Child Obesity Prevention and Intervention:

A Family Business

by Kate Goldhaber, PhD

THE Family INSTITUTE AT NORTHWESTERN UNIVERSITY

Our mission is to strengthen and heal families from all walks of life through clinical service, community outreach, education and research. The rate of childhood obesity has risen dramatically over the past twenty-five years - an alarming trend when considering its adverse effects on physical, psychological and social functioning. Childhood obesity is associated with health problems such as hypertension, type 2 Diabetes and coronary heart disease, and psychological problems including low self-esteem, poor body image and depression. Furthermore, the social stigma of obesity puts overweight children at risk for discrimination, teasing, bullying and isolation. Although obesity can stem from genetic, environmental and psychological factors, research suggests that the primary cause of childhood obesity is fairly simple: children are taking in more calories than they are burning. In an environment characterized by super-sized portions and sedentary lifestyles, it is challenging for children to maintain healthy weights.

While the increasing prevalence of childhood obesity is troubling, there is good news for concerned parents. Research suggests that family-based approaches are among the most successful in intervening and/or preventing childhood obesity. Parents can influence their children's caloric intake and energy expenditure by controlling the home environment, providing education and support, and modeling healthful behaviors. In fact, a 1998 study by M. Golan and colleagues found that treatments that involve only the parent are associated with better childhood weight control than those treatments that involve only the child.

In addition to their increased effectiveness, family-based interventions are also more sensitive for children. Rather than singling out overweight children for special diets and exercise regimens, all family members are encouraged to develop more healthful habits. This approach protects overweight children from experiencing stigma and isolation in their families.

Family-Based Interventions for Increasing Physical Activity

In the recently published *Best Practices in the Prevention and Treatment of Childhood Obesity*, Michael Coles, PhD, and Wade Gilbert, PhD, recommended that youth complete at least sixty minutes of moderate to vigorous physical activity each day. "Moderate" intensity activities include brisk walking, swimming or mowing the lawn, while "vigorous" intensity activities include jogging, aerobic dance or cycling uphill. Unfortunately, less than 5% of the nation's schools require daily physical education and, of those that do, it is estimated that students are inactive for 50% of class time. Thus, it is important for parents to ensure that children are physically active at home or in extracurricular activities.

An important step in increasing children's physical activity is to limit their "screen time," or time spent in front of televisions, computers and/or video games. Researchers have found a correlation between time spent watching television and obesity. This is not surprising, given that television viewing decreases time available for physical activity and encourages unhealthful eating patterns in its commercials. A 2001 study by R.S. Strauss found that 90% of foods advertised on television are high in fat, sugar and salt. Thus, a child who spends hours in front of the television is inundated with prompts to snack on energy-dense foods. Eventually, the television itself can become a conditioned stimulus for snacking – similar to always eating popcorn at the movie theater.

In 2004, the Robert Wood Johnson Foundation estimated that the average child engages in four hours of screen time per day. Results from a child obesity intervention study suggests that simply reducing this time will likely result in weight loss. In a 1991 laboratory study, L. Epstein and colleagues found when they limited obese children's access to sedentary activities, these children increasingly chose to engage in physical activities. In 1995, they explored this finding in a real-world setting by examining how different reinforcement patterns influenced obese children's weight. They compared the effects of rewarding them for exercising, reducing time spent being sedentary and a combination of both. Interestingly, they found that children who were rewarded for reducing sedentary behaviors had the best outcomes - better than those who were rewarded for exercising, and better than those who were rewarded for both exercising and reducing sedentary behaviors. This study has two important implications. First, simply rewarding children for exercising is not ideal because excessive sedentary behavior may counteract its effects. Second, parents should be wary of rewarding children for exercising. When children exercise in response to rules and rewards, they are less likely to see themselves as intrinsically motivated to be active. In other words, they may come to see physical activity as a chore, akin to cleaning their rooms to earn allowance or avoid punishment, rather than as a pleasurable, chosen pursuit. Thus, the best strategy for promoting weight loss is to limit children's sedentary behaviors in the hope that they will choose physical activities as an alternative.

To facilitate children's replacement of sedentary behaviors with physical activity, parents should set up opportunities for physical activity. For example, they can provide athletic equipment such as bicycles, roller skates and jump ropes. They can also arrange outings to parks or swimming pools, and encourage participation in school and community activities. Parents may also involve children in active household chores such as walking the dog, raking leaves or painting. It is also important for parents to model an active, healthful lifestyle.

Family-Based Interventions for Improving Diet

Research indicates that the best approach for influencing children's diets is to create an environment that facilitates making healthful choices. Given that parents cook meals, purchase meals and do the grocery shopping, they largely determine what food items are available at home. Thus, they can avoid getting into power struggles over what children eat by providing a variety of healthful options and keeping junk food out of the home. After all, a child cannot snack on chips and candy without a junk food-stocked pantry. Taking this approach will limit conflict around eating and also help children learn to regulate their own diets. Parents are encouraged to utilize the food pyramid for general guidelines about what constitutes a healthy diet. Basic principles include providing a variety of foods, offering ample grains, vegetables and fruits, and limiting fat, saturated fat and cholesterol.

In addition to creating a facilitative environment, it is important for parents to model healthful behavior in their food selections, portion sizes and eating patterns. If children see parents snacking in front of the television, they will likely adopt this habit. Research has shown that parental diet and television practices both influence child weight.

Parents may also influence children's relationship with food, through both reinforcement and modeling. Children will be most successful in maintaining healthy weight if they eat – and stop eating – in response to the physiological cues of hunger and satiation. Thus, with notable exceptions (birthdays, Halloween, special outings, etc.), parents should

avoid rewarding children with food. Parents are encouraged to generate a list of non-edible rewards with their children, which might include material items as well as fun family activities. Similarly, parents should avoid consoling children with food. Rather, they should talk with children about their problems, and/or engage them in activities that lift their spirits. This response will help prevent children from learning to use food for emotional comfort as they get older.

Just as it is important for parents to model a healthful diet, it is also important to model a healthy relationship with food. If parents eat in response to stress or sadness, children may imitate these practices.

A Caveat for Parents

As parents try to encourage healthful eating and exercise habits, they must be careful not to inadvertently create preoccupation with thinness or body image concerns. Parents can take a few precautions toward this end. Parents are encouraged to focus on health, not appearance. They should talk with their children about the health risks associated with obesity rather than the social costs. Similarly, they should reinforce making diet and exercise choices that

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promote fitness and overall good health rather than focusing on weight fluctuations. Along those lines, parents should not moralize food, but evaluate it in terms of its nutritional value. For example, fattening foods should not be regarded as "bad," but simply as "high in fat," and thus to be consumed in moderation. Parents should also avoid making comments about food "being bad" when they indulge in high calorie foods or food "being good" when they eat in healthy ways. This can create an environment of shame around eating, which can contribute to unhealthful patterns.



Author Biography

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