



CHILDHOOD OBESITY: NOW IS THE TIME TO ADDRESS THIS EPIDEMIC IN NH'S SCHOOLS

The purpose of this paper is to bring attention to the costs that the current childhood obesity epidemic imposes on our schools, our society and the quality of life of our children. There is mounting evidence that, by taking action to improve the physical inactivity and poor nutrition habits of today's school children, schools can meet performance goals and alleviate financial restraints.

Background

The majority of American youth are sedentary and do not eat well. These unhealthful practices can lead to learning problems in schools and health-related problems that begin during school aged years and continue into adulthood. These behaviors are directly linked with children becoming overweight or obese. Nationally 16 percent of school aged children and adolescents are overweight- a figure that has risen three-fold since 1980.¹ Between 70 and 80 percent of overweight children and adolescents remain overweight or become obese as adults. Obesity as a whole costs our nation \$117 billion dollars a year.² Costs due to obesity-related illnesses in children have tripled from \$35 million (1979) to \$127 million in 1999.³

The schools in New Hampshire can play a critical role in combating the childhood obesity epidemic in our State. Schools are uniquely poised to play a significant role in preventing and decreasing childhood overweight and obesity. School is where children spend their time; where they learn, be it from books, from teacher, from peers, or by example.¹ Schools provide children with equal access to information about physical education, activity and nutrition- regardless of their family's background, financial status, or knowledge of these issues. Children spend nearly 2000 hours at school each year.

Many studies show a direct link between physical activity, nutritional intake, fitness levels, weight problems and academic performance. Physical activity in adolescents has consistently been related to higher levels of self-esteem and lower levels of anxiety and stress – each of which is associated with better academic performance. A study in California (2000) showed that students in fifth, seventh and ninth grade with lower Body Mass Indices (BMI) performed better on state standardized tests. A study conducted in 2003 in NH showed an inverse relationship between BMI levels and academic performance of third graders.⁴

It is probable that students with poor nutrition, inactivity and weight problems have a higher prevalence of physical conditions and psychological/social problems that are frequent causes of absenteeism. An article in JAMA (2003) stated that obese children and teens missed six times as many days of school as healthy students. Absenteeism has been directly linked to poorer academic performance in a number of studies.

NH childhood obesity rates and fitness levels

A study conducted in 2004⁵ measured the BMI and fitness levels of NH's school children. 18% of the girls and 22% of the boys had BMI levels above the 95th percentile, which places them in the category considered overweight or obese. Both the boys and girls BMI rates are significantly higher than the current national estimate of 16% for this category. An additional 20% of both boys and girls had BMI levels between the 85th and 94th percentile, which places them in the category considered at risk for becoming overweight or obese.

This study also measured fitness levels and found that 88% of children can meet the minimum fitness level upon entering school. Only 47% of children in their second year of school achieve the minimum fitness levels for the same fitness tests. At the age of ten, when an aerobic capacity and recovery test is also administered, only 22% of the children in NH can achieve the minimum fitness levels and as students age the percentage of children achieving these minimum levels continues to fall.

Why we need to address this issue now

It is understood that all schools are oriented toward providing a high quality education for all students. Combating the lack of physical education, activity, and poor nutrition can help schools meet their goal of improving academic achievement of their students while maintaining if not improving their financial situation. By reducing the incidence of childhood obesity by increasing physical activity and proper nutrition, schools can reduce absenteeism; the costs of which have been estimated in the tens of thousands of dollars for small school districts to the tens of millions of dollars for the larger school districts in the United States.

In addition, the cost to our society for the obesity epidemic is growing at a phenomenal rate. If 70 to 80 percent of today's overweight children are expected to become overweight and obese adults, the current estimate of the costs of obesity, stated as \$117 billion, can be expected to double in the next decade. A study conducted by the Mayo clinic in 2003 reported that less than 25% of school aged children accumulated 60 minutes of physical activity during a 24-hour period, which is the current recommended level. Now is the time for schools to lead the initiative to reduce the current levels of childhood obesity in NH and to improve the quality of life of our school children.

This epidemic can be addressed by improving the quality of the nutrition provided to school aged children and assuring that their physical education and activity levels are adequate to maintain a healthy lifestyle. We must assure that all school children receive adequate physical education to allow them to participate in physically active lifestyle that will allow them to achieve their highest academic proficiency and quality of life. It is clear that teachers and parents will support this type of initiative. A survey conducted (2003) by the Robert Wood Johnson Foundation found that 90 percent of teachers and 86 percent of parents are convinced that physically active children are better able to learn.

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- ¹ The Learning Connection: The value of improving nutrition and physical activity in our schools. Action for Healthy Kids, 2004.
 - ² Wolf, AN, Colditz GA. Current estimates of the economic cost of obesity in the United States. *Obes Res* 1998 Mar; 6(2):97-106.
 - ³ Wang G and Dietz W. Economic burden of obesity in youths aged 6-17 years: 1979-1999. *Pediatrics*, Vol 109(5), May 2002.
 - ⁴ Martin TA, White C, Van Dole K. The New Hampshire Health Assessment Project. NH Dept. of Education, 2003.
 - ⁵ Martin, TA. Helping NH's Children Become Their Physical Best. NH Medical Society Annual Meeting November 2004.