Downward trends in the prevalence of childhood overweight in the setting of 12-year school- and community-based programmes

In 1992, a nutritional programme was instituted in schools in two towns in northern France, with other community-based interventions after. This study reviews the outcomes of the study following the children for the next 12 years, compared to children in two similar non-intervention schools. This programme was designed to address the rising rates of childhood obesity across the world. Three periods can be distinguished throughout the study: nutrition education in schools (1992-1997); observational study on the determinants of weight changes (1997-2002); physical activity and nutrition education through community-based actions (2002-2007). These periods are respectively named FLVS I through III. At the beginning of FLVS I, the first period, childhood obesity was not considered a public health crisis. Instead of directly addressing childhood obesity, the intervention wished to improve public knowledge of nutrition and improve dietary habits in the home. It notably did not include physical activity (PA) intervention. However, due to increasing public interest, town councils from the intervention communities eventually began to promote PA. At the end of the first intervention, however, there was a non-significant increase in children with overweight from 1992 to 2000. Due to the results of this period of the study, there was an increased awareness of this slight increase. Of note, a lower socioeconomic class was associated with a higher risk of overweight or obesity in intervention and non-intervention children. In 2004, mean BMI and overweight prevalence for both boys and girls in the intervention towns were significantly lower in the intervention towns than in the control towns. This is interesting considering the initial jump in BMI after the intervention.

In summary, after an initial increase in BMI in the intervention towns, “there was a significant decrease in mean BMI and the prevalence of overweight tended to decrease”. In fact, when compared to the towns not participating in the intervention 12 years after the beginning of the interventions, there was a significantly lower prevalence of overweight. Therefore, if there is in fact “a causal link between the interventions and the decrease in overweight prevalence, it is worth emphasizing that a follow-up period of more than 10 years was needed to yield these results”. It must be noted that the long-term effects may be due to support from outside sources, such as parents, government officials, and schools. Community involvement and support may therefore contribute a key role to the success of overweight and obesity interventions.