Systematic review and meta-analysis of school-based interventions to reduce body mass index

The link between childhood and adult obesity has been demonstrated extensively through different studies. Recently, the World Health Organization has identified school-based interventions as necessary to halt the rise of obesity prevalence. Indeed, school has been identified as the ideal setting to deliver public health interventions given their ability to reach all children. The aim of this systematic review was to conduct an up-to-date evaluation of published studies that evaluated the impact of school-based interventions on body mass index of students.

Overall, the studies seem to show that school-based interventions can significantly reduce children’s BMI, especially if they include a physical exercise component. Furthermore, the comparison between interventions administered only to overweight and obese children appeared more effective in reducing body mass index compared to these administered to all children. This updated review suggests that school-based interventions can effectively reduce students’ BMI and evidence points to a sustained benefit after 6-years of follow-up.