



The process and impact of change in the school food policy on food and nutrient intake of children aged 4-7 and 11-12 years both in and out of school; a mixed methods approach

- School meal provision was introduced in the mid-19th Century as a public health response to under-nutrition of children. In the late 20th Century, the focus for public health shifted as the obesity epidemic in children emerged, and a number of nutrition-related public health initiatives were introduced. One such initiative was the introduction of the school food policy in England in 2006; primary and middle schools were to be fully compliant by September 2009.
- A mixed methods approach was used to collect data at both school and individual level from two age-groups in Newcastle and Northumberland, North East England. Dietary, anthropometric and socio-economic data were collected using identical quantitative methods pre, mid and post-implementation of the school food policy. Data on food eaten at school (school lunch or packed lunch) and throughout the day were collected. A qualitative approach was used to examine the process of implementation of the policy.
- There were significant improvements in the nutrient content of both school and packed lunches in children aged 4-7yrs; the extent of change was greatest in school lunches. There was less evidence of such changes for children aged 11-12yrs.
- The effect of lunch type choice (school or packed lunch) on total dietary intake changed from pre to post-implementation of the school food policy in that those having school lunch had intakes more in line with recommendations. For some nutrients, this was a reversal of intakes prior to the school food policy and demonstrates the impact of the school food policy not only on lunch time intake but also on the total dietary intake of 4-7 yr olds.
- In contrast to our findings in 4-7yr olds there was limited evidence of the effect of school lunch type on the total diet of 11-12yr olds; the exception was in % energy from fat. Mean daily intakes from iron and folate fell from 1999-00 to 2009-10; it is important to note these were both below the Reference Nutrient Intake (RNI) in 1999-00 and remained so in 2009-10.
- The process evaluation suggested that schools coped well with challenges involved in implementing the school food policy. The knowledge and skills of catering staff, their ability to adapt to new processes and ways of working were important factors as was the level of commitment from senior managers. It was evident for both age groups that the food choice available was only one factor in the decision to have school lunch or packed lunch; the dining room experience and encouragement offered to children is part of this choice.
- Our findings, particularly for 4-7yr olds, have demonstrated the potential for school lunch to have a positive impact on the total diet. To maximise this impact there is a need for a concerted effort to ensure full compliance with the policy for all age groups and to encourage and facilitate children to take advantage of school lunch.

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