

Effectiveness of school food environment policies on children's dietary behaviours: A systematic review and meta-analysis

Children with poor diets are at high risk of developing overweight and obesity. As almost all children eat lunch at school, and a sizeable proportion also receive breakfast, improving food offered in schools may prevent or treat childhood overweight and obesity. Several governments have implemented standards for the nutritional quality of school cafeteria food. The authors “systematically investigated and quantified the effects of school food environment interventions - carefully exploring sources of heterogeneity - including provision of healthful foods/beverages, competitive food/beverage standards, and school meal standards, on habitual and in-school dietary consumption, adiposity and metabolic risk factors in children.”

This article found a total of 91 studies. 40 programmes gave healthy meals or snacks to students directly, 29 developed guidelines for food and drinks offered separately from school meals and 39 implemented guidelines for school meals themselves. While the vast majority did not affect BMI, they did alter children's diets. “Direct provision policies increased fruit intake by 0.27 servings/d [servings per day] and vegetable intake by 0.04 servings/d, but not water intake. Competitive food/beverage standards reduced SSBs [Sugar-Sweetened Beverages] by 0.18 servings/d and unhealthy snacks by 0.17 servings/d. School meal standards increased fruit intake by 0.76 servings/d, reduced total fat intake by ~1.5% energy and saturated fat intake by ~1% energy, and reduced sodium by 170 mg/d.” The authors recommend that future studies focus on healthy foods besides fruits or vegetables and focus on sustainability.

Reference: Micha R, Karageorgou D, Bakogianni I, et al. Effectiveness of school food environment policies on children's dietary behaviours: A systematic review and meta-analysis. PLoS One. 2018;13(3):e0194555. Published 2018 Mar 29. doi:10.1371/journal.pone.0194555