

Childhood Obesity

Introduction

The global presence of overweight and obesity has reached epidemic levels over the last few decades, most notably in the United States. From 1980 to 2004, the prevalence of overweight and obesity in children more than tripled, rising from 5 to 15 percent. Children whose parents are overweight or obese have a greater chance of being overweight and obese themselves. Overweight children and adolescents are more likely to become obese adults.

As a result, we have observed an increase in the diseases (“comorbidities”) that had traditionally been viewed as “diseases of aging” which are now appearing in children: type 2 diabetes, high cholesterol, hypertension, cardiovascular disease, sleep apnea, and orthopedic problems. In addition, psycho-social problems such as low self-esteem and teasing from peers may cause life-long damage to children. There is now a generation of children who may not outlive their parents due to overweight and obesity unless we reverse this trend.

Definition of Overweight & Obese

It is no longer “cute” to have overweight children since they seldom out-grow it. Assuming parents take their children to annual well visits they can check with their pediatrician or school nurse to determine if there is cause for alarm.

The American Academy of Pediatrics and the Centers for Disease Control and Prevention recommend the use of [Body Mass Index \(BMI\) adjusted for age](#) to screen for overweight and obesity in children and teens ages two through 19 years. BMI, by itself, is not a diagnostic tool but can be used by physicians and other healthcare professionals as a marker. Children often follow their own growth curve. If your child has been in the 85th to 95th percentile, they are considered “at risk” for overweight. Children who are \geq 95th percentile are considered overweight. The term obesity is controversial as a diagnostic term in children and adolescents.

Multifactorial Dilemma

Overweight and obesity are caused by an energy imbalance where calories consumed exceed calories expended throughout the day. This leads to an increased fat storage in the body. Sedentary lifestyles have contributed to this problem particularly with increased “technology” time (television, computers, and video games) and lessened time spent in activities and moving about. This includes time spent at schools. Daily physical education has frequently been sacrificed to allot time for the concept of “no child left behind,” which has been implemented in many communities. Even though research shows that children who are more physically active perform better academically, physical education programs are often the first programs to go when school budgets are cut.

In some communities, the environment that has been constructed is not conducive to recreation; there is often a lack of sidewalks and/or safe parks and playgrounds. When the time constraints of working parents are factored in, the opportunities to provide opportunities for children to have additional physical activity decreases.

Finally, children currently consume foods that are high in calories, but low in nutrient quality. Many of these foods contain fewer vitamins, minerals, fiber and protein than are recommended and have a higher fat content. Families currently tend to eat more packaged, processed and pre-prepared foods, which gives them less control over the ingredients, rather than making meals from wholesome ingredients.

Prevention and Treatment of Childhood Obesity

Families and communities should work toward preventing obesity in the first place. Family behavioral intervention must begin when a child is first identified as “at risk” for overweight. Parents and caregivers need to be educated to lead by example, as healthy lifestyle choices impact everyone.

For some children, maintaining body weight and waiting for their height to “catch up” has been the norm. However, in part due to lack of regular physical activity, weight loss may also be necessary to prevent the likelihood of comorbidities.

Technology time should be restricted to no more than two hours per day. In addition, making sure children have at least nine hours of sleep is vital for growing bodies to rest, renew and repair. Education, participating in physical activities, healthy diets and regular health check-ups can aid in prevention and treatment of overweight and obesity.

Education

Children are bombarded with messages on television in a manner that are often more effective at communicating to them than parents can. This includes television program content along with commercials that are often for fast-food or low-nutrient quality foods. Their environment is frequently determined by parents and caregivers; many children who are overweight and obese have one or both parents in the same situation. Adults have a difficult time decreasing body weight, so it is understandable that families have difficulty losing weight. Parents need to lead by example and engage in regular physical activity and make more healthful food choices.

Physical Activity

Physical activity has a positive effect on health and is an essential component in prevention and treatment of overweight and obesity. Physical activity can help to lower blood pressure and cholesterol, decrease fat deposition and help to maintain body weight. Physical activity is important to growth and development of the cardiovascular system, increasing bone density, and improving muscle health. Like adults, children should be physically active most days of the week. Sixty minutes of moderate physical activity daily for children is recommended by the National Association for Sport and Physical Education, the U.S. Department of Health and Human Services and the National Institutes of Health.

Types of Physical Activity

There are many ways to get children and families moving: walking, biking, dancing, jumping rope, basketball, Frisbee, and skating all count! Families can spend active time together visiting playgrounds, parks, museums and zoos. Consider taking active vacations together that include hiking, biking, walking, boating and swimming. Involve children in household activities like walking the dog, washing a car, raking leaves, lawn-mowing and shoveling snow. Physical activity is an essential part of a healthy lifestyle for the entire family.

Dietary Practices

Children who are overweight and obese need to reduce their daily caloric intake while maintaining a diet that is balanced in nutrients to encourage proper growth and development. Choose foods that are wholesome: fruits, vegetables, low-fat or fat-free dairy, high-fiber grains, and lean proteins. You may consult the US Dietary Guidelines at www.mypyramid.gov for more information. Consider finding a registered dietitian (RD) in your community for individualized recommendations and guidance (www.eatright.org).

Summary & Conclusions

The prevalence of overweight and obesity continues to threaten the health and well-being of children across the globe. There is a need for parents, caregivers, physicians and schools to identify children who are “at risk” and initiate lifestyle changes to prevent further escalation of health problems. Lifestyle modifications, as suggested here, can be part of prevention and treatment for overweight and obesity. This trend can be reversed, but not only does it take a village to raise a child - that same village needs to ensure that the child is healthy and well.

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