How can schools help youth increase physical activity? An economic analysis comparing school-based programs

Increasingly, research suggests that there is a positive association between school-based physical activity and academic outcomes such as academic achievement, better performance in math, reading and English as well as improved attention and concentration. Additionally, levels of physical activity in childhood directly influence health outcomes in adulthood. Given the identified benefits of increased levels of physical activity, this study assessed four types of school-based opportunities to improve physical activity for youth:

1. After-school programmes
2. Before-school programmes
3. Extending the school day to provide 60 minutes of PE
4. Short (10 minutes) in-class physical activity breaks

Given the variety of programmes studied, the cost-effectiveness varied considerably. However, physical activity effectiveness in terms of MET-hours gained was similar across programme types. Consequently, programme cost was a driving factor of cost-effectiveness. The cost-effectiveness was “$0.01 per MET-hour gained for the in-class physical activity breaks assuming DVD players need to be purchased, $0.49 for instructor-led physical activity before school, $0.98 for extended school day with mandatory PE and $10.62 for on-site after school programmes. Overall the evidence points towards the fact that extending the school day to provide 60 minutes of PE as well as short in-class physical activity breaks were the most cost-effective options.