



Research Brief

Fitness and Physical Activity

Question: What can be done to support fitness and physical activity?

Summary of Findings:

Life in the 21st century has brought about many changes, some which have been a definite detriment to the population's physical health. Transportation tends to revolve around the automobile so people do not walk or bicycle to their destinations. New technologies mean that people sit more and are less active than in the past. With high stakes testing looming large, physical education class have been reduced so that students are not nearly as physically active as they were 20 years ago. A lack of community resources has cut down the number of physical fitness types of activities available to the public. Nine million children and adolescents or 15% of the population under the age of 18 in the United States are overweight, this has tripled over the past 20 years. Young children tend to be physically active but those levels tend to slow down during adolescence. In a survey conducted in 1999, it was found that children spent four hours a day watching television, playing video games, and working on a computer. The CDC (Center for Disease Control) found that 1/3 of high school students are not involved in any type of hearty or aerobic fitness activities. It appears that more high school males participate in regular vigorous physical activities than do females. According to one survey, only three percent of the adult population is living a healthy and active lifestyle. "Healthy lifestyles are more influential than genetic factors in avoiding deterioration traditionally associated with aging" (*Physical fitness*). Schools can guide students in developing life-long habits of participating in physical activities.

According to the National Association for Sports and Physical Education, the concepts of physical fitness activities and physical education are used synonymously, however, they are not the same. A physical education program is a scheduled and highly structured program where skills of teamwork, cooperation, leadership, and specific physical skills are taught by well-trained physical education teachers. Fitness activities involve any type of body movement. In addition to students participating in a physical education program, fitness activities should be done by adolescents at least 60 minutes a day at least five times a week. Some studies indicate that if physical activities are done in short 10-15 minute time frames throughout the day, the benefits are the same as if they had been done in a full workout at one time. Fitness activities can include: walking, biking, hiking, dancing, mowing the lawn, snow blowing the yard, gardening, bowling, washing the family car, babysitting for a toddler, walking a dog, flying a kite, and participating in intramural sports or extracurricular activities.

Academic Achievement

1. Two studies found that academic achievement was higher among those who were more physically active. The adolescents appeared to have more energy and the ability to concentrate more than those who were inactive.
2. Another study indicated that there was increased brain function in those who were physically active, which can enhance cognitive function.



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3. A recent study out of California found that:
 - a. those who were academically high achieving tended to have higher fitness levels
 - b. those who were academically high achieving with high fitness levels tended to make higher gains in mathematics than in reading
 - c. females who had high fitness levels tended to make higher overall academic gains than males

Physical Benefits

The literature strongly states that adolescents who are physically active should:

1. be able to successfully manage stress and depression
2. get better quality sleep
3. feel better about themselves
4. develop competency in physical skills
5. have reduced risk for Type 2 diabetes, high cholesterol, obesity, high blood pressure, and asthma
6. develop and maintain strong bones and muscles

Recommendations

1. Encourage families to get involved in physical activities
2. Design and disseminate a fitness calendar with varied activities that students can easily follow
3. Bring together the school and community resources to support fitness activities
4. Provide on-going training and support to teachers on the importance of fitness and ways to incorporate fitness activities into their programs
5. Develop a school fitness plan with a commitment of appropriate resources and a culture where physical activity is valued
6. Design programs that are supervised and led by knowledgeable and well-trained adults
7. Offer daily physical education classes
8. Offer a wide-range of extracurricular activities and intramural sports programs

Online Resources:

- Health & fitness
Active lifestyle program
A list of 100 activities that “count” as part of keeping fit is given.
http://www.presidentschallenge.org/educators/program_details/active_lifestyle.aspx#
- Activity calendar
An example of an activity calendar and what it should include is provided.
http://www.bam.gov/sub_physicalactivity/physicalactivity_activitycalendar.html
- Being physically active can help you attain or maintain a healthy weight
Some ideas for and reasons to become physically active are suggested in this article.
http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_whatcanyoudo.htm



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- Building a healthier future through school health programs
This is the complete report with recommendations and suggestions for developing programs on healthy living.
http://www.cdc.gov/nccdphp/promising_practices/pdfs/SchoolHealth.pdf
- Declaration of support for the United Nations Resolution 58/5-International Year of sport and physical education
This is a declaration and description for 2005 International Year of Sport and Physical Education.
http://www.aahperd.org/aahperd/pdf_files/un_resolution.pdf
- Diet, exercise a real shortcut to health
A brief description of a study that indicates that within 6 weeks of living a healthier lifestyle, the body will show improvement.
<http://www.healthfinder.gov/news/newsstory.asp?docid=524241>
- Does physical activity influence academic performance?
A synopsis of several studies that show a correlation between fitness and academic levels.
<http://www.sports-media.org/sportapolisnewsletter19.htm>
- ESPN play your way program
A description of a program to lead physical games that is sponsored by ESPN is provided in this article.
<http://www.aahperd.org/naspe/template.cfm?template=espn.html>
- Few in U.S. living healthy lifestyles
A summary of a survey that found only 3% of the adult population is living a “healthy lifestyle.”
<http://www.healthfinder.gov/news/newsstory.asp?docid=525339>
- Get fit to fight metabolic syndrome
This article briefly describes a 6 year study where it was found that the more physically people were, the lower their rate of metabolic issues were.
<http://www.healthfinder.gov/news/newsstory.asp?docid=526764>
- Get up and move
Numerous ideas for physical activities are provided in this piece.
http://www.fns.usda.gov/tn/Resources/POC_topic2.pdf
- Is it physical education or physical activity?
This article provides a definition for and examples of physical activities.
<http://www.aahperd.org/naspe/template.cfm?template=difference.html>



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- McDonald's is heading to school gym classes
A brief description of the Passport to Play Program being sponsored by McDonald's is given.
<http://www.edweek.org/ew/articles/2005/09/21/04health-3.h25.html>
- New study supports physically fit kids perform better academically
This is a synopsis of the study from California showing a relationship between academic achievement and fitness levels.
http://www.aahperd.org/naspe/template.cfm?template=pr_121002.html
- Physical activity and the health of young people
Information on the background and importance of physical activity is provided in this piece.
<http://www.cdc.gov/HealthyYouth/physicalactivity/pdf/facts.pdf>
- Physical education and activity
A brief synopsis and description of information on the types of physical activity and importance of that activity are given in this article.
<http://www.cdc.gov/HealthyYouth/shpps/factsheets/pdf/pe.pdf>
- Physical fitness
A brief article on the importance of daily physical activity is provided.
<http://www.healthierus.gov/exercise.html>
- Promoting better health-An executive summary
A thorough executive summary of the report on Promoting Better Health for Young People through Physical Activity and Sports is described.
http://www.cdc.gov/HealthyYouth/physicalactivity/promoting_health/index.htm#ExecSum
- Promoting better health-Strategies, School Programs
Some ideas and suggestions for implementing physical education and physical activities programs in schools are highlighted in this article.
http://www.cdc.gov/HealthyYouth/physicalactivity/promoting_health/strategies/school.htm
- Promoting better health-Youth sports and recreation programs
Suggestions for ways community recreation programs can be utilized to help promote fitness is provided.
http://www.cdc.gov/HealthyYouth/physicalactivity/promoting_health/strategies/sportrec.htm
- Relation of academic performance to physical activity and fitness in children
A brief description of an Australian study that found a correlation between academic achievement and fitness levels.
<http://prevention.sph.sc.edu/updates/2001/oct2001article4.htm>



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- **Student Health**
An overview of the importance of physical activity, fitness, nutrition and environmental concerns are described in this article.
<http://www.edweek.org/rc/issues/student-health/>
- **Summary-Physical activity and health**
A summary of the importance of physical activity and associated research are provided in this piece.
<http://www.cdc.gov/nccdphp/sgr/summ.htm>
- **When fat is a family issue**
This is a description of a program in England that gets the entire family involved in non-competitive exercise.
<http://www.timesonline.co.uk/article/0,,8122-1814043,00.html>

Grant Opportunity

- **Teacher's Toolbox-October 2005**
Examples of some fun fitness activities for the month for all age levels is given. Information on a grant opportunity for \$5000 to help develop and facilitate community resources is provided.
http://www.aahperd.org/naspe/template.cfm?template=teachers_toolbox_oct05.html

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