

RESEARCH FACTS and FINDINGS

A collaboration of Cornell University, University of Rochester,
and the New York State Center for School Safety

Childhood Obesity

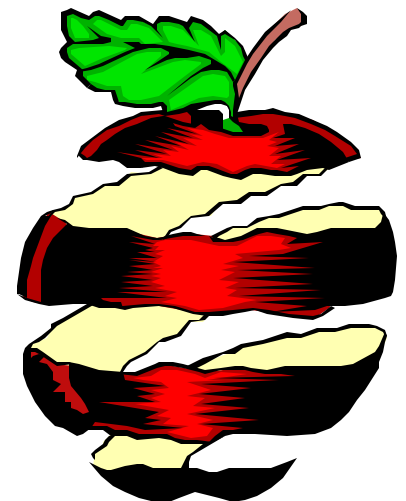
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Over the past few years, much has been written about childhood and adolescent obesity. A recent article in the Journal of the American Medical Association reported that 15% of 6-19 year olds (almost 9,000,000) in the U. S. are overweight, and that rates of childhood obesity have been steadily increasing since the 1970's (Ogden, et. al., 2002). This increase in obesity has raised concerns regarding both the physical and psychological health of our nation's youth.

How this came about The National Institute of Diabetes, & Digestive & Kidney Diseases (NIDDK), National Institutes of Health, report that children become overweight for the same reasons adults do—expending less energy than is consumed through food. While genetics certainly plays a role in obesity, it cannot account for all the increase our country has seen in children and adolescents who are overweight or obese. This increase cuts across all ages and racial groups in the U.S. (NIDDK, 1998). Socioeconomic status and gender also play a role in obesity; women of all races who are of low socioeconomic status are approximately 50% more likely to be obese than those of higher socioeconomic status. The United States is not alone in this problem. Dramatic increases in the number of people who are overweight or obese has also been reported in Canada, Australia, and many European countries (Eberstadt, 2003).

According to the Centers for Disease Control (CDC), several environmental factors have contributed to rising rates of obesity among youth, including *more hours spent in sedentary activities* such as watching television and playing computer or video games, and the *availability of fast foods and the super sizing of fast foods* that lead to diets high in fat and sugar. Two other issues contributing to childhood obesity that are being looked at more closely by researchers are urban sprawl and the high percentage of both parents, and in particular, mothers working outside the home.

Urban sprawl is characterized by housing developments that are built outside of city centers in remote or rural areas, usually off highways, where residents must drive to get to school, work, or shopping. Partly in response to the increase in obesity among Americans of all ages, there is more interest among urban planners, fitness professionals and others to change the way we live. Referred to as "smart growth" this movement advocates building neighborhoods with sidewalks and bike lanes in closer proximity to schools, shopping and workplaces. It is hoped that these types of neighborhoods will naturally encourage a more active lifestyle. Advocates hope that making the connection between urban sprawl and obesity will lead to more attention and financial support to this issue. (Macaluso, 2003) Safety is another neighborhood issue that inhibits physical activity among children. Some inner city neighborhoods may have sidewalks and be located near shopping and schools, but crime and violence concerns keep children indoors.



A recent study from the National Bureau of Economic Research on the relationship between *mother's employment outside the home and childhood obesity* found a direct, causal relationship between more intensive maternal work hours and overweight children. Mothers who work more hours per week were more likely to have an overweight child than mothers who worked fewer hours or who didn't work at all. This trend was particularly evident for children of white mothers, of educated mothers, and of high-income mothers. Since the 1970's maternal employment has more than doubled, and childhood obesity has more than tripled. The researchers theorized that time constraints for working families may lead them to rely more on prepared or fast foods, which are more likely to be high calorie. Children in childcare settings may learn to eat on a time schedule, rather than when they are naturally hungry. Children who are unsupervised when they come home from school may eat less nutritious snacks and spend more time watching television or playing computer games (Anderson, et. al., 2002)

What can parents do? Parents should engage in and encourage their children to engage in regular physical activity. The benefits of regular physical activity include (CDC, 2000):

- Improving strength and endurance
- Helping to build healthy bones, muscles and joints
- Helping to control weight, build lean muscle, and reduce fat
- Reducing anxiety and stress, increasing self-esteem and overall energy level
- Preventing disease and promoting health

Physical health risks of obesity Similar to overweight adults, overweight children and youth are at higher risk for a number of health problems. According to the U.S. Surgeon General, risk factors for heart disease such as high cholesterol and high blood pressure occur at higher rates in overweight youth than in youth who are not overweight. The number of children and adolescents being diagnosed with Type 2 diabetes, previously considered an adult disease, has increased dramatically. Overweight children have a 70% chance of becoming overweight adults. This risk increases to 80% if one or more parent is overweight. Adults and children who are overweight are also at increased risk for problems such as sleep apnea, asthma, arthritis, gall bladder disease, and certain types of cancer. (US Surgeon General, 2001)

Cost to society According to researchers from RTI International and the CDC, medical expenditures resulting from the treatment of obesity-related diseases are significant. Their analyses showed that approximately 78.5 billion dollars or 9.1% of annual medical spending is attributable to overweight and obesity. These numbers rival that attributable to smoking which ranges from 6.5% to 14.4% of annual medical spending, depending on the source. (Finkelstein, et. al., 2003)

Parents can also positively influence the way their family eats.

The healthy eating guidelines below are recommended by the U. S. Surgeon General's office:

- Eat a healthy breakfast
- Encourage your child to eat when hungry and to eat slowly
- Eat meals together as a family as often as possible
- Carefully cut down on the amount of fat and calories your family consumes
- Guide your family's choices rather than dictating foods
- Don't place your child on a restrictive diet

- Avoid the use of food as a reward
- Avoid withholding food as a punishment
- Encourage children to drink more water and fewer beverages with added sugars such as soft drinks and sports drinks
- Stock the refrigerator with healthy snacks, low fat milk, fruits and vegetables
- Discourage eating meals or snacks while watching TV

Psychological health risks of obesity While the physical health risks of obesity are significant so are the psychological ones. Studies have shown that children express negative attitudes toward their obese peers as early as kindergarten, and there is a clear association between obesity and low self-esteem, especially in adolescents. (Moran, 1999) A study on childhood obesity and self-esteem (Strauss, 2000) found a significant relationship between obesity and lowered self-esteem in early adolescence. Young obese adolescent white females had the lowest levels of self-esteem, followed by obese Hispanic females. Obese children with lowered self-esteem have increased levels of sadness, loneliness and nervousness. They also are more likely to engage in high-risk behaviors such as smoking and drinking alcohol.

Importance of Exercise A new study from nutrition researchers at UNC-Chapel Hill asserts that lack of physical activity and not increased caloric intake is responsible for the growing rate of obesity among youth aged 12-19. Dr. Lisa Sutherland, in an analysis of federal health data, found that from 1980 to 2000, obesity increased 10%, physical activity decreased 13% and caloric intake increased 1%. In the past, efforts to deal with the problem of obesity has focused on diet, but there is increasing evidence that physical activity plays a significant role. Dr. Sutherland stated that their analyses demonstrate that “policy focused heavily on restricting certain foods is failed policy. We should not have a discussion about the causes of obesity without talking about physical activity. Unless we get our children moving, we will be unable to make any significant progress in terms of weight management. (Tanson, 2003)”

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<http://www.human.cornell.edu/actforyouth>

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