

School Nutrition: A Continuing Legislative Battle

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The prevalence of childhood obesity in the United States is increasing at an alarming rate, resulting in immediate and long term risks to the physical health of our nation's youth, and as such, the long-term health of our nation (Institute of Medicine, 2005). The number of children diagnosed with serious diseases associated with obesity, such as diabetes and hypertension has created a public health crisis (Grey et al., 2004). In fact, the National Student Nurses Association (NSNA) 2002 House of Delegates addressed increased obesity in children and adolescents by adopting a resolution that encouraged obesity education for nurses and nursing students. It stated that although 25 to 30 percent of children in the U.S. are obese, experts believe that this number may underestimate the problem and as such nursing students should be educated in the implications and education of school nutrition (NSNA, 2002).

Recent initiatives and legislation have started to address this negative health trend in children and teenagers. The American Beverage Association, in partnership with the American Heart Association, other anti-obesity advocates and the William J. Clinton Foundation reached an agreement in May 2006 that will stop the sale of most sodas in schools by 2010 (Olson, 2006).

The U.S. Department of Agriculture (USDA) has established standards requiring schools to plan menus that meet the Dietary Guidelines for Americans, but these standards do not apply to "a la carte" foods; foods sold in snack bars, foods sold in school stores, or food sold in vending machines (U.S. Department of Health and Human Services [USDHHS], 2000). These standards may hinder the nation's goals regarding childhood obesity. Healthy People 2010 aims to reduce the proportion of children and adolescents who are overweight or obese and increase the proportion of children and adolescents age 6 to 19 years whose intake of meals and snacks at school contributes to good overall dietary quality (USDHHS).

Health Risks Associated with Eating Practices

Poor eating habits in childhood have been found to increase the risk of both childhood, as well as adult onset obesity, which is associated with chronic health conditions such as high cholesterol levels, cardiovascular disease, hypertension, and Type 2 diabetes (Grey et al., 2004; Robinson & Thomas, 2004). The number of obese school-aged children may be as high as 4.7 million (Grey et al.). Not surprisingly, in more recent years, a steady increase in the number of children defined as obese has prompted health professionals to begin to explore the factors influencing childhood nutrition including socio-cultural factors.

Children of lower economic status are more at risk for developing obesity and other related illnesses. "For inner-city minority youth, living in poverty may be compounded with decreased access to healthy foods and safe exercise areas" (Grey et al., 2004, p.10). In schools, the families of these children have the option to participate in government programs that provide lunch at a reduced rate or a free lunch based on their income. The meals that are being provided by such programs however may constitute more than half the daily required caloric intake leading to excess caloric consumption, weight gain and obesity (Carter, 2002, p.2180).

Food Options in Schools

The availability of unhealthy food options in schools is alarming. Although breakfasts and lunches served in schools must meet federal nutrition standards, the USDA does not have to control the nutritional content of foods that are sold outside of school food service areas, such as in vending ma-

chines, school stores, or snack bars (Institute of Medicine, 2005). These a-la-carte foods, which are often preferred by children over the school meal programs are known as competitive foods and are of low nutrient density or high energy density (University of Washington, 2003; Institute of Medicine). Competitive foods sold

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in schools are high in sugar, fat, and calories (University of Washington; Institute of Medicine).

Nearly half of elementary schools allow students unrestricted access to vending machines or school stores and 68% allow students to purchase items during their lunch time (University of Washington, 2003). (Fried & Nestle, 2002). In addition to competitive foods, meals served in schools may also be of poor nutritional quality. For example, high calorie, energy dense items such as cookies, cake and batter fried foods are served as part of school meals (Levine, 1999; Institute of Medicine, 2005). Popular fast foods from restaurant chains such as Pizza Hut and Taco Bell are readily available for children to buy for lunch at school and during school field trips (Levine). These fast food items are often high in fat and sodium, making them unhealthy food choices.

Nutrition Education at Schools

The school represents one of the most significant social environments where the development of

knowledge and skills to promote health and prevent diseases can be addressed (James & Adams, 1998; Institute of Medicine, 2005). Schools have the ability to impact children's thoughts, beliefs and behaviors both at school and at home. In fact, teachers may have greater influence on a child's health than any other person outside the home (Baxter, 1998). However, schools typically do not incorporate enough nutrition education in the curricula to influence dietary behaviors (Auld, Romaniello, Heimendinger, Hambidge, & Hambidge, 1999). Surprisingly, not all states require health curriculum and that only sixty nine percent of states that require health curriculum include nutritional content (Kann, et al., 2001; Institute of Medicine).

Food Preferences of Children

Due to the near constant availability of calorie dense and high sugar foods, American children learn at an early age to prefer fatty or sugary foods over healthier choices such as fruits, vegetables, and whole grains (Cullin, et al., 2000; Kubik, et al., 2003). American children obtain half of their daily calories from added fat and sugar; only one percent of children regularly eat diets conforming to the recommendations of established guidelines (Fried & Nestle, 2002). In addition, nearly half of children fail to achieve any of the recommendations (Fried & Nestle, 2002). Furthermore, salad and vegetables, excluding potatoes, are the main school lunch food items that contribute to plate waste (Baxter, 1998). Negative attitudes toward healthy foods and socially learned food preferences contribute toward the preference for less healthy foods. Predominant beliefs among fourth- and fifth-grade students

have found that vegetables taste nasty and 'if it's good for you, then it must taste bad' (Baxter, 1998). Beverages are particularly hazardous to children: children aged two to nineteen years obtain approximately one quarter of their calories from soft drinks (Cullen, Ash, Warneke, & de Moor, 2002). This is why the recent legislation is welcomed by most health advocates even though the implementation doesn't reach completion until 2010, a timeline which some argue is too slow to help children now (Kluger, 2006).

Food Marketing in Schools

For the average child, almost one-third of the day is spent in school which makes schools a key marketing environment for food and beverage producers (Levine, 1999).

Through key staff members such as administrators, teachers, and food service providers, the food industry gains access to schools. Incentives are offered to schools in return for product advertising (Levine, 1999). Items such as free magazines and teaching materials (Levine), as well as cash incentives, are given to schools (Fried & Nestle, 2002). Typically, soda companies offer schools money in order to place vending machines within the school (Fried & Nestle). Food companies also offer monetary incentives to schools based on the amount of sold product (Fried & Nestle). Schools in lower income areas are targeted due to the financial needs of the school. Though lucrative to the school itself, advertising in schools overlooks the health of the students and may circumvent parental control (Institute of Medicine, 2005).

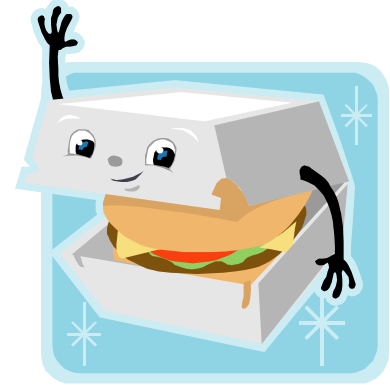
Implications

Schools are uniquely positioned to enhance student learning by pro-

moting, modeling and supporting healthy behaviors (University of Washington, 2003). In order to impact the risks associated with poor nutrition, it is crucial that healthy nutrition be systematically taught and modeled to students at every grade level.

Despite efforts made to teach children how to make healthier choices, children may be receiving mixed messages. Children may be taught to make good choices, but they are often presented with poor nutritional options in their schools (University of Washington, 2003). In order to prevent mixed messaging, schools need to promote partnerships and health leaders in a coordinated health effort. Health leaders should include both adults and the students themselves. Through creative partnerships, school breakfast and lunch programs can offer and promote consumption of more fruits and vegetables.

A partnership with the health care community is needed to bring about significant change and in fact, the Clinton Foundation intends to tackle school food choices next. Coordinated health intervention programs may immediately slow the rate of obesity in children. Nurses are particularly well suited to help not only the students, but the school district as a whole to achieve healthier standards and promoting school nutrition action groups [SNAGs] (Worwood, 2001). School nutrition action groups could include a representation from all stakeholders in the school, including nurses, school administrators, teachers, school personnel parents, and students (Worwood). Regular interaction to discuss school meals and other nutritional standards are essential (Worwood). Additionally, SNAGs can work on a broader scale toward changing legislation regarding the



Children get mixed messages on fast food: while they're told that it's unhealthy, it is readily available in many schools.

food available in schools (Worwood).

Nurses need to serve not only the children but their parents, families, and teachers. To partner with the community, schools could become a place of family activity by providing opportunities for families to participate in after-school activities and nutritional programs. This service can begin with education and counseling about the importance of good nutrition. Nutritional education will aid teachers and parents when working with children on how to choose healthier options. Teachers need the most current nutritional information and recommendations. Nurses provide teachers with the link between current nutritional knowledge and classroom teaching. Once armed with current knowledge, teachers can plan activities, projects, and create the needed nutritional environment in the classroom. Finally, nurses can also encourage teachers to adopt a healthy lifestyle themselves that allows teachers to serve as healthy role models for their students. The time is now for all persons dedicated to the health of children to come together in a true partnership to attack the public health crisis of childhood obesity.

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