The Physical Activity Guidelines for Children and Adolescents

The Role of Communities in Promoting Youth Physical Activity

Your Name
Organization or Group
Date of Presentation
Presentation Objectives

- Identify the benefits of regular physical activity among youth
- Describe the key physical activity guidelines for children and adolescents
- Describe the role of communities, in partnership with schools and families, in promoting the physical activity among children and adolescents
A Day in the Life of Colin:
A 7-Year-Old Child

- Walks to and from school
- Jumps rope and does gymnastics in physical education class
- Plays on the playground during recess
- Does homework
- Watches television
- Plays soccer with family
- Plays video games
What Are the Benefits of Physical Activity?

- Promotes health and fitness
- Builds healthy bones and muscles\(^1\)
- Reduces the risk of developing obesity and risk factors for diseases such as type 2 diabetes and heart disease\(^1\)
- Reduces the symptoms of anxiety and depression\(^1\)
- Can positively affect concentration, memory, and classroom behavior\(^2\)

1. HHS. Physical Activity Guidelines Advisory Committee Report;2008
How Much Physical Activity Do Youth Need?

- Children and adolescents should do 60 minutes (1 hour) or more of physical activity daily.
  - **Aerobic Activities:** Most of the 60 or more minutes per day should be either moderate- or vigorous-intensity aerobic physical activity. Include vigorous-intensity physical activity at least 3 days per week.
  - **Muscle-strengthening Activities:** Include muscle-strengthening physical activity on at least 3 days of the week, as part of the 60 or more minutes.
  - **Bone-strengthening Activities:** Include bone-strengthening physical activity on at least 3 days of the week, as part of the 60 or more minutes.
- Activities should be age-appropriate, enjoyable, and offer variety.
What Does This Really Mean?

• At least 60 minutes every day
• Mostly aerobic activities
• Add variety and fun
What are Aerobic Activities?

- Activities that keep your body moving enough to increase your heart rate and make you breathe harder.
- There are two intensities of aerobic activity:
  - Moderate-intensity
  - Vigorous-intensity
Judging the Intensity of Aerobic Activities

• Moderate-intensity Activity
  ▪ Heart will beat faster than normal and breathing will be harder than normal
  ▪ On a scale of 0 to 10, moderate-intensity activity is a 5 or 6

• Vigorous-intensity Activity
  ▪ Heart will beat much faster than normal and breathing will be much harder than normal
  ▪ On a scale of 0 to 10, a vigorous-intensity activity is 7 or 8
# Types of Moderate- and Vigorous-Intensity Aerobic Activities

<table>
<thead>
<tr>
<th>Type of Physical Activity</th>
<th>Age Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Children</td>
</tr>
<tr>
<td></td>
<td>Adolescents</td>
</tr>
<tr>
<td>Moderate-intensity aerobic</td>
<td>• Active recreation, such as hiking, skateboarding, rollerblading</td>
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<tr>
<td></td>
<td>• Bicycle riding</td>
</tr>
<tr>
<td></td>
<td>• Brisk walking</td>
</tr>
<tr>
<td></td>
<td>• Active recreation, such as canoeing, hiking, skateboarding, rollerblading</td>
</tr>
<tr>
<td></td>
<td>• Brisk walking</td>
</tr>
<tr>
<td></td>
<td>• Bicycle riding (stationary or road bike)</td>
</tr>
<tr>
<td></td>
<td>• Housework and yard work, such as sweeping or pushing a lawn mower</td>
</tr>
<tr>
<td></td>
<td>• Games that require catching and throwing, such as baseball and softball</td>
</tr>
<tr>
<td>Vigorous-intensity aerobic</td>
<td>• Active games involving running and chasing, such as tag</td>
</tr>
<tr>
<td></td>
<td>• Bicycle riding</td>
</tr>
<tr>
<td></td>
<td>• Jumping rope</td>
</tr>
<tr>
<td></td>
<td>• Martial arts, such as karate</td>
</tr>
<tr>
<td></td>
<td>• Running</td>
</tr>
<tr>
<td></td>
<td>• Sports such as soccer, ice or field hockey, basketball, swimming, tennis</td>
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<tr>
<td></td>
<td>• Cross-country skiing</td>
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<tr>
<td></td>
<td>• Active games involving running and chasing, such as flag football</td>
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<tr>
<td></td>
<td>• Bicycle riding</td>
</tr>
<tr>
<td></td>
<td>• Jumping rope</td>
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<td>• Martial arts, such as karate</td>
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</tr>
<tr>
<td></td>
<td>• Sports such as soccer, ice or field hockey, basketball, swimming, tennis</td>
</tr>
<tr>
<td></td>
<td>• Vigorous dancing Cross-country skiing</td>
</tr>
</tbody>
</table>
What are Muscle-Strengthening Activities?

• Activities that make muscles do more work than usual activities of daily life
• Activities that can be part of unstructured play
  ▪ Climbing trees
  ▪ Playing tug-of-war
• Activities that can be structured
  ▪ Push-ups, pull-ups
  ▪ Working with resistance bands
  ▪ Lifting weights
# Types of Muscle-Strengthening Activities

<table>
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<th>Age Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Children</strong></td>
</tr>
<tr>
<td>Muscle-strengthening</td>
<td>• Games such as tug-of-war</td>
</tr>
<tr>
<td></td>
<td>• Modified push-ups (with knees on the floor)</td>
</tr>
<tr>
<td></td>
<td>• Resistance exercises using body weight or resistance bands</td>
</tr>
<tr>
<td></td>
<td>• Rope or tree climbing</td>
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<tr>
<td></td>
<td>• Sit-ups (curl-ups or crunches)</td>
</tr>
<tr>
<td></td>
<td>• Swinging on playground equipment/bars</td>
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</tbody>
</table>
What Are Bone-Strengthening Activities?

• Activities that produce a force on the bones that promotes bone growth and strength, such as jumping

• Activities that are especially important for young people because the greatest gain in bone mass occur during the years just before and during puberty
### Types of Bone-strengthening Activities

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</thead>
<tbody>
<tr>
<td></td>
<td>Children</td>
</tr>
</tbody>
</table>
| Bone-strengthening        | • Games such as hopscotch  
                           | • Hopping, skipping, jumping  
                           | • Jumping rope  
                           | • Running  
                           | • Sports such as gymnastics, basketball, volleyball, tennis  | • Hopping, skipping, jumping  
                           | • Jumping rope  
                           | • Running  
                           | • Sports such as gymnastics, basketball, volleyball, tennis  |
How Are the Guidelines for Youth Different from the Guidelines for Adults?

• Take into consideration natural activity patterns of children
  ▪ All episodes of moderate- or vigorous-intensity activities count toward daily requirement
  ▪ Unstructured active play can provide all three types of physical activity
• Daily physical activity required
• Specify need for bone-strengthening activities and vigorous-intensity activities each week
Meeting the Guidelines

Getting and Staying Active
How Physically Active Are High School Students?

* Were physically active doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes/day during the 7 days before the survey.

How Much Do 9- to 13-Year-Olds Participate in Physical Activity?

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Organized Activity</th>
<th>Free-Time Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black, non-Hispanic</td>
<td>24%</td>
<td>75%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>26%</td>
<td>75%</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>47%</td>
<td>79%</td>
</tr>
<tr>
<td>Total</td>
<td>39%</td>
<td>77%</td>
</tr>
</tbody>
</table>

Meeting the Guidelines

• **Youth Who Don’t Meet the Guidelines**
  ▪ Slowly increase activity in small steps
  ▪ Participate in enjoyable activities

• **Youth Who Meet the Guidelines**
  ▪ Continue being active on a daily basis
  ▪ Work toward becoming more active

• **Youth Who Exceed the Guidelines**
  ▪ Maintain activity level
  ▪ Vary the kinds of activities to reduce the risk of injury
A Day in the Life of Colin

- Walks to and from school (20 minutes)
- Jumps rope and does gymnastics in physical education class (10 minutes each)
- Plays on the playground during recess (10 minutes)
- Does homework (20 minutes)
- Watches television (30 minutes)
- Plays soccer with family (20 minutes)
- Plays video games (30 minutes)

**Total physical activity time = 60 minutes**
- Vigorous-intensity aerobic activity: jumping rope
- Bone-strengthening activities: jumping rope, gymnastics
- Muscle-strengthening activities: gymnastics
## Colin’s Weekly Physical Activities

<table>
<thead>
<tr>
<th>Day</th>
<th>Activity</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Walks to and from school</td>
<td>20 minutes</td>
</tr>
<tr>
<td>Monday</td>
<td>Plays on playground</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Monday</td>
<td>Jumps rope</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Monday</td>
<td>Does gymnastics</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Monday</td>
<td>Plays soccer with family</td>
<td>20 minutes</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Walks to and from school</td>
<td>20 minutes</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Plays on playground</td>
<td>25 minutes</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Climbs on playground equipment</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Walks to and from school</td>
<td>20 minutes</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Plays actively with friends</td>
<td>25 minutes</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Jumps rope</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Runs</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Does sit ups</td>
<td>2 minutes</td>
</tr>
<tr>
<td>Day</td>
<td>Activity</td>
<td>Duration</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Thursday</td>
<td>Plays actively with family</td>
<td>30 minutes</td>
</tr>
<tr>
<td></td>
<td>Plays soccer</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Friday</td>
<td>Walks to and from school</td>
<td>20 minutes</td>
</tr>
<tr>
<td></td>
<td>Plays actively with friends</td>
<td>25 minutes</td>
</tr>
<tr>
<td></td>
<td>Bicycles</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Saturday</td>
<td>Plays on playground</td>
<td>30 minutes</td>
</tr>
<tr>
<td></td>
<td>Climbs on playground equipment</td>
<td>15 minutes</td>
</tr>
<tr>
<td></td>
<td>Bicycles</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Sunday</td>
<td>Plays on playground</td>
<td>10 minutes</td>
</tr>
<tr>
<td></td>
<td>Plays soccer</td>
<td>40 minutes</td>
</tr>
<tr>
<td></td>
<td>Plays tag with family</td>
<td>10 minutes</td>
</tr>
</tbody>
</table>
Maria: A 16-Year-Old Adolescent

- Maria participates in many types of physical activities in many places.
- She plays tennis and does sit-ups and push-ups during physical education class.
- She likes to play basketball at the YMCA, do yoga, and go dancing with her friends.
- She likes to walk and hike with her dog.
A Day in the Life of Maria

- Walks dog (10 minutes)
- Plays tennis (30 minutes)
- Does sit-ups and push-ups (5 minutes)
- Plays with children at the park while babysitting (15 minutes)
- Total physical activity time = 60 minutes
  - Vigorous-intensity aerobic activity: tennis
  - Bone-strengthening activity: tennis
  - Muscle-strengthening activity: sit-ups and push-ups
Barriers to Meeting the Guidelines

- Personal
  - Attitude
  - Belief in ability to be physically active
- Social
  - Influence of their peers
  - Parental support
- Environmental
  - Safe locations to be active
  - Access to equipment
  - Financial costs of physical activities
  - Time
YOUTH PHYSICAL ACTIVITY
Youth Physical Activity

The Role of Communities
How Communities Can Promote the Youth Physical Activity Guidelines

- Community-wide campaigns
- Enhance access to places to be physically active
- Involve multiple sectors of the community
Community-Wide Campaigns

• Include physical activity messages with activities
  ▪ Health fairs
  ▪ Walk and run events
  ▪ Physical activity counseling

• Distribute messages through television, newspapers, radio, and other media
  ▪ Encourage local media to feature stories about young people who have made physical activity a priority
Lexington, Kentucky, and the VERB™ Campaign

• Social marketing campaign promoted physical activity among “tweens” (youth aged 9–13 years)
• Coalition of local health, education, and community-based agencies adapted the CDC’s VERB™ campaign for their community
Lexington, Kentucky, and the VERB™ Campaign

- Increased physical activity opportunities for tweens
- Increased and strengthened community-wide partnerships
- Businesses gained recognition in the community
- VERB™ became a household word in Lexington
- Helped launch more than eight spin-off scorecard programs in several other Kentucky counties and in Sarasota County, Florida
Improving Access to Places and Programs To Be Physically Active

• Implement “complete streets” policies
• Identify safe routes for walking and bicycling
• Build new places for physical activity or turn an abandoned or vacant lot into a park, multipurpose court, or playground
• Provide access to school gymnasiums, recreation fields, and playgrounds when school is not in session
Cross-Sector Collaboration

What Schools, Families, and Communities Can Do Together
Cross-Sector Collaboration

- Parks and recreation departments—provide access
- Law enforcement agencies—promote safety
- Urban planners—design features
- Transportation agencies—promote use, safety, and access
- Architects—design and construction
Working Together: Community Involvement In School-Based Physical Activity

• Support school-based physical activity
  - Join the school health advisory council
  - Donate equipment or money or encourage staff to volunteer time
  - Support Safe Routes to School programs
  - Offer afterschool physical activity programs
Working Together: Joint-Use Agreements

• Share resources: athletic fields, playgrounds, and fitness facilities with other community members and organizations

• Open school facilities to provide physical activity programs to students, families, school staff, and community members

• Seek funding from local businesses, community groups and health organizations for physical activity programs and events
YOUTH PHYSICAL ACTIVITY
Thank you!

Questions?

Be Active and Play, 60 minutes, every day!

Information in this presentation is provided by
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Division of Adolescent and School Health
www.cdc.gov/HealthyYouth