Washington Play
Physical Activity for the Young
Promoting Active Play in Early Learning

Faisal Malik, MD
Mollie Grow, MD
Katy Levenhagen, MS, RD

This Healthy Active Living Initiative is supported by a grant from the American Academy of Pediatrics with generous funding from MetLife Foundation for WA PLAY
Class Outline

- Benefits of Physical Activity for Children
- Guidelines for Physical Activity and Screen Limits
- Movin’ It – Applying the Guidelines
- 3 “Got-to-Have” Resources for Movement
- Bringing it Home – Extending the message to parents
- Evaluations and Wrap-up
Physical Activity in Child Care

- Epidemiologic evidence suggests that children are not getting enough physical activity in child care settings.

Children spend:
- 70%-83% of their time being sedentary in child care (even when excluding time spent in naps and meals).
- Only spend 2% to 3% of the time in vigorous activities.
Active Play
Helps brain development

• Foundation for healthy attachment
• Improves behavior
• Helps children sleep
• Helps children learn
• Helps children pay attention
Physical activity may improve children's academic performance

A Dutch review of 14 studies revealed that schoolchildren who were more physically active performed better academically. In the journal Archives of Pediatrics & Adolescent Medicine, researchers said that the improved academic performance of these children may be attributed to increases in blood and oxygen flow to the brain during exercise. HealthDay News (1/2), Los Angeles Times/Booster Shots blog (1/2)
Active Play
Creates **healthy** bodies

- Promotes active living habits
- Builds strong, fit bodies
- Maintains healthy weight
- Teaches children to enjoy movement
- Prevents overweight and obesity
Figure 1. Trends in obesity among children and adolescents: United States, 1963–2008

NOTE: Obesity is defined as body mass index (BMI) greater than or equal to sex- and age-specific 95th percentile from the 2000 CDC Growth Charts.

Childhood Overweight Rates

CDC data, 2008

- 19% of kids 6 – 19 are obese
- 10.4% of kids 2 – 5 are obese
- 14% of low income 2 – 5 are obese
Childhood Obesity Measures

- Obese: BMI > 95%
- Overweight: BMI ≥ 85%
- Healthy Weight: BMI between 5th and less than 85th%
- Underweight: BMI < 5th%

(all measures are age for sex)
In Washington State 2009, 32.8% of all children were overweight.

Pediatric Nutrition Surveillance Report, 2009,
Long Term Health Risks

- Type 2 Diabetes
- High Blood Pressure/Hypertension
- High Cholesterol
- Heart Disease/Stroke
- Higher health care costs
- Quality of Life issues
Short Term Health Risks

- Premature puberty
- Sleep Apnea
- Asthma
- Bone/joint issues
- Social discrimination
- Depression and low self-esteem
- Risk for eating disorders
Contributing Factors

- Too Many Calories
- More added fats, sugar and salt
- Too much food/more snacking
- Larger servings
- Lack of family meals

- Too much sedentary time/screen time
- Lack of enough physical activity
- Viewing influential food advertisements
Determinants of childhood obesity

- Child weight
- Home
- Neighborhood
- School & Child Care
- Federal and State Policy
Target Areas for Healthy Practices in Child Care

- Infant Feeding Practices
- Nutrition
- Mealtime Socialization
- Screen Time Limits
- Physical Activity
Source for Child Care Physical Activity Guidelines

- Defined by Caring for Our Children: National Health and Safety Standards – Guidelines for Early Care and Education Programs, 3rd Ed. 2011

- [http://nrckids.org/](http://nrckids.org/)
Let's Move! Child Care Goals

1. Physical Activity
Provide 1-2 hours of physical activity throughout the day, including outside play when possible.

2. Screen Time
None under age 2. For 2 and up, work to limit to 30 minutes/week during child care. Aim for no more than 1-2 hours/day of quality screen time at home.

3. Food
Try to serve fruits or vegetables at every meal. Eat meals family-style whenever possible. Avoid serving fried foods.

4. Beverages
When you can, give water during meals and all day. Avoid sugary drinks. Two and up, serve low- or non-fat milk and 4-6 ounces max of 100% juice a day.

5. Infant Feeding
Provide breast milk to infants of mothers who wish to breastfeed. Welcome mothers to nurse mid-day and support parents’ decisions with infant feeding.
Active involvement in a stimulating, challenging, and loving environment causes the brain to grow and flourish.

Passive involvement, isolation, and an impoverished environment diminish the brain.

From: Healthy Beginnings Training Curriculum, Comprehensive Health Education Foundation, 2003
Physical Activity Contributes to Development

- Brain growth
- Gross and fine motor skills
- Social/communication skills
- Hand-eye coordination
- Fitness
  - strength, flexibility, endurance
- Balance
- Cognitive skills
- School Readiness
“Physically active kids are more likely to succeed in school.”

“The notion that kids who are unhealthy are going to be able to learn better is pretty flawed. It makes sense to have kids who are physically educated. The chances of them performing better on standardized tests are higher.”

Study conducted by Bryan McCullick, kinesiology professor at the University of Georgia, referenced by the Robert Wood Johnston Foundation, [Childhood Obesity – Robert Wood Johnson Foundation](http://www.childhoodobesity.org)
A Quick Game: the yarn ball toss!
Infant Movement
Hey, My Developing Brain Depends on **Movement**!
By the time a child is 3 the brain has formed 1000 trillion connections... The infant brain thrives on feedback from its environment... which is mostly YOU!

Brain Games for Babies, Jackie Silberg, 2nd Edition, 2005
Container #1
Container #2
Container #3
Container #4
Infant Movement Guidelines

- Infants have at least 3, 5 minute sessions of supervised tummy time when they are awake.
- Infant environment is least restrictive at all times.
- “Container” use is limited to 15 minutes/day.
- Infants go outside 2–3 times a day.
Young Children

- Among 6–23 month olds, about 40% can turn on the TV and change channels by themselves.
- Baby apps are popular among parents. A 14 month old will stay engaged for about 3–4 minutes.
- Children 6 months–6 years average 2 hours of media time compared to 40 minutes a day of reading.
- Half of children under 2 watch TV or DVDs everyday.
- The Media Family, Kaiser Institute, 2006
In a typical day, the percent of children who use screen media, by age:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 year-olds</td>
<td>61%</td>
</tr>
<tr>
<td>2-3 year-olds</td>
<td>88%</td>
</tr>
<tr>
<td>4-6 year olds</td>
<td>90%</td>
</tr>
</tbody>
</table>

Children’s Daily Media Use, 2005

In a typical day, percent of children six and under who...

- Use any screen media: 83%
- Watch TV: 75%
- Watch videos/DVDs: 32%
- Use a computer: 16%
- Play video games: 11%

Among all 8- to 18-year-olds, amount of time spent with each medium in a typical day:

- TV content: 4:29
- Music/audio: 2:31
- Computers: 1:29
- Video games: 1:13
- Print: 0:38
- Movies: 0:25

Total media exposure: 10:45

Note: Children may be engaged in more than one of these activities at the same time.
For many families, media use has become part of the fabric of daily life.
Child Care Screen
Time Guidelines

- No TV for infants (< 2 yrs)

- All ages over 2:
  - 1/2 hr or less per week
  - Limit to educational program
  - Computers mostly for homework

- Avoid background noise from the

Alternatives to Screens

Brain Storm

When to use screens
What takes the place of screens
How to help parents
Outside Play Time

- All Children in Full Time Care
  - 2–3 times a day

- School Age Programs –
  - at least once for children in part time care
Expect heaviest rainfall in Seattle between January and May and October and December. The region gets over 65 percent of its rainfall during winter, which doesn’t give too many chances for clear days. In fact, the average yearly precipitation is 37 inches and rain averaging 50 percent of the time.

http://www.seattletravel.com/weather.html
Outdoor Activities

“Nothing encourages physical activity as much as being outdoors.”

- Fresh air
- Exploration/discovery
- Engage with nature
- Improves concentration
- Vigorous activity

*Last Child in the Woods: Saving our Children from Nature-Deficit Disorder*, Richard Louv, Algonquin Books, 2005
Humans evolved in the outdoors. Without nature can we still be fully human?

Mary Rivkin, Restoring Children’s Right to Play Outside, NAEYC, 1995
“All kids need a daily dose of G”
(G for Green)

Dr. Frances Ming Kuo, *Parks and Other Green Environments: Essential Components of a Healthy Human Habitat*, Recreation and Park Association, 2010
Playscapes:
a blog about
playground design

http://playgrounddesigns.blogspot.com/
Physical Activity Guidelines

- Moderate to Vigorous Activity
  - Toddlers: 60 – 90 min.
  - Preschoolers: 90 – 120 min.
- 2 – 3 structured activities/day
- Continuous opportunities to develop and practice skills
- Active play is never withheld as a form of punishment

It All Adds Up!

National Resource Center, Motion Moments Video Clips

http://video.ucdenver.edu/users/lfields/c413a27e-b88f-4899-a6a2-
Types of Physical Activity

- **Teacher Led – 20 to 30 min/day**
  - Foster skill development
  - Teach safe moves
  - Involve all children
  - Introduce movable objects

- **Independent Play – the rest of the day**
  - Ample space promotes safe, rigorous movement
  - Practice skills
  - Socialize, problem solve, improvise
  - Explore with “movable objects”
Movement in Child Care Should Be:

• Exploratory, imaginative
• Enjoyable, fun
• Regularly scheduled
• Integrated into other activities
• Shared with parent information
Do the Locomotion

- walking
- running/jogging
- jumping
- hopping
- side-sliding
- skipping
- galloping
Change it Up!

Vary the Locomotion

- Level
- Pathway
- Rate
- Direction
Movements in Small Spaces

- Stretching = Flexibility
- Yoga = Strength & balance
- “Quick Play” = Guided skill practice
Stress Relief Moves

- Promotes flexibility
- Helps children relax
- Creates peace & quiet
- Enhances focus
- Good for transitions!
I hear and I forget.
I see and I remember.
I do and I understand and
One picture is worth a thousand words.
Reach Out to Parents

- Let parents know what activities you do each day
- Market and post your physical activity policies
- Send home handouts
- Include physical activity ideas in your newsletter
- Post photos of kids in action
- Have a baby yoga session with parents
- Turn the TV off when parents arrive
- Other ideas???
Head Start Body Start

Your 1–Stop Shop for physical activity play and games for YOU and PARENTS

- http://www.aahperd.org/headstartbodystart/activityresources
Favorite PA Resources for Early Learning

- **Head Start Body Start**, AAPHERD. Association for the American Alliance for Health, Physical Education, Recreation and Dance, (Lots of practical play, games and movement ideas. Great materials to share with parents)

- **Get Kids Moving**, Let’s Move Child Care, Nemours Institute, (Guidelines and policy for PA and movement, provider and parent resources)
  [http://healthykidshealthyfuture.org/activities/what.htm](http://healthykidshealthyfuture.org/activities/what.htm)

- **Healthy Habits for Life Resource Kit and We Have the Moves**, Kids Health, Sesame Street and Nemours Institute, (FREE preschool curriculum)
  [http://classroom.kidshealth.org/index.jsp?Grade=cc&Section=hhfl](http://classroom.kidshealth.org/index.jsp?Grade=cc&Section=hhfl)
“If the physical part of children’s lives are thriving it can’t help but contribute to other aspects of their development, learning and growth.”

Teaching the Three R’s through Movement Experiences, Anne Gilbert Green, National Dance Education Organization, 2002