

Cost-effectiveness of a school-based health promotion program in Canada: A life-course modeling approach

Following global trends, the prevalence of childhood obesity has been increasing in Canada. While this has health repercussions, it also has a significant economic impact, with societal cost estimates for obesity in Canada ranging from 1.27 to 11.08 billion Canadian dollars annually. While many factors contribute to this rise in the prevalence of overweight and obesity, inadequate physical activity and poor nutrition have been identified as the underlying causes of obesity. Consequently, interventions promoting active living and healthy learning have been considered as effective, especially when implemented in schools given their ability to reach nearly all children. The APPLE School programme implemented healthy eating and active living policies, practices and strategies while engaging students, parents, schools staff and other stakeholders. The aim of this study was to examine the cost-effectiveness of the APPLE Schools programme following a life-course approach.

Three scenarios were modelled, all of which had favourable cost-effectiveness ratios. Results were stronger when looked at on a longer time-horizons compared to those based on shorter time-horizons. Overall, the study showed that the Apple Schools programme was cost-effective, despite looking solely at effects through changes in body mass index, suggesting that the estimates for the cost-effectiveness ratio per QALY gained may even be conservative. The Apple Schools programme seems to be a cost-effective intervention for obesity prevention and the reduction of chronic disease risk over the lifetime of children.