Prevalence of obesity with increased blood pressure in elementary school-aged children.

Figueroa-Colon R, Franklin FA, Lee JY, Aldridge R, Alexander L.

Department of Pediatrics, University of Alabama at Birmingham, Children's Hospital of Alabama 35233, USA.

The objectives of this study were to estimate the prevalence of obesity in school-aged children in Jefferson County, Alabama; to learn when school-aged children become obese; to determine the susceptible groups; and to study the association between obesity and blood pressure. During the school year, 5,953 children, ranging in age from 5 years to 11 years, were screened for weight, height, and blood pressure, using standardized techniques. We found that obesity, defined as > or = 120% of ideal body weight for height, is prevalent in 5-year-old to 11-year-old children. The prevalence of obesity in girls at age 5 was 23% in blacks and 10% in whites, rising to 47% in blacks and 27% in whites by age 11. In boys, the prevalence of obesity at age 5 was 13% in blacks and 6% in whites, rising to 29% in blacks and 22% in whites by age 11. The prevalence of obesity is significantly greater in black than in white children and is also significantly greater in girls than boys. The systolic and diastolic blood pressures were significantly higher in obese than in non-obese children. We conclude that the significant prevalence of childhood obesity and an associated complication, increased blood pressure, emerge in school-aged children. Thus, we recommend investigations of prevention and intervention programs to be used in the school setting.

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