charts and indices to determine "weather permitting" opportunities.

Refer to Appendix E for more information.

### **Rainy Day Ideas**

A rainy day does not mean that children are not active, even when space is limited. If you **have** to stay indoors when the weather is not so good, here are a few ideas from the Be Active Kids activities to get you started:

- · Create an obstacle course or obstructed pathway in the hall.
- · Make stilts and walk around on them.
- · Jump over hurdles.
- Put on a circus.
- Talk about healthy foods and do the activity Let's Make a Healthy Pizza.
- Skate on a Plate
- Walk like the Animals
- Have a Lily Pad Walk.
- Do an action story. See the Action Story section for ideas.

### Adaptations for Making Physical Activity Available to All Children

Every child has different strengths and needs. Children grow and develop at different paces. To meet the needs of all children, the curriculum should be adaptable. This will allow for maximum participation by all children. Benefits for children include full access to all parts of the activity, the ability to grow and develop, active participation, and interaction with other children. Providing adaptations or modifications to physical activities will promote motor skill development for both the child who finds the activity too easy and the child who finds it too hard.

These activities are not designed for competition. They are designed for all children to reach their potential. By learning basic skills, they will have more confidence, engage in more activities, and be more active.

**Universal Design for Learning (UDL)** (Center for Applied Special Technology, 2011) – Eliminating barriers for learning

#### Principle I: Provide Multiple Means of Representation

Present ideas in multiple ways – explain, demonstrate, use pictures, have children touch and feel things, (e.g. when explaining about hopping, talk about animals that hop, demonstrate hopping, read a book about an animal that hops).

#### Principle II: Provide Multiple Means of Action and Expression

Introduce words that children need to know to understand what to do, (e.g. do children know what "balance" means? Talk about it before asking them to walk on a balance beam or balance on one foot). Use physical activities to reinforce and teach other concepts — spatial relationships (e.g. over, under, around), colors, shapes, and numbers.

#### Principle III: Provide Multiple Means of Engagement

Provide activities that interest children and spark their imagination. Encourage them to advance their skills and work towards independence (e.g. be sure children can stand on one foot before they try to hop). If any activity is too advanced for children, allow them to do the best they can and alter the situation and expectations.

### BE ACTIVE KIDS

#### **Accommodate All Abilities:**

Can everyone do the activity? If not, what do you need to change — instructions, materials, setting, time? If you have children in wheelchairs, can they throw the ball sitting instead of standing? Do you need to move the basket or hoop closer or put it at a different height? Can they roll a ball across a table instead of on the floor? Keep a record of the adaptations as they may be useful in other activities.

### Equipment and Methods: How do I use Be Active Kids activities?

Be Active Kids activities are intended to help get children more active and to learn skills while having fun. These activities are listed by age (infants, toddlers, twos, and preschoolers). Some activities overlap ages or can be adapted to fit children's different developmental levels since children develop at different rates and are able to perform activities at different ages. Remember, these activities are not specific to a certain age but are related to what children may be able to do and learn at a certain time.

#### All of the materials you need for Be Active Kids are inexpensive and easily replaced if damaged. A couple of things to remember:

- 1. Be aware that latex allergy in children seems to be on the rise and that many everyday products and toys are made with latex rubber.
- 2. Young children will require adult supervision that will assure their safety while also encouraging their development.
- 3. There are intended and unintended uses for play equipment and loose parts. Be sure to monitor the use of the equipment to ensure motor skills practice, physical activity, or creative exploration.
- 4. Adult sized equipment will most likely not be appropriate for young children due to their development and readiness. Consider weights and sizes of objects when providing them to children.

A list of materials for use in the Be Active Kids activities can be found in **Appendix C** and **Appendix D** along with an age appropriate list found at the start of each section. Many other things can be used in a variety of ways to get kids interested and moving.

Missing some materials? Think outside the box (or even inside the box) and use common loose parts or modify what you have to provide your children with multiple fun opportunities to move. Equipment does not have to cost a lot to be effective. **Don't let missing material stop you from doing an activity; Be creative!** 

#### Summary

Thank you for providing the opportunities for children to participate in playful activities that will help to ensure that they are more active and develop the fundamental motor skills and movement concepts needed for health and development. Your encouragement and enthusiasm will allow children to enjoy playing and moving more so they can build lifelong habits to keep them fit and healthy.

### Give them a Healthy Start.

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