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Downward trends in childhood obesity after 12-year school- and community-based programmes

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There is an urgent need for sustainable programmes that reduce childhood obesity. In two towns in northern France (Fleurbaix and Laventie; FL) a school-based nutrition information programme was initiated in 1992 and was followed by a number of community-based interventions (1-3). The opportunity was taken to measure the outcomes in terms of childhood obesity and overweight over the next 12 years.

The design was a repeated cross-sectional school-based survey. For the school years beginning in 1992, 2000, 2002, 2003 and 2004, the height and weight of all 7-12-year-old children attending school in FL were measured. In 2004 the same assessments were made in two towns (CT) with similar socio-economic characteristics but no intervention.

The OR for the age-adjusted prevalence of overweight were calculated using generalized estimation equations. Comparisons between FL and CT were performed using a multivariate linear regression model, adjusted for height and age, for weight and BMI and with Pearson χ^2 tests for overweight prevalence.

The prevalence of childhood overweight in FL was 11.4% in 1992 and 8.8% in 2004 (NS). Using the 2002 school year as reference the age-adjusted OR for overweight in FL was significantly lower in 2003 (0.65) and 2004 (0.69) for girls only (P = 0.01). The same trend was observed in boys (0.82 and 0.72 respectively). For the 2004 school year the overweight prevalence was significantly lower in FL (8.8%) than in CT (17.8%; P<0.0001).

At the community level it is possible to reverse trends towards increasing overweight. The data suggest that interventions targeting a variety of population groups can have synergistic effects over a long period of time.

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