

CHILDHOOD OBESITY: A GROWING PHENOMENON FOR PHYSICAL EDUCATORS

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The greatest health risk facing children today is not a terrible disease as Leukemia or unthinkable trauma such as abuse. It is obesity. The prevalence of childhood obesity in the United States has risen dramatically in the past several decades (Wilmore, 1994). Twenty-five percent of American children are obese. Of those 25 percent, 80 percent are destined to become obese adults (Epstein, Wing, Koeske, & Valoski, 1987). Obesity is defined as an excessive accumulation of body fat. Obesity is present when total body weight is more than 25 percent in boys and more than 32 percent fat in girls (Lohman, 1987). Factors associated with obesity include genes, domestic environment, health, psychological influences, hypothyroidism, Cushing's syndrome, lifestyle and eating habits. These factors are definitely related to obesity, but research has shown that the environment is the most critical factor (Coates & Thorensen, 1978; Collipp, 1980; Rasmussen; 1976).

Children on the average spend up to five or six hours a day involved in sedentary activities, including excessive time watching television, using the computer, and playing video games. To make mat-

ters worse, children are bombarded with well-crafted television ads from fast food chains and other purveyors of high fat, high sugar-meals or snacks (Dietz & Gortmaker, 1985). Recent reports have suggested that children age two to six who watch television are more likely to choose food products advertised on TV than children who do not watch such commercials (Epstein, 2001; Bowser, 2001). Unhealthy weight gain due to poor diet and lack of exercise is responsible for 300,000 deaths each year and cost nearly 100 million dollar per year for medical care (Wilmore, 1994).

Invariably, an increase in obesity appears to be the trend. According to the Lifestyle Research Institute (1988), most overweight children will likely become overweight adults. The study also found that obesity in children age 7 to 12 increased more than 50% between 1981 and 1988. According to the National Stroke Foundation (1999), obesity must be considered a high priority among teachers, parents, and health organizations. The Foundation's findings of one in four children who are obese should be an urgent call for concern.

Emphasizing Positive Attributes

Quality physical education programs can serve as major components to reduce the incidences of childhood obesity. The physical educator is a vital part of a school's interdisciplinary team.

Curriculum concerns for the obese should include instructions in nutrition, individual and group counseling, exercise classes, and eating control. Emphasis is placed on involvement, self-control, fostering acceptable attitudes, and instilling positive self-perceptions. The school's nurse, guidance counselor, administrator, and child's parents play crucial roles as team members. They all are needed in assisting the child in setting short term and attainable goals.

It is rare that physical educators don't come in contact with students who fall in the category of being obese. Quite often, the obese child experiences frustration in physical activities, is ridiculed by his or her peers, chosen last for teams, and thus, establishes a negative attitude toward physical education and school in general (Pangrazi, 2004; Siedentop, 2004). Some children go through periods of withdrawal and indulge in antisocial behavior. A cycle, vicious in nature, results in increased frustration and isolation, causing greater withdrawal, and as a substitute for acceptance and activity, eating is sought for comfort and satisfaction. In trying to encourage a positive attitude toward exercise and fitness, the creative physical educator can try several approaches. One would be to offer programs involving maximum participation so that all students are working at the same time. If all are busy and occupied in working on skills, there is

little time to judge peers. This style of teaching allows students to gain self-confidence and work at a suitable pace. Another approach would be to orient class sessions toward achievement and maintenance of physical fitness levels. Exercise regimens could be individually prescribed and followed. Success would be measured on the basis of individual progress and not on group comparison. The physical educator is often admired and well-liked by the elementary age child. The teacher can take advantage of this admiration to provide individual counseling for children who need help. With assistance from the school nurse-teacher, the physical educator can help the child work out a diet and exercise program for home use. By talking with the child, the physical educator can determine what physical activities opportunities exist for the child in the home situation and can assist the child in designing an exercise program that the child can actually follow. Simply telling an individual what should be done is not likely to result in success, but if the individual is involved in the planning and selecting of activities, it is more likely that he or she will be an active participant. If activities are geared toward the child's abilities, then he or she would display a higher degree of self-confidence and motivation. In selecting activities, it is important to include a wide variety of activities and skills, since this will allow for a greater likelihood of success and participation.

Effective Treatment Interventions

Programs designed to treat childhood obesity should be consistent and adequately enforced.

Setting weight loss goals should be small, so that the child doesn't become overwhelmed or discouraged. A weight loss rate of two to four pounds per month could be a target goal. Goal setting can serve as the motivating factor in maintaining a positive attitude and increasing a child's self-confidence.

A food diary can be useful to keep up with the type and quantity of food eaten. Children can readily observe their eating habits, engage in calorie counting, and make decisions about reducing problem foods. Parents should assist their child with balancing calories through both diet and exercise. Helping parents to help children with weight control problems involves defining the problem, giving information and feedback, teaching reinforcement strategies, and giving psychological and moral support. Also, the social environment has a powerful impact on eating behavior and physical activity habits, particularly when these activities occur primarily in social settings such as family dinners, group outings, school lunches, recess, and recreational times. Obese children need help to cope with these difficult situations.

The physical education program can be an invaluable source of support and knowledge for the obese child. Research by Seltzer and Mayer (1970) observed modest weight loss in elementary and middle school students in a five month, three classes per week program, combining exercise, nutrition education, and psychological support. Botvin (1979) reported significant weight loss in adolescents who participated in a 10-week program which demonstrated a significant decrease in

weight and reversed the steady weight gain which had occurred in three years prior to program participation. When it comes to physical performance, obese children require a higher oxygen uptake capacity to perform a given activity. Obesity takes a great toll on children's cardiorespiratory fitness because they must perform at a higher percentage of their maximal oxygen uptake (Bar-Or, 1983). Therefore, it is unrealistic to expect obese students to perform on the same level as their non-obese counterparts. Exercise prescriptions in schools for obese students should focus on caloric expenditure rather than to improve cardiorespiratory fitness (Rowland, 1991). A major focus should be on the amount of time the child engages in activity, and moderation should be favored over intensity.

Childhood obesity is not a problem that will disappear. If we are to succeed in making real progress in combating the obesity epidemic, we must teach children that being active is as important as math or writing. Every school aged student should have access to regular physical education. We will not be able to reach the Surgeon General's new Healthy People 2010 goals if administrators and state legislatures continue to scale back on physical education in order to balance budgets. Physical education programs throughout the country must take a proactive approach in combining fitness, counseling, dieting, and nutrition to assist children who suffer from obesity. At the same time, parents involvement can provide the support to encourage their child to remain positively motivated. The importance of a healthy body cannot be minimized, and as interdisciplinary team

leaders, physical educators can make positive strides to help obese children reach their lifetime health and fitness goals.

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