

# **Prevalence and secular trends in overweight and obese Taiwanese children and adolescents in 1991–2003**

劉燦宏

Liou TH;Huang Y;Chou P

## **Abstract**

**Objective:** To describe recent trends in overweight and obese schoolchildren in Taiwan using international cut-off points.

**Design:** Three independent cross-sectional surveys were used.

**Participants:** The study enrolled 157 485 students in 1991, 130 770 students in 1997 and 72 789 students in 2003, all aged 6-18 years, from elementary schools, secondary high schools and senior vocational high schools

**Results:** The prevalence of overweight and obese students increased significantly between 1991 and 2003. During this period, the percentage of male overweight and obese students increased from 5.7% to 14.2% and from 7.9% to 17.4%, respectively. The prevalence of female overweight and obese students increased from 11.1% to 13.4% and from 3.1% to 4.1%, respectively. Covariance analysis indicates that both sexes in 2003 had significantly higher percentages of overweight and obese subjects than those in 1991 and 1997 ( $p < 0.001$ ). Additionally, the prevalence of overweight and obese boys was higher than that for girls in each survey ( $p < 0.001$ ).

**Discussion:** Analytical results demonstrate that prevalence and secular trends in overweight and obese Taiwanese children and adolescents increased significantly from 1991 to 2003. Taiwanese boys are more likely to become overweight and obese than their female counterparts.

**Keywords:** Obesity; body mass index; overweight; children