

Moving Toward Health: Preventing and Overcoming Obesity in Children

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Most of us are well acquainted with the saying “garbage in/garbage out”—especially in association with some type of business practice. A twist on this familiar saying has relevance to our children’s health. “Energy in/energy out,” a term used by nutritionists, describes the balance between calories consumed and calories burned. If a person’s level of physical activity is not great enough to burn the amount of calories taken in, weight increases. If this imbalance continues, obesity may result. We know that many children do not get enough opportunities for the “energy out” part of this equation. Children need time to move and explore the world around them. Not only does physical exercise help prevent weight problems, it also helps increase concentration and a sense of well-being. Therefore, as educators we have many reasons for finding ways to help increase the amount of physical activity that children experience each day.

Consider the following:*

- ▶ Obese children and adolescents are at risk for high blood pressure, high cholesterol, and other risk factors for heart disease.
- ▶ Obese children are more prone to poor self-confidence and depression.
- ▶ There is an alarming increase in the incidence of type 2 diabetes in obese children and adolescents.
- ▶ One of the most severe problems for obese children is sleep apnea (interrupted breathing while sleeping), which can lead to problems with learning and memory.
- ▶ Obese children have a high incidence of orthopedic problems, liver disease, and asthma.
- ▶ Overweight adolescents have a 70 percent chance of becoming overweight or obese adults.

The movement and music division of High/Scope Educational Research Foundation has started a training program to help prevent the early onset of obesity-related health problems.

Overweight and Obesity

Overweight refers to an excess of body weight in relation to height, as established by an objective standard such as the Body Mass Index (BMI), which lists weight levels associated with the fewest risks to health.

Obesity refers to an excessive amount of body fat in relation to lean body mass.

Source: National Centers for Disease Control and Prevention,
www.cdc.gov/nccdphp/dnpa/obesity/defining.htm

*United States Department of Health & Human Services, [HHS], Office of the Surgeon General, 2001, and Torgan, 2002

In response to educators' need to maximize the school day to help children excel academically, the Education Through Movement (ETM) training program offers a series of innovative, research-based movement and music techniques through which healthy physical activity becomes a part of children's everyday learning and a means of reinforcing academic concepts. The ETM training helps teachers identify times during the day when movement can be used to help children burn calories.

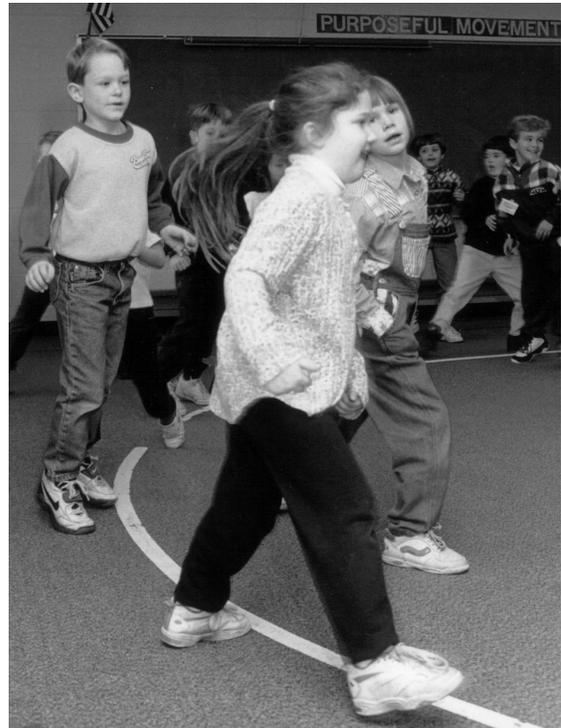
Teachers also learn strategies for using movement during transition times and other segments of the school day to help children refocus and sharpen their attention. For example, as children are moving from one activity to the next, they can march in steady beat to words set to a familiar tune such as "The Farmer in the Dell." A child who volunteers to be the leader chooses and demonstrates how everyone will march to the melody. In another transition activity, children can move to music in a parade line around the space. A child volunteer leads the parade line, demonstrating to the rest of the class how to place their hands on their shoulders, hips, head, and so on. A new leader can take over each time the music stops and restarts.

Teachers participating in ETM training

- ▶ Learn and practice curriculum-appropriate activities that can be used during classroom time and transition times
- ▶ Participate in day-long training with staff, followed by interactive classroom demonstrations with children
- ▶ See activities modeled by a movement and music trainer
- ▶ Develop and share their own classroom activities and techniques to use during class transitions

Teaching children to be active learners is very important to helping them develop positive, life-changing behaviors. Considering the many hours children spend in school and classrooms, it is very important for teachers to model and experience physical activity for and with children. This might be the most promising venue for making a large-scale impact on children's health. While ETM can benefit children at any age, it is particularly recommended for use in preschool and early elementary (K–2) classrooms—where the potential is greatest for long-term positive changes in behavior.

According to the authors of a research article appearing in the *Journal of the American College of Sports Medicine*, one consistent observation stands out among the studies of energy expenditure in young children: Youngsters under the age of seven seem to expend about 20 to



Not only is physical activity healthy and fun for children but it also helps them refocus and sharpen their attention.



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30 percent less energy in physical activity than the level recommended by the World Health Organization (American College of Sports Medicine [ACSM], as cited in Pica, 2004). At a childhood obesity conference sponsored by the North Dakota Department of Health, Dr. Samuel Abbate commented, "The consequences of denying the body exercise are just as severe as depriving it of food, water, or oxygen; it just takes longer to see the consequences" (Pica, 2004).

Teaching healthy behaviors at a young age is important to encouraging lifelong healthy habits. Positive behaviors involving physical activity and nutrition can prevent obesity in children and adolescents, and families and schools are the two most critical links for reinforcing those behaviors. By integrating physical activity throughout the day with classroom learning, educators using ETM have a powerful method for furthering academic goals while addressing the problem of childhood obesity.

References

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