

It is **important** to remember that BMI is a tool. BMI can fall short in accurately categorizing athletes, other muscular people, and the elderly, so a doctor or healthcare professional should make the final determination as to the status of your child.

### Links

-www.bcps.org/offices/physed/  
County website, parent information, links of interest

-www.bcps.org/offices/physed/curriculum/adapted\_physed.html  
County website, philosophy, goals and objectives for adapted P.E.

-www.aahperd.org  
Resources, consumer health news

-www.aahperd.org/naspe/  
Media and advocacy, publications

-www.cdc.gov/growthcharts/  
Research, data, and tools to calculate BMI

-www.mayoclinic.com  
BMI calculator, obesity information

-www.cdc.gov/nccdphp/dnpa/physical  
Physical Activity for Everyone

-www.PE4life.com  
News, articles, resources

-www.obesity.org  
Facts, consumer alert, community action, statistics

-www.acsm.org  
Health and Fitness information

-www.presidentschallenge.org  
Get Fit information for kids, teens, adults

-www.fitness.gov  
President's Challenge program, publications, resources



### Office of Physical Education

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## Physical Education in Baltimore County Public Schools

Physical education is an important and unique part of the daily instructional program. Physical Education contributes to overall educational goals and to the development and maintenance of fitness. Physical activity is the method by which learning takes place.

The purpose of the physical education program is to contribute to each student's growth and development in the physical, cognitive, and social domains through a movement-based curriculum.

The Baltimore County Public Schools' Office of Physical Education is committed to implementing programs to educate children about the importance of a healthy lifestyle. They are dedicated to improving the health and well-being of the next generation.

**Elementary physical education** in BCPS focuses on fundamental movement. Students participate in adventure, rhythms and dance, tumbling and gymnastics, manipulatives (hoops, wands, jump ropes, beanbags), individual, partner, and team games.

The **middle school** program emphasizes skill development in adventure, rhythms and dance, tumbling and gymnastics, and individual, team, and recreational sports. Intramurals are provided for students to enhance their skills and game play.

The required course at the **high school** level is Fitness Foundations/Fitness Mastery, a comprehensive fitness-based curriculum that provides participation and knowledge to enhance and maintain a healthy level of fitness. Students are encouraged to take electives based on their interests.

Students at all levels are given the opportunity to use pedometers, heart rate monitors and other forms of technology to enhance their learning and understand how exercise affects their bodies and helps maintain lifelong health.

### "Mens Sana in Corpore Sano" "A Sound Mind in a Sound Body"

Quality physical education instruction involves the whole child by providing psychomotor, cognitive, and affective benefits.

BMI  
Body Mass Index

Office of  
Physical Education

Baltimore County  
Public Schools



### Facts:

- Nine Million Children over the age of six are obese.\*
- Another 15 percent are borderline and at risk of being overweight.\*

\* Source: Childhood Obesity: Health in the Balance, 2004, The National Center for Health Statistics

## The Problem

The percentage of young people who are overweight has tripled in the last 30 years. Among children 6-19 years, 16% are considered overweight and an additional 31% are at risk for overweight. (*Journal of American Medical Association*, 291 no. 23, 2004) Overweight is associated with an increased incidence and prevalence of hypertension and Type 2 diabetes (diabetes mellitus) before and during adulthood, as well as cardiovascular disease in adults (Krauss, et al. 2000) Because the current generation of children and young adults is the most overweight in our nation's history, reducing obesity is one of the top health priorities for the Center for Disease Control (CDC). The CDC is conducting research activities and programs to improve our understanding of all the ways that obesity can affect health and identify strategies to prevent obesity related health problems. One of those strategies is providing growth charts for plotting Body Mass Index (BMI). Reducing obesity is a complex and long-term effort, but certain facts are clear. Physical inactivity is part of the problem and part of the solution. Physical Education is an essential element of this solution. (*The State Education Standard*, Dec. 2004, p. 32)

“More than 18 million young people in this country are overweight or obese. In fact, the U.S. now has the highest percentage of overweight youth in the nation's history.”

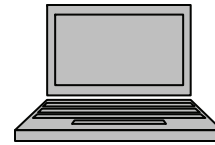
\*Source: *The State Education Standard*, Dec. 2004, p. 13

## Office of Physical Education Initiatives

The Office of Physical Education distributed a tri-fold called the *Challenge of Obesity* last year as Phase 1 of the initiative to inform parents about the obesity problem in the county and nationwide. Phase 2 of the initiative involves educating parents on the Body Mass Index (BMI) measurement that all students can have calculated during fitness testing in the Baltimore County Public Schools. Through these initiatives, the Office of Physical Education is attempting to make parents more aware of the obesity epidemic that many health experts are calling a national crisis. Through these efforts, the Office of Physical Education hopes to make a difference in students' health.

## What Is the BMI?

Body Mass Index (BMI) is a mathematical formula that uses height and weight to classify people as underweight, healthy weight, overweight, or obese. Although it does not differentiate between body fat and muscle mass, BMI is a useful tool for indicating whether a student is within a normal growth pattern, overweight, at risk of becoming overweight, or underweight. BMI is calculated differently for children than for adults. Because boys and girls grow at different rates, BMI for children is age and gender specific, and must be calculated for each child on an individual basis with specific BMI standards for the various classifications.



## How to Calculate BMI

To determine a child's BMI, visit either of these two websites for more information on BMI.

The Centers for Disease Control and Prevention Web site at [www.cdc.gov/growthcharts/](http://www.cdc.gov/growthcharts/) for a complete set of growth charts used to calculate BMI in children.

Calculate a child's body mass index by going to [www.mayoclinic.com](http://www.mayoclinic.com) and selecting the section entitled Calculators. This tool provides BMI information for children between ages 2 and 18.

## BMI Standards

Children and teens whose BMI for age is:

- In the 95<sup>th</sup> percentile or higher are considered overweight
- Between the 85<sup>th</sup> and less than the 95<sup>th</sup> percentile are considered at risk for overweight
- Between the 5<sup>th</sup> and 85<sup>th</sup> percentile are considered normal weight
- Below the 5<sup>th</sup> percentile are considered underweight

\* Source: A Nation at Risk: Obesity in the United States

## What to Do If a Child Is at Risk for Becoming Overweight.

Share concerns with the child's health care provider for further evaluation and intervention, if necessary. Consider these other following suggestions:

- Encourage regular exercise
- Provide a healthy diet
- Be an active family—60 minutes or more each day (ie: walk, hike, bike, dance, skate, backpack, climb, kayak, etc.)
- Advocate for daily Physical Education
- Promote after-school activities
- Encourage sport participation
- Limit TV, video games, and computer time to 1-2 hours a day combined
- Encourage new activities
- Give gifts that promote fitness (e.g., heart rate monitors, pedometers, scooters, skates, jump ropes, etc.)
- Plan parties with active themes



## Fitness Testing in Baltimore County Public Schools

All students in grades 4-8 and grade 9 in the Baltimore County Public Schools are given a comprehensive health-related fitness assessment called *Fitnessgram*. The assessment provides students with feedback to identify how to improve fitness levels and learn to enjoy regular physical activity. Computerized reports are provided to students and parents at least once during each school year. The report objectively evaluates fitness levels and uses scientifically established standards necessary to obtain and maintain good health. The standards are age and gender specific and show where students need improvement or when they are in the Healthy Fitness Zone (HFZ). Students learn to assess their own personal fitness and work to set personal goals to reach the HFZ. Student athletes who want to achieve a higher level of athletic performance fitness should work with their teachers and parents. *Fitnessgram* tests the health-related components of fitness which are aerobic capacity, muscular strength and endurance, flexibility and body composition. BMI is included as one of the standards used in the assessment for body composition analysis.