











The impact of the Universal Infant Free School Meals policy

From September 2014, all infants in state-funded schools in England (comprising Reception, Year 1 and Year 2) have been entitled to receive a free school meal under the Universal Infant Free School Meals (UIFSM) policy.

The policy aims to improve children's educational attainment, social skills and behaviour; ensure children have access to a healthy meal each day and develop long-term healthy eating habits; help families with the cost of living, and remove disincentives to work. At a running cost of around £400 per pupil/year, plus £175m of capital spending in the first three years, this policy is a sizeable investment into children, and it is important to know whether it has delivered its aims.

Free school meals have been available to children from low-income families receiving qualifying benefits since after World War II. In recent years around 16% of infants in state-funded schools were registered to receive these. Since 2011, schools have received additional 'pupil premium' funding, currently £1,320 per year, for each child registered for meanstested Free School Meals (FSM).¹ Universal Infant Free School Meals (UIFSM), making free meals available to all children in infant year-groups, were introduced in 2014, though pupil premium payments have continued to be tied to children being registered as entitled for means-tested FSM.

Universal and means-tested free school meals have been a live policy issue for several years and continue to be at the centre of public debate. In their 2019 election manifestos the Conservative party promised to maintain their commitment to the UIFSM programme, while Labour and the Liberal Democrats promised to extend it to all primary school pupils, and meanstested FSM to all secondary-school pupils whose families receive Universal Credit. The COVID-19 pandemic has highlighted the role of school meals in preventing hunger and hardship for the poorest children, prompting the Government to fund £15/ week supermarket vouchers throughout the May half term and summer holidays for children registered for means-tested free meals (Crawford et al., 2020). The UIFSM programme however was halted for children who did not attend school during the partial school closures between March and July 2020.

To inform the public debate on free school meals, this project offers the first evaluation of the UIFSM policy. We use administrative data to provide evidence on the impact of UIFSM implemented in England on take-up of meals, registration for FSM, bodyweight, school attendance, educational performance and food expenditure.

The full report can be found at www.iser.essex.ac.uk/files/uifsm-impact.pdf

Schools also receive a pupil premium allocation for children currently or recently in local authority (LA) care or adopted from care, and service children.

Data

We use a variety of existing secondary data sources appropriate to the outcomes being studied:

- For take-up of school meals, we combine individual and school-level Schools Census data with local authority (LA)and survey datasets from the period before UIFSM was introduced.
- For household expenditure we use the UK Household Longitudinal Study (UKHLS), also known as *Understanding Society*.
- For registration for FSM we use individual data in the National Pupil Database
- For children's bodyweights we use school-level data from the National Child Measurement Programme (NCMP) combined with some school-level information from Department for Education's 'Schools, Pupils and their Characteristics' releases.
- For attendance or absences (for health and other reasons) we use individual data on counts of absences by reason, from the National Pupil Database published by the Department for Education.
- For attainment and educational development we use individual data on performance in the National Pupil Database Early Years Foundation Stage Profile (EYFSP) and Key Stage 1 (KS1) assessments.

Methods

- Our analysis of take-up of school meals and registration for FSM is primarily graphical and descriptive, benchmarking these figures for UIFSM cohorts against those of older cohorts.
- To assess the impact of UIFSM on household food expenditure we use a 'difference-in-difference' model which compares how household food expenditure changes before and after UIFSM were introduced, between households who do and do not have a child of the eligible age-group.
- To assess the impact of UIFSM on **bodyweight outcomes** we exploit the fact that the NCMP measures children throughout the school year, and that if UIFSM alters children's dietary intake we should expect a dose-response relationship: UIFSM children measured right at the start of the school year (zero school meals provided) should not show different outcomes to those never exposed to UIFSM, while those visited later (after progressively more school meals) should show diverging bodyweight outcomes between cohorts that were and were not exposed to the policy. We compare the change in children's bodyweight over the school year before and after UIFSM introduction in a 'difference-in-difference' approach.
- To assess the impact of UIFSM on attendance and absence we compare
 infant year-group children (exposed to UIFSM) with junior year-group
 children (not exposed to UIFSM). These can be described as treatment
 and control groups respecially the service of the UIFSM policy, the infant and
 junior absence rates would have changed in parallel to each other.
- To assess the impact of UIFSM on children's development and attainment we attempted to compare not-FSM-registered children (newly entitled to a free school lunch) with FSM-registered children (always entitled to a free school lunch), intending to describe these as treatment and control groups respectively, and again using a 'difference in difference' method. However, evidence from elsewhere in this report shows that FSM-registered children do, in fact, benefit significantly from the UIFSM programme, making them unsuitable as a control group. We instead provide descriptive evidence on how the gap between FSM-registered and not-FSM-registered changed.
- Our results on bodyweight outcomes, attendance and absence, development and attainment, and expenditure are all 'intention to treat' estimates, meaning the average effect of being entitled to a universal infant free school meal. This does not distinguish between effects on those actually taking up a school meal and not.
- To assess the impact of take-up of school meals on development/ attainment, we compare children taking and not taking their entitled universal school meal within the same cohort at the same school, controlling for other demographic characteristics.

Main results

Take-up of school meals

- · Take-up of school meals by not FSM-registered pupils rose from a consistent 30-35% in the eight years preceding the policy to approximately 85% in the UIFSM period (a 50 percentage point increase), and for FSM-registered pupils (for whom there was no change in the financial incentive to take a school lunch) from about 84% to 87%.
- Providing UIFSM to infant pupils (in Reception, Year 1 and Year 2) has reduced take-up of means-tested free school meals among FSM-registered juniors (in Years 3-6) in the same primary schools relative to FSM-registered juniors in schools with no infants.
- UIFSM has resulted in some parents entitled to register their child for (means-tested) FSM and pupil premium not doing so: registration rates for infant pupils are about 1.2 percentage points lower than should be expected.

Household food expenditure

· Having a child become entitled to UIFSM results in a saving on food expenditure among not-FSM-registered households, of approximately £20 per month in total for a household with two adults and two children. This suggests the policy has to some extent helped families with the costs of living.

Children's bodyweight

 Making high quality school meals free on a universal basis reduces children's bodyweight throughout the first year of school, reducing the proportion obese (by 0.7 percentage points from a base of just under 10%) and bringing more children into the healthy range (by 1.1 percentage points from a base of 76%).

· Benefits accrue to children in schools with a wide range of student intakes (measured as the proportion of students registered for FSM), apart from in the schools with the most and least affluent student body.

Absences from school

 UIFSM improved absence rates for FSM-registered infants. The effect size is equivalent to missing 1.2 fewer whole days at school over the academic year in total. About 60% of this effect is accounted for by reduced absences for illness or medical appointments. Changes in absence rates for infants not registered for means-tested FSM are negligible, suggesting that the policy has reduced inequalities in absences between children from lower and higher income backgrounds.

Attainment

- · At age 5, the performance of the always-eligible FSMregistered group appears to have improved since UIFSM by more than their newly eligible not-FSM-registered peers, closing the gap between these groups by around 4%. The opposite is true at age 7, with the gap widening by between 5 and 10% since UIFSM was introduced, equivalent to the not-FSM-registered making two weeks' more progress. Given that we find beneficial effects on absences and take-up of school meals for the always-eligible 'control group', we do not interpret these effects on attainment as causal effects of the UIFSM policy.
- · Among those entitled to UIFSM, children who actually take up the available free school lunch have stronger educational performance at both age 5 and age 7.

Implications for policy and practice

- Given current estimates of the direct healthcare and productivity costs of obesity, the policy's impacts in reducing obesity would, under assumptions detailed in this report, make it cost effective if evaluated as investment spending on the future health and productivity of the country. This suggests that UIFSM should be maintained, and possibly extended.
- Our analysis suggests that high school food standards are responsible for the beneficial impact of UIFSM on children's bodyweight. This highlights the importance of retaining the current standards. To enable continued compliance an increase in the per-meal revenue funding in line with the Full Economic Costs of providing school meals (in the region of £2.50 per meal) may be required.
- Reduced registration for FSM has contributed to schools
 missing out on pupil premium payments intended to support
 the educational attainment of disadvantaged students, to
 the tune of £2000 per school on average. DWP JobCentres,
 responsible for the administration of Universal Credit, should
 be enabled to share data on parents with children entitled to
 FSM directly with schools.
- Enabling continued high take-up of school lunches among both FSM-registered and not-FSM-registered pupils throughout primary school will be key to embedding the short-term benefits of the scheme and/or take-up, observed for obesity, absences, and attainment. Possible strategies include:
 - Efforts to maintain and create an attractive and social school dining environment. This may entail expanded use of staggered lunchtimes and improvements or enlargements of kitchen and dining spaces.

- Emphasis of school meals as 'healthy' rather than free, and an integral part of the school day.
- UIFSM were not delivered to children who were
 prevented from attending school during the months of
 COVID lockdown. It is important that efforts to encourage
 take-up and adherence to school food standards are
 maintained as schools reopen. Switching to 'takeaway
 style' lunches or restricting access to school meals
 because of capacity constraints would undo the good
 work achieved in improving children's nutritional intakes,
 and making school lunchtimes more attractive to all
 children. This has to be weighed against the requirements
 for social distancing.
- To establish the longer-term impacts of UIFSM, consistent and comprehensive data are required. In particular:
 - Collection of the National Child Measurement Programme, which was halted by COVID-related school closures, should resume in the 2020/21 academic year if appropriate infection-control protocols can be implemented and the health and wellbeing of children protected.
 - Data on take-up of school meals should routinely be collected and published by the Department for Education separately for infant and junior school students, and within each of these age-groups separately for FSM-registered and not-FSM-registered pupils. At present, school-level take-up statistics are available on all infants, and on all FSM-eligible children. They do not differentiate take-up among infants by FSM-registration status, and do not differentiate take-up among FSM-eligible children by infant/junior status. Individual-level Census data do not include school lunch take-up for any non-infants.

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