

Trends of Overweight and Obesity in Affluent School Girls of Punjab between 1996 and 2003

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Abstract

To assess the prevalence of overweight and obesity in school girls between 6-15 years of age among the affluent families of Punjab, two studies are compared using body mass index (BMI) as a parameter. The first study done in the year 1996-1997 (Group-I) was compared with the second study in 2003-2004 (Group-II). Group-I had 677 girls and group-II had 727 girls. Overweight and obesity were assessed using age- and sex-specific body mass index cut-off points. Results showed a 10.49% and 13.48% prevalence of overweight and 4.87% and 6.33% prevalence of obesity in girls of group-I and group-II, respectively. This shows that the overall prevalence of overweight and obesity has increased by 2.99% and 1.45%, respectively, in seven-year period. However, the difference in the prevalence of overweight and obesity in the two surveys was statistically non-significant.

Key Words: Body Mass Index, Overweight, Obesity, Punjabi Males

Introduction

Representative data for examining the prevalence of obesity and secular trends in childhood obesity have been collected over the past three decades in many industrialized countries. *Bundred et al. (2001)* studied children of U.K. and observed the prevalence of overweight as 14.7% in 1989 and 23.6% in 1998 while that of obesity increased from 5.4% to 9.2% during this period. Between 1975 and 1995, the prevalence of overweight rose from 10.0% to 16.3% in German boys and from 11.7% to 20.7% in German girls (*Kromeyer-Hauschild et al., 1999*). Among US children and adolescents, the prevalence of overweight, including obesity, has increased from 15.4% in 1971-1974 to 25.6% in 1988-1994 (*Ogden et al., 2002*). In Canada, in 1981, only 11% of boys and 13% of girls were overweight and obese according to IOTF reference while by 1996 these figures reached 33% and 27% for boys and girls, respectively (*Tremblay et al., 2002*).

Data from Brazil and Chile are good examples to show that the rate of increase of obesity among some developing countries is similar or even faster than that in the USA. In Brazil, the prevalence of overweight, including obesity, tripled between 1970's and the late 1990's, increasing from 4.1% to 13.9% among children and adolescents aged 6-18 years (*Wang et al., 2002*). In Japan, between 1974 and 1995, the prevalence of overweight, including obesity, doubled, rising from 5.5% to 10.8% (*Kotani et al., 1997*). Among urban children in China within six-year period between 1991 and 1997, the prevalence of overweight and obesity increased from 7.7% to 12.4% (*Wang et al., 2002*). In Thailand (*Mo-Suwan et al., 1993*), the obesity prevalence increased from 12.2% to 15.6% in two-year period. Only limited data are available on change in prevalence of overweight and obesity with time from Indian subcontinent. *Subramanyam et al. (2003)* reported no significant change in the prevalence rate of obesity in 17-year span among Chennai