Physical Activity

- The American Academy of Pediatrics (AAP) and Centers for Disease Control and Prevention (CDC) recommend school-aged children participate in at least 60 minutes of moderate to vigorous physical activity every day

- 1 hour of physical activity can be done all at once, or in short bursts of 10-15 minutes.

- All children, including those with disabilities, should participate in physical activity daily. Activities should be adapted, when necessary, to allow all children opportunities for fun, appropriate, active play.

- Children should engage in both unstructured and structured play in order to develop cognitive, motor, and social skills.

- Daily outdoor play is also highly recommended for all children.

STAR recommends at least 1 hour of physical activity per day.

Physical activity is associated with:

- Health benefits such as: maintaining a healthy weight, improving blood lipid profile, protecting against future diseases
- Academic achievement
- Decreased likelihood of risky behaviors in adolescence
- Increased attention
- Emotional well-being

Welcome to another edition of the STAR Clinician newsletter! The purpose of this newsletter is to keep you informed of related research in the field of nutrition and physical activity.

We welcome your suggestions and comments, so please feel free to email us at star@hphc.org.

Enjoy!

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Parents of young children report doing less physical activity than adults without children, and thus health care providers may want to encourage parental physical activity as a way to model good habits for young children.


Active transport to school (i.e. walking or biking) is a good way for kids to meet physical activity requirements. Currently the likelihood of using active transport peaks at age 10 and then decreases.


Level of aerobic fitness was a predictor of academic success in youth, regardless of ethnicity. As low rates of aerobic fitness are common, especially amongst overweight and obese youth, efforts should be placed on increasing aerobic fitness in children.


Neighborhood environment has been cited as a hindrance to physical activity for families in neighborhoods without a safe play space. This lack of physical activity puts children at risk for obesity. It is important to help families living in unsafe areas find ways for their children to remain active.

Dias & Whitaker. *J Health Care Poor Underserved*. 2013

The amount of time spent in moderate-to-physical activity decreased for school-aged children over a two year study as sedentary behavior increased. This trend was more common in children with higher BMI Z scores at baseline.


Intervention studies with physical activity show that it has a small but significant effect on depression in children and adolescents. This effect was greater in overweight and obese children, highlighting the importance of physical activity on mental health in this population.


Physical inactivity is correlated with increased arterial stiffness, which can lead to stroke, myocardial infarction, cardiovascular diseases, and other arterial abnormalities. Since overweight children generally have lower levels of physical activity, they are more likely to exhibit arterial stiffness and be at risk for these problems.

Urbina et al. *J Hypertens*, 2010

U.S. Health and Human Services (HHS) recently issued a report, *Strategies to Increase Physical Activity in Youth*. The report highlights the importance of a multicomponent intervention to increase PA, including:

- Improve physical education by increasing lesson time, having it taught by well-trained specialists, and emphasizing instructional practices that provide substantial moderate to vigorous activity.
- Provide classroom activity breaks.
- Develop before and after school activity opportunities including active transport by encouraging families to walk or bike to school, if possible.
- Provide after-school activity space and equipment.
- Build skills for how to be physically active.

Talking with Parents and Patients about Physical Activity (PA)

**U**se the STAR handouts to inform your patients of healthy behaviors and to encourage behavior change.

**P**romote daily active play and PA for **all** patients.

**M**otivate and engage parents by:
- Assessing parents’ interest and confidence in increasing PA for their family
- Helping parents consider the pros and cons of increasing PA

**S**peak directly to the child to encourage and reinforce active behaviors; ask child which activities he/she enjoys; provide positive feedback: “You can do it!” “Keep up the good work!”

**E**ncourage parents to be active themselves. They are role models! Children will be more likely to engage in physical activity if they see their parents doing it and enjoying it. For parents and children who are not active now, encourage them to start slowly and build up.

**D**irect parents to resources for activity ideas: newspapers, magazines, community centers, and websites, including:
- Mass in Motion: [www.mass.gov/massinmotion](http://www.mass.gov/massinmotion)
- Body and Mind: [www.bam.gov](http://www.bam.gov)

**U**se the STAR clinician database to search for PA options for your patients
- Search by activity or location
  - HVMAStarStudy.com

**P**rovide alternative activity ideas if the neighborhood is unsafe: community centers, after-school and summer programs, Nintendo Wii, and Dance, Dance Revolution video games.

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**RECENT TRENDS**

**Data from the National Health and Nutrition Examination Survey 2009-2010**

A selection from Table 1. Data on Children Who Met Physical Activity Recommendations

<table>
<thead>
<tr>
<th>Age</th>
<th>% of Children getting 60+ min/day of moderate/vigorous PA 7 days/wk</th>
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<tr>
<td>6-8 yrs</td>
<td>9-11 yrs</td>
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<td>70</td>
<td>80</td>
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**Summary**

Children who get less PA include:
- 9-11 year olds
- Girls
- Hispanics
- Obese children

Fakhouri et al., *JAMA Pediatr*, 2013
Looking for educational materials to share with overweight patients? Check out the STAR website: www.hvmastarstudy.com

Here are some examples of what you will find there:

**10-2-1-0**

**Goals for STAR Kids**

Sleep at least 10 hours a night.

No more than 2 hours per day of screen time.

Get at least 1 hour of moderate to vigorous physical activity per day.

Drink water. Have 0 sugary drinks.

Work together. Pick a goal. Offer encouragement. You can do it!

**Star Daily Goals**

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
<th>Goal</th>
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<td>Hours/Minutes of Quality Sleep a Night</td>
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Kids need at least 1 hour of moderate to vigorous physical activity every day.

- **Make physical activity a part of every day.**
  - If 60 minutes sounds like a lot right now, help your child start slowly and build up.
- **Make it routine.**
  - Make a plan for physical activity. What to do, when to do it. Days often go by quickly, and if you don’t have a plan, it likely won’t happen.
- **Work with your child to figure out what s/he would like to do.**
  - For programs and classes, ask what your child’s school offers after school.
  - You can also check your local community center, YMCA, local recreation department, Boys & Girls Club, college, dance studio, or gym.
  - Make physical activity family time. Take a walk together after dinner, play ball, or shoot hoops. It can be a nice time to talk.
  - Swap some TV time for active time.
  - Offer lots of encouragement.
  - Be an active role model and show your child how you make the time for physical activity.
- **Encourage active transport.**
  - Help your child add physical activity to everyday life by walking or biking to school, a friend’s house, or the store, when possible. Too far? Park further away or get off the bus or T early to get in a little walk.

There are 1,440 minutes in a day. Help your child plan to be active for at least 60 of them.

Kids need at least 1 hour of moderate to vigorous physical activity every day.

- **What is “moderate to vigorous”?**
  - During moderate activity, you can talk but not sing.
  - In vigorous activity, you can say a few words, then need a breath.
- **Why is it so important?**
  - Regular physical activity helps kids:
    - Sleep
    - Learn
    - Control their weight
    - Develop healthy habits while they’re young

Handouts are available for each of the STAR goals.