The Cost and Cost-Effectiveness of a School-Based Comprehensive Intervention Study on Childhood Obesity in China

In two decades, the prevalence of childhood overweight and obesity in China has more than tripled. In addition to being a serious public health threat, the indirect effects of obesity and obesity-related dietary and physical patterns reached 3.4% of the gross national product in 2000 and is projected to reach 8.7% by 2025. Given the ability for schools to reach a vast majority of children, they have been identified as a key setting for public health strategies. The objective of this study was to evaluate the effects and the cost-effectiveness of a comprehensive intervention programme for childhood obesity with combined nutrition education and physical activity, compared to a non-intervention control group.

The authors hypothesised that combined interventions would both be more effective and cost-effective than single nutrition or physical activity interventions. This hypothesis was confirmed through borderline significant difference in change of the overweight and obesity prevalence between the combined intervention and the control group. However, the single interventions yielded no change in BMI reduction. Overall, school-based combined nutrition and physical activity interventions were cost-effective to improve BMI in school children and also had a potential effect on childhood obesity prevention.