

Summer Meeting, 4–6 July 2011, 70th Anniversary: From plough through practice to policy

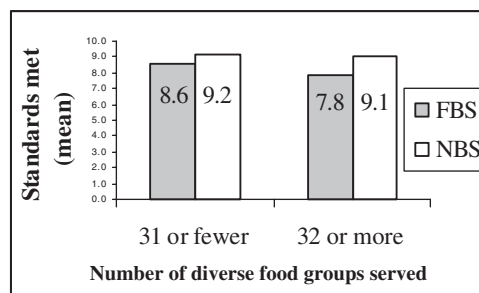
Dietary variety in school lunches in England and the effect on compliance with food-based and nutrient-based standards

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Since September 2008, school food provision in primary schools in England has been required to be compliant with both food-based standards (FBS) and nutrient-based standards (NBS)⁽¹⁾. Since food diversity is seen as a key way to help children to a healthier future⁽²⁾, FBS were introduced alongside NBS as a way of ensuring an adequate variety of food across a school's lunchtime menu cycle. The role of the nutrient based standards is to help ensure that an appropriate nutrient balance is derived from an average school lunch. In order to assess food provision and consumption at lunchtime, as well as assess compliance with the FBS and NBS, the Primary School Food Survey (PSFS)⁽³⁾ was carried out in 2008. The PSFS used a nationally representative sample of 136 maintained primary schools in England. Ethical approval was obtained from King's College London.

Data from the PSFS were used to assess how diversity in food provision affected compliance with the eleven weekly FBS (as detailed in PSFS) and the fourteen NBS. Each food item from the school lunchtime food inventory was grouped into 66 'diverse food groups' (butter, spreads and condiments were excluded). The number of different diverse food groups served per week and the absolute number of items served per week were both significantly negatively correlated with the number of FBS met by schools ($r = -0.42$; $P < 0.001$ and $r = -0.33$; $P < 0.001$, respectively). When both were entered into the same model, the significant predictor was the number of different 'diverse food groups' served. This variable was then used as the basis for dichotomising schools (those serving thirty-one or fewer diverse groups per week and those serving thirty-two or more groups per week). Significantly more FBS were met by schools serving fewer diverse groups (8.6 FBS v. 7.8 FBS; $P = 0.038$). The number of NBS met did not differ with either the absolute number of items or the number of different diverse food groups served.



While the FBS encourage dietary diversity, too much choice appears to be counter-productive. Further support should be given to schools to help them understand the balance between providing variety whilst meeting the FBS.

1. The Education (Nutritional Standards and Requirements for School Food) (England) Regulations (2007) (SI 2007/2359) as amended by the Education (Nutritional Standards and Requirements for School Food) (England) (Amendment) Regulations 2008 (SI2008/1800) http://www.opsi.gov.uk/si/si2007/uksi_20072359_en_1
2. School meals review panel. (2005) Turning the tables: Transforming School Food. Main report ref. 2005. Available at: <http://www.schoolfoodtrust.org.uk/partners/reports/turning-the-tables-transforming-school-food> (accessed 27 January 2011).
3. School Food Trust (2009). Primary school food survey 2009. Available at: <http://www.schoolfoodtrust.org.uk/school-cooks-caterers/reports/primary-school-food-survey-2009-full-technical-report>