

National Alliance for Nutrition & Activity

Obesity and Other Diet-Related Diseases in Children

Obesity and poor nutrition are major contributors to heart disease, cancer, stroke, and diabetes, which are responsible for two-thirds of deaths in the United States.¹ Major risk factors for those diseases often are established in childhood: unhealthy eating habits, physical inactivity, poor health literacy, and obesity.

Childhood Obesity Is Skyrocketing. Over the last two decades, rates of obesity have tripled in children and adolescents aged 6 to 19 years.² One in seven young people has obesity and one in three is overweight. Children generally do not outgrow obesity: obese 10-14 year olds are 28 times more likely than non-obese children to be obese in young adulthood.³



Obesity Rates Have Tripled in Children and Teens⁴

The Consequences of Childhood Obesity⁵

Physical Health	Emotional and Social Health
Glucose intolerance and insulin resistance Type 2 diabetes High blood pressure High cholesterol Hepatic steatosis Cholelithiasis Sleep apnea Menstrual abnormalities Impaired balance Orthopedic problems	Low self-esteem Negative body image Depression Stigma Teasing and bullying Negative stereotyping Discrimination Social marginalization

Childhood Obesity Causes "Adult" Diseases in Children. One-quarter of children ages five to 10 years show early warning signs for heart disease, such as elevated blood cholesterol or high blood pressure.⁶ Atherosclerosis (clogged arteries) begins in childhood. Autopsy studies of 15 to 19 year olds have found that about 10% have advanced fibrous plaques.⁷

Type 2 diabetes can no longer be called "adult onset" diabetes because of rising rates in children. In one study, the incidence of type 2 diabetes in adolescents increased ten-fold between 1982 and 1994.⁸ Between 2002 and 2005, the use of type 2 antidiabetic drugs increased 166% among 10- to 14-year-old girls.⁹ Children now have a one in three chance of developing diabetes during their lifetime.¹⁰



Poor Nutrition and Childhood Obesity

Few Children Are Eating Healthy Diets. Many children are both overweight and undernourished. According to USDA, children's sodium intake is 214% above the recommended level, 85% of children consume more saturated fat than is recommended in the *Dietary Guidelines for Americans*, and over two-thirds of all foods consumed by school children are foods that are recommended for occasional consumption. At the same time, children have low intakes of vegetables and fruit, and very low intakes of dark green and orange vegetables, legumes, and whole grains. Fried potatoes are the largest contributor to vegetable intakes for school-age children.¹¹

Children Are Eating More Calories. USDA surveys have found that children ages 2 to 18 years consumed an average of 118 more calories per day in 1996 than they did in 1978.¹² An extra 118 calories per day, if not compensated for through increased physical activity,



would translate into an average of 12 pounds of extra weight gain per year. This caloric increase is coupled with high levels of sedentary lifestyles among children.

Children Are Eating Empty Calories. While obesity is a complex, multi-factorial problem, soft drinks and snack foods play a key role. Children who consume more soft drinks consume more calories (about 55 to 190 per day) than kids who drink fewer soft drinks^{13,14} and are more likely to become

overweight.¹⁵ Sodas and fruit drinks are the biggest single source of calories and added sugars in the diets of teenagers.¹⁶ Increases in children's calorie intake during the 1990's were driven by increased intakes of foods and beverages high in added sugars.¹⁷

A study conducted by the Harvard School of Public Health found that for each additional serving of soda or





juice drink a child consumes per day, the child's chance of becoming overweight increases by 60%.¹⁸ A health-education program encouraging elementary school students to decrease soft drink consumption reduced rates of overweight and obesity.¹⁹

Consumption of soft drinks can displace healthier foods from children's diets, like low-fat milk, which can help prevent osteoporosis.^{16,17,20,21,22} The number of calories children consume from snacks increased by 120 calories per day between 1977 and 1996, from 363 calories to 484 calories.²³

For more information, contact either Jennifer Weber at the American Dietetic Association at 202.775.8277 or jweber@eatright.org; or Bethany Hanna Pokress at the Center for Science in the Public Interest at 202.777.8351 or bpokress@cspinet.org.

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