

Universal Free School Meals reduce child obesity and help with the cost of living

Angus Holford and Birgitta Rabe. ISER, University of Essex

We study the impacts of providing free meals to primary school children by looking at universal free school meal (UFSM) schemes implemented in primary schools in four local authorities (LAs): Newham (from 2010), Islington (from 2011), Southwark (from 2012) and Tower Hamlets (from 2014).

Comparing changes in outcomes in these LAs with those that do not run UFSM schemes enables us to evaluate the causal impact on bodyweight outcomes among Reception and Year 6 children, and on household food expenditure. See more detailed results and methodology in our MiSoC Explainer: *Impacts of Local Authority Universal Free School Meal schemes on Child Obesity and Household Food Expenditure* (<https://doi.org/10.5526/misoc-2022-003>).

Key findings on bodyweight outcomes

- Receiving universal free school meals reduces prevalence of obesity by 9.3% among Reception children and 5.6% among Year 6 children on average
- This corresponds to a 1.3 and 1.4 percentage points reduction in obesity (Figure 1). These impacts are substantial, given how hard it is to influence obesity through other interventions involving exercise or healthy eating education
- Effects are largest among Year 6 children who received UFSM the longest: the reduction in obesity was 8.4% among children who received them throughout primary school (2.1 percentage points reduction – Figure 2)
- The effect on children receiving UFSM for the first time in Year 6 is smaller than the corresponding effect on Reception children. This indicates that the bodyweights of older children are harder to shift in the short term

Figure 1 Average impacts of exposure to Universal FSM on bodyweight outcomes

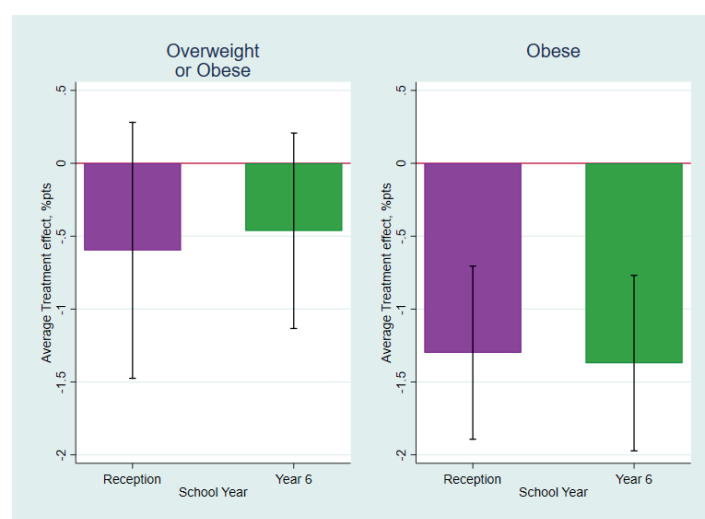
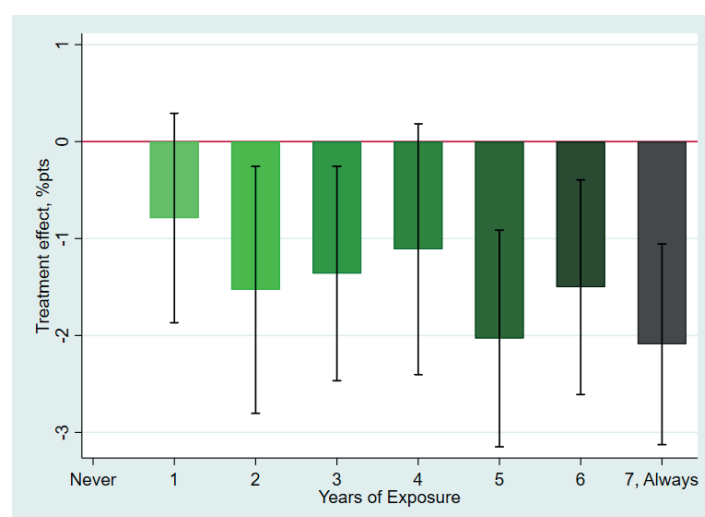


Figure 2 Impacts on obesity for Year 6 children by duration of exposure to UFSM



- The overall relationship suggests the impact of UFSM on obesity rates is cumulative, i.e. it adds up over time
- The impact of UFSM is much smaller in schools with pre-existing high prevalence of obesity (Figure 3). This could be because the school and home environment around high-obesity schools is less conducive to losing weight. These families and schools may benefit from additional interventions

Key findings on household food expenditure

- Families save approximately £37 per month in total on food spending, based on a household with two adults and two primary-aged children (Table 1)
- About half of this saving is due to reduced spending on 'eating out', which includes takeaways
- The reduction in expenditure is smaller than the value of the free meals, suggesting households are consuming a higher value of food in total

Messages for policy

Our results show that universal free school meal schemes reduce the prevalence of obesity among children and help households with the cost of living.

Our finding of a cumulative effect over time of providing free meals suggests that starting free meal provision early and maintaining it throughout primary schools would maximise the impact on cutting obesity rates and contribute to addressing the significant long-term healthcare and indirect productivity costs of obesity.

Universal provision throughout primary school would also ensure that all children have access to a meal of high nutritional standards while helping families with school-age children with the cost of living.

Angus Holford
Research Fellow
ajholf@essex.ac.uk

Birgitta Rabe
Professor of Economics
brabe@essex.ac.uk

Figure 3 Average impacts on obesity by pre-existing school-level obesity

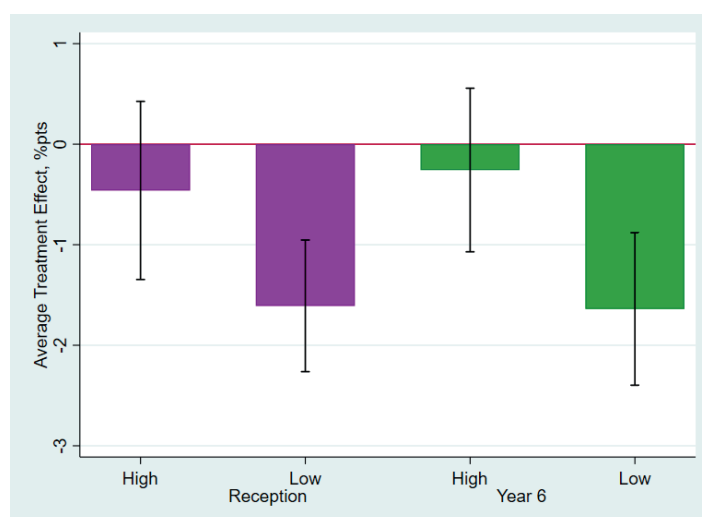


Table 1 Impacts of Universal FSM on household food expenditure in last four weeks

	Super-market food (1)	Eating out and takeaways (2)	Total (1)+(2)	Market value of UFSM*
One UFSM-eligible child in a one parent, one child family	-£6.20	-£5.47	-£11.47	£34.50
Two UFSM-eligible children in a one parent, two child family	-£15.27	-£13.46	-£28.23	£69.00
One UFSM-eligible child in a two parent, two child family	-£10.02	-£8.83	-£18.52	£34.50
Two UFSM-eligible children in a two parent, two child family	-£20.04	-£17.67	-£37.04	£69.00
Sample size	46,765	46,768	46,582	

Data sources: Figures 1-3: National Child Measurement Programme, 2007-2019. Table 1: UK Household Longitudinal Study, waves 1-11. See full results and methodology in MiSoC explainer: Holford, A. and Rabe B., (2022) *Impacts of Local Authority Universal Free School Meal schemes on Child Obesity and Household Food Expenditure* (<https://doi.org/10.5526/misoc-2022-003>). The Nuffield Foundation has funded this project, but the views expressed are those of the authors and not necessarily the Foundation. Visit www.nuffieldfoundation.org. The authors acknowledge additional support from the ESRC Research Centre on Micro-Social Change [ES/S0124861]. This work uses data from the National Child Measurement Programme, supplied by NHS Digital, also known as the Health and Social Care Information Centre. The use of NHS Digital statistical data in this work does not imply the endorsement or quality assurance of NHS Digital in relation to the interpretation or analysis of the statistical data. Research datasets may not exactly reproduce National Statistics aggregates.

© ISER September 2022 DOI: 10.5526/misoc-2023-001