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Report # 67

Childhood Obesity: Trends and Causes

July 2005

America's Overweight Children

Obesity On The Rise

Poor diet, inactivity, TV among the reasons why

Childhood obesity is fast becoming an American crisis. The rate of overweight teenagers tripled in the past 30 years and more than doubled among 6-11 year-olds – placing these children at high risk for problems ranging from Type II diabetes to being bullied.

The reasons for this alarming trend are many. Too much television and too little exercise, diets heavy with fast food, and parents who are overweight themselves are among the chief contributing factors. And no child is immune. Although minorities and the poor are more likely to be overweight, the unhealthy trend is seen among children of every race, culture, and economic class.

In the U.S., 15% of children ages 6-19 years old are at or above the 95 percentile of Body Mass Index (BMI), a measure of body weight adjusted for height.¹ Rates among teenagers jumped to 15.5% in 2000 and to 15.3% among children between the ages of 6-11 years.

The dawn of the 21st Century saw the trend continuing as childhood obesity rates rose to 16.5% of all U.S. children in 2002.² Although older children are the ones more likely to be overweight, the rate of overweight preschoolers ages 2-5 years is still an alarming 10.4%.³

Among minorities and the poor, the problem is worse. For example, more than 26% of African-American girls ages 12-19 are overweight and teenagers from low-income families are twice as likely to be overweight than teens from higher income families.⁴

Among industrialized nation's, America's 13-15 year olds have the

highest rates of being overweight.

Weight gain comes down to a simple mathematical formula – more calories are consumed than the body uses. In recent years, the average caloric intake of American children has increased by 80 to 230 calories, depending on activity level.⁵

Driving this increase are factors related to eating habits, lifestyles, and family and societal influences.

Unhealthy Diet

U.S. children do not eat a healthy diet. For example:

- Only 2% of children 2-19 years old eat a healthy diet as defined by the Food Guide Pyramid and 75% of all children eat more saturated fats than recommended.⁶
- Children consume twice as much soft drinks than milk.
- They eat fewer home-cooked meals and more fast food. From 1977-

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1996, the daily percent of food eaten at home decreased from 74.1% to 60.5%⁷ – a trend that suggests they are eating higher levels of fats, sugars, and carbohydrates and fewer fruits and non-starchy vegetables, and milk.

Inactivity A Problem

At the same time children are increasing their calorie intake, they are becoming less active. In fact, the National Health and Nutrition Examination Surveys suggest that a lack of physical activity may be the chief cause of childhood obesity.⁸

The President's Council on Physical Fitness and Sports reports that only one half of youths ages 12-21 years get regular physical activity and 25% of youths report no vigorous physical activity.

Hours Of Television

Watching too many hours of

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television or playing computer or video games among them also contributes to inactivity, poor diets, and weight gain.

- Girls who watched more than four hours of television a day, for example, were found to be more likely to be overweight than girls who watched less than four hours⁹ – a finding possibly related to the extra 175 calories per day girls consumed while watching five or more hours of television.
- The time young children spend watching television increases as they age. One-year-olds were found to watch 11 hours per week on average and four-year-olds watch on average 18 hours per week. As the hours increase, so does the risk that preschoolers will become overweight.¹⁰
- Watching television while eating effects what children eat. Children who eat meals while watching television tend to eat more meat, pizza, snack foods, and caffeinated drinks and fewer fruits, vegetables, and juices than children who do not eat meals in front of the TV.¹¹

Family Influences

Several factors within the family are linked to childhood obesity as well.

Children in low-income families are more likely to be overweight, which may be related to the economics of food. Poverty and food scarcity are associated with eating fewer vegetables and fruits and more less-expensive, energy-dense foods such as those made with refined grains and added sugars and fats.¹² Children from low-income families, in general, also spend more time watching television than children from higher income families.

Having obese parents raises a child's risk of being obese. Among pre-

pubescent girls, having two obese parents is associated with having a BMI twice that of girls with two lean parents.¹³ For children under the age of 10 years, having an obese parent doubles their risk of being obese as adults.

Being overweight as a child invites risks to physical and emotional

health, which jeopardize outcomes into adulthood.

The good news is that childhood obesity is a preventable problem – one that studies show can be addressed effectively at home, school, and in the community.



references

References noted in the text follow:

- ¹ Center for Disease Control and Prevention (CDC). (2003). Table 71: Overweight children and adolescents 6-19 years of age, according to sex and age, race, and Hispanic origin: United States, selected years 1963-65 through 1999-2000. In *Health Issues in the United States, Data from the National Health and Nutrition Examination Survey*, p. 215.
- ² Hedley, A., Ogden, C. L., Johnson, C. L., Carroll, M. D., Curtin, L. R., & Flegal, K. M. (2004). Prevalence of overweight and obesity among US children, adolescents, and adults, 1999-2002. *Journal of American Medical Association (JAMA)*, *291*(23), 2847-2850.
- ³ Ogden, C. L., Johnson, C. L., Carroll, M. D., & Flegal, K. M. (2002). Prevalence and trends in overweight among US children and adolescents, 1999-2000. *Journal of American Medical Association (JAMA)*, *288*(14), 1728-1732.
- ⁴ Center for Disease Control and Prevention (CDC), loc. cit.
- ⁵ Philipson, T., Dai, C., Helmchen, L., & Variyam, J. N. (2004). The economics of obesity. *Economic Research Service*.
- ⁶ USDA, Office of Analysis, Nutrition and Evaluation. (2001). Changes in children's diets: 1989-1991 to 1994-1996. Washington, DC: USDA, Report No. CN-01-CD1.
- ⁷ Caballero, B., Clay, T., Davis, S. M., Ethelbah, B., Rock, B. H., Lohman, T., Norman, J., Story, M., Stone, E. J., Stephenson, L., & Stevens, J. (2003) Pathways: A school-based, randomized controlled trial for the prevention of obesity in American Indian school children. *American Journal of Clinical Nutrition*, *78*, 1030-1038.
- ⁸ Troiano, R. P., Briefel, R. R., Carroll, M. D., & Bialostosky, K. (2000). Energy and fat intakes of children and adolescents in the united states: Data from the national health and nutrition examination surveys. *American Journal of Clinical Nutrition*, *72*, 1343-1353.
- ⁹ Crespo, C. J., Smit, E., Troiano, R. P., Barlett, S. J., Macera, C. A., & Andersen, R. E. (2001). Television watching, energy intake, and obesity in U.S. children. *Archives of Pediatrics and Adolescent Medicine*, *155*, 360-365.
- ¹⁰ Wang, G., & Dietz, W. H. (2002). Economic burden of obesity in youth aged 6 to 17 years: 1979-1999. *Pediatrics*, *109*(5), 1-6.
- ¹¹ Coon, K. A., Goldberg, J., Rogers, B. L., & Tucker, K. L. (2001). Relationships between use of television during meals and children's food consumption patterns. *Pediatrics*, *107*(1), 1-9.
- ¹² Drewnowski, A., & Specter, S. (2004). Poverty and obesity: The role of energy density and energy costs. *American Journal of Clinical Nutrition*, *79*, 6-16.
- ¹³ Caballero, et al., loc.cit.

Children, Youth & Family background is published by the University of Pittsburgh Office of Child Development (OCD), a program of the University of Pittsburgh School of Education. These reports are based on available research and are provided as overviews of topics related to children and families.

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