Universal Infant Free School Meals

ANGUS HOLFORD AND BIRGITTA RABE

[Photo: Shutterstock]

With Marcus Rashford's successful campaign to extend their provision into the summer holidays this year, free school meals are back on the agenda. But what about universal provision? The universal infant free school meals (UIFSM) programme was introduced in 2014 in England. What impact has UIFSM had on disadvantaged school children?

Free school meals have been a live policy topic for some years, and the COVID-19 pandemic has brought them back into the centre of public debate. School closures to contain the spread of COVID-19 have highlighted the role of school meals in preventing hunger and hardship for the poorest children, prompting the government to fund £15 a week supermarket vouchers throughout the May half term and summer holidays for eligible children.[1] This provision has sparked new discussions about free school meals during holidays beyond the current crisis, including to new groups of pupils, such as migrant children who have no recourse to public funds. At the same time, it is feared that current and future government spending squeezes might endanger the UIFSM policy, introduced in 2014 and providing free lunches to all children in their first three years in school. Despite the considerable interest in free school meals, the evidence base on how they impact children is thin. In this article we present evidence assembled in our Nuffield Foundation-funded project 'The Impact of the Universal Infant Free School Meal policy' to contribute to the debate. In particular, we ask what impact the policy is having on disadvantaged school children.

School closures to contain the spread of COVID-19 have highlighted the role of school meals in preventing hunger and hardship for the poorest children.

Since September 2014, all infant children (in reception and years 1 and 2) in state-funded schools in England have been entitled to receive a free school meal at lunchtime under the UIFSM programme. The policy's stated aims are:

- to improve children's educational attainment, social skills and behaviour;
- to ensure children have access to a healthy meal each day and develop long-term healthy eating habits;
- to help families with the cost of living; *and*
- to remove disincentives to work.

At a running cost of around £400 per pupil per year (at £2.30 per pupil per meal), plus £175 million of capital spending for kitchen improvements in the first three years, this policy has represented a sizeable investment in children.

We investigated whether the UIFSM policy has delivered its aims by looking at impacts on the take-up of meals, absences from school, children's bodyweight and attainment. Despite some shortcomings we find that the policy has yielded significant benefits for children, including children from disadvantaged backgrounds, and UIFSM deserves the support of those who campaign against child poverty.

Take-up of the policy

Before the introduction of UIFSM, children of parents receiving certain out-of-work benefits were already entitled to means-tested free school meals (FSM). Therefore, at face value, the policy does not benefit those in most need of support and instead makes meals free for many children from better-off backgrounds.

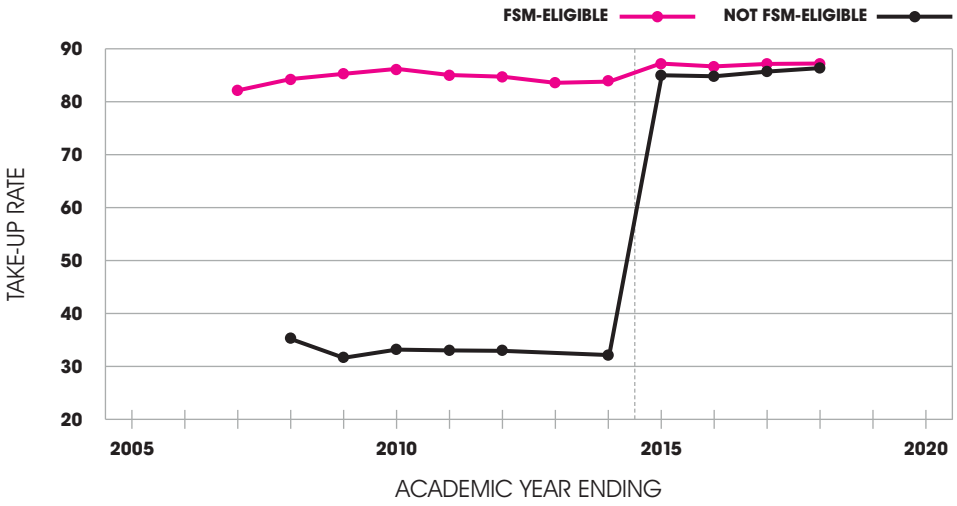
Hobbs and Vignoles document that eligibility for FSM is far from a precise proxy for family income.[2] While eligible children are, on average, in households with much lower incomes than children who are not eligible, many eligible children are not in the lowest-income households and many children in lowest-income households are not eligible.

> **Making meals free for everyone ensures that children who would benefit from a free meal but are not FSM eligible are not left out.**

Making school meals universally available has also been shown to address the potential stigma attached to receiving a free meal, and to send a signal that the school lunch is a desirable good, thereby raising participation among all students, not just those taking advantage of a fall in price.[3]

While we have made clear that FSM eligibility is not a perfect indicator for low household income or other kinds of family disadvantage, we use eligibility as a proxy because of its availability in our data. Figure 1 (above) plots the take-up of school meals among those who are and are not eligible for FSM (see the **note** below fig 1 for how data points are derived). That clearly shows how the UIFSM policy increased take-up of free meals predominantly among children not eligible for FSM, including children 'missed' by FSM criteria. Take-up by these children rose from a consistent 30–35 per cent in the eight years preceding the policy to approximately 85 per cent in the UIFSM period. For the smaller group of FSM-eligible pupils (around 15 per cent of primary school children) for whom there was no change in the financial incentive to take a school lunch, there was a small rise from 84 per cent to 87 per cent. This increase may indicate that the programme makes the lunchtime dining experience more attractive to children from disadvantaged backgrounds.

Figure 1: Take-up of school meals among children who are eligible for and not eligible for free meals

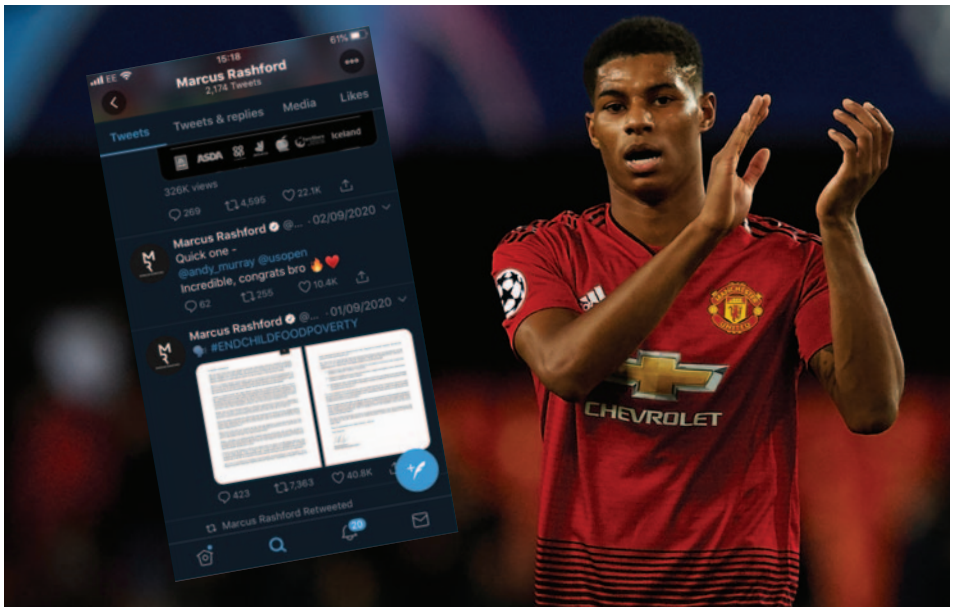


Note: Sources: FSM-eligible series 2007–14 derived from 'Schools, pupils and their characteristics' and 2015–18 from Spring School Census. Not-FSM-eligible series: 2008–10: 'National Indicators' from the Department for Communities and Local Government; 2011–12: School Food Trust take-up surveys; 2014: Department for Education take-up survey. Combining these figures for overall take-up by primary-age children at the local education authority level with the proportions of FSM-eligible take-up known from the 'Schools, pupils and their characteristics' series, enables the proportions of primary-age not-FSM eligible children taking school meals to be derived. 2015–18 derived from Spring School Census, with take-up rate equal to the proportion of all not-FSM-eligible infant-age pupils taking a school lunch. (Graph appears similar if restricted to schools without junior or infant pupils.)

Impact on school absences

Department for Education research has shown that missing even a day of school has a noticeable impact on children's educational performance.[4] UIFSM might affect absences by making it attractive to attend school; for example, if eating with friends makes lunchtimes more enjoyable, or by reducing illnesses because school lunches following school food standards are significantly more nutrient-dense than the majority of packed lunches.

Our analysis shows that UIFSM does indeed reduce absences from school, by a small amount.[5] Remarkably, the beneficial effects on absences accrued mostly to FSM-registered students, whose absences reduced by 1.22 days (for absences for any reason), and by 0.71 days (for absences for health reasons), out of a total of about 190 school days.



The 22-year-old Manchester United footballer, Marcus Rashford, successfully campaigned to extend free school meals this summer. He wrote a letter to MPs demanding the continued supply of free school meals during the summer holidays, and posted the letter on twitter.

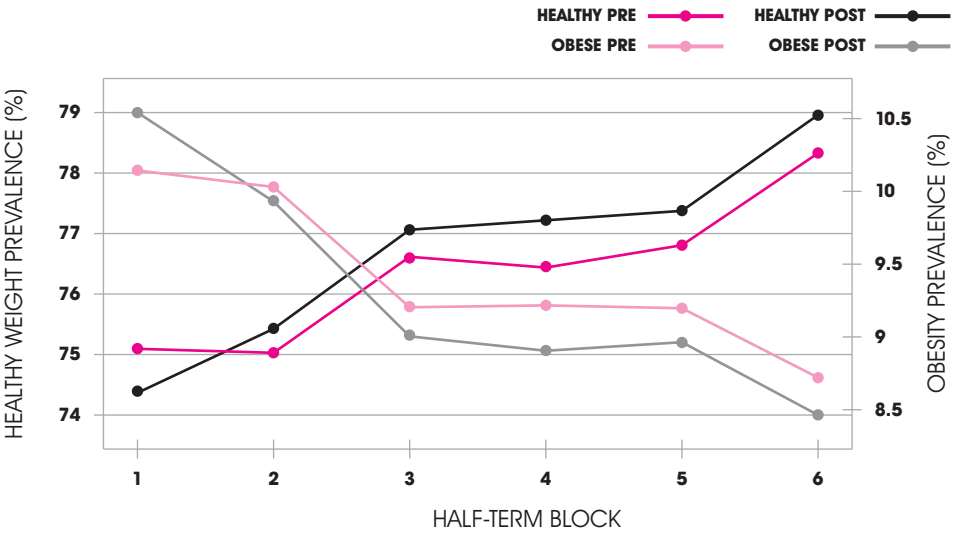
He has subsequently formed a child food poverty task force calling for three policy recommendations made by the National Food Strategy to be funded by the government as soon as possible:

- *Expanding free school meals to every child from a household on UC or equivalent, reaching an additional 1.5 million children aged seven to 16.*
- *Expanding an existing school holiday food and activities programme to support all children on free school meals in all areas of England.*
- *Increasing the value of the Healthy Start vouchers from £3.10 to £4.25 per week, and expanding the scheme to all those on UC or equivalent, reaching an additional 290,000 people.*

Marcus Rashford has spoken about his own experiences of using a food voucher scheme as a child while being raised by his hard-working single mother. [Photo: Shutterstock]

School lunches following school food standards are significantly more nutrient-dense than the majority of packed lunches.

Figure 2: Trends in healthy weight and obesity prevalence over the school year, before and after introduction of UIFSM



Note: Data source: National Child Measurement Programme. Healthy weight and obesity prevalence shown in this chart are the means, across schools, of the within-school proportions healthy weight and obese (accounting for age and sex of children measured) for schools measured in each half-term block, by pre- (academic years ending 2009–14) and post- (academic years ending 2015–18) UIFSM.

These impacts are small but not trivial, given the expected effects on educational attainment. The effects for students not registered for FSM are at least five times smaller.

As the main rise in take-up of school meals was by students not registered for FSM, these results are unlikely to be driven by improving children's health and resilience of their immune system. Instead, the prospect of school lunch with a greater proportion of peers has appeared to make school attendance more attractive for FSM-registered children.

Impact on bodyweight

We evaluated the effect of the UIFSM programme on children's likelihood to be obese using school-level data from the National Child Measurement Programme (NCMP). Each school is visited once each academic year for heights and weights of children in reception and Year 6 to be taken. We use this data to establish how children's bodyweight develops over the reception school year when UIFSM is in place compared to children in the years before the policy was introduced.[6]

We expected to find a beneficial effect of UIFSM on bodyweight because school meals contain fewer calories than the typical packed lunch, which is the alternative. While a school lunch complying with the school food standards should average 530 calories per day, an audit study found 89 per cent of packed lunches to exceed this level, averaging 624 calories, and only 1 per cent of packed lunches meeting food school standards in terms of energy and nutrients.[7]

Figure 2 shows the school mean obesity prevalence and healthy weight prevalence over the school year, which is divided up into six half-term blocks. We show these measures separately for reception cohorts before and after UIFSM were introduced. The figure shows that as reception children start school, in the first half-term the obesity rate of the cohorts benefitting from UIFSM is slightly higher than in pre-policy cohorts. Over the course of the school year, obesity rates go down for all children, but the decline is steeper after school meals were made free for all pupils. Results for healthy weight follow the opposite trajectory, and since that is a positive outcome, have the same beneficial interpretation. Using appropriate models and controls, we estimate that by the end of the school year on average a child in a cohort receiving UIFSM is 0.7 percentage points less likely to be obese (relative to a pre-policy average of 9.4 per cent). That is a 7.4 per cent reduction in obesity rates; this is a remarkable effect, given that previous policies such as healthy eating education and several sports initiatives have had less positive results on obesity.

While we are unable to distinguish between the effects on children registered for FSM and those not registered given our data, we can compare effects on obesity prevalence in schools with few and many FSM registered students. We find no effect for children in the 20 per cent of schools with the most affluent intakes (with only up to 4.4 per cent FSM-eligible pupils). Nor do we find an effect in the bottom 20 per cent least affluent schools (27–100 per cent FSM eligible, with an average of 38 per cent FSM eligible) nor a statistically significant effect in the next quintile down. Instead we find a statistically significant effect for schools in the second and third deprivation quintiles. This result suggests that UIFSM has contributed to reducing the bodyweights of many children from relatively disadvantaged areas, but not the most disadvantaged.

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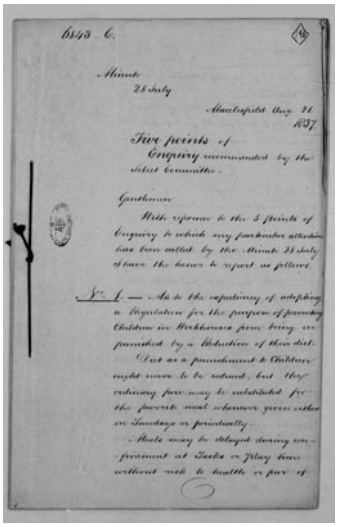

The UK's National Archives contain many documents about UK government policies regarding the state's feeding of children. These minutes date from an 1837 select committee hearing into the feeding of children in workhouses. More recent documents focus on the provision of school meals. [Photo: The National Archives]

Impact on educational attainment

Our data do not allow us to assess the impact of UIFSM on children's educational attainment with the same rigour as for absences and children's bodyweight. We can, however, document the association between taking up UIFSM and educational development. While we account for a rich set of characteristics, we cannot be sure that such an association is a causal effect of UIFSM.

We find that taking a free school meal in the years after the UIFSM policy was implemented is associated with better learning outcomes at ages five and seven, compared to not taking up the free meal offer. For example, those who take up free meals are 4 percentage points more likely to reach a 'good level of development' at age five and to perform better in all areas of learning (reading, writing, maths, science, speaking and listening) than those who do not take up the free meals. There is no difference in the benefit between pupils eligible and not eligible for FSM, apart from the not-FSM group benefitting slightly more for speaking and listening.

This indicates that children from both disadvantaged and better-off groups benefit similarly from participating in UIFSM in terms of their educational development.

Adverse effects

Despite the benefits, the UIFSM policy seems to have had some adverse effects that may potentially affect disadvantaged children: reducing registration for FSM reduces a schools' allocation of pupil premium, which is linked to the number of FSM-registered pupils in each school; and reducing take-up of school meals among FSM-registered children in older year groups.

In the presence of UIFSM, there is no direct financial incentive for parents to register their children for means-tested FSM when they first start school. Other incentives remain, however, such as unlocking pupil premium payments to the school, and FSM eligibility acting as a passport to other benefits, including subsidised school transport. Our data show that those starting school after the UIFSM policy was introduced registered for FSM at a rate of 1.2 per cent lower than usual, leading an average primary school to lose more than £2,000 of pupil premium funding per school, or £32 million in total, as a result of UIFSM.[8] This loss, though relatively small, makes a case for auto-enrolment of pupils for entitlement to the pupil premium; for example, by enabling job centres to share universal credit data directly with schools. Alternatively, schools and local education authorities should be encouraged to use an eligibility checking service.

UIFSM were introduced in 2014. This government poster extolls the benefits of free school meals. Similar benefits would apply if school meals were made universal despite the age or background of recipients. [Photo: HM Government]

Secondly, our analysis suggests that while take-up of school meals rose considerably among infant pupils after meals were made free by the policy, the take-up among FSM-eligible pupils in older year groups in primary school has gone down. This decrease could be caused by over-crowding or time constraints in schools where many more infants have school meals, making the dining experience less attractive to older children. To ensure FSM-eligible pupils in older year groups do not miss out, schools should consider increased use of staggered lunchtimes, expanded dining areas or increased kitchen staffing.

Conclusion

The UIFSM policy represents a significant investment in enhancing the school environment for all children. UIFSM has contributed to:

- significant reductions in school absence rates concentrated among FSM-eligible children;
- a significant positive association between school meal take-up and educational development and attainment for all children, including those eligible for FSM; *and*
- a shift in reception children's bodyweights to a healthier level over the course of the school year, with these effects apparent for children in all but the richest and poorest schools.

Hence, despite its universal nature, the policy has yielded significant benefits for children from disadvantaged backgrounds. Efforts to fix UIFSM drawbacks, and ensure its retention, deserve the support of campaigners against child poverty.

When schools closed to nearly all pupils in March, UIFSM provision ended for most children, including for disadvantaged children not meeting FSM eligibility criteria. Because provision of summer holiday vouchers is only for children eligible for means-tested FSM (plus some groups who have no recourse to public funds), a large number of children will have been without a free school meal for months. 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 attempting to discourage some students from taking 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.

Efforts to fix UIFSM drawbacks, and ensure its retention, deserve the support of campaigners against child poverty.

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Footnotes

1. C Crawford E Greaves and B Rabe, 'What difference will the COVID Summer Food Fund make to children's lives?', Economics Observatory (ECO), 4 July 2020, available at: https://www.coronavirusandtheeconomy.com/question/what-difference-will-covid-summer-food-fund-make-childrens-lives
2. G Hobbs and A Vignoles, 'Is children's free school meal 'eligibility' a good proxy for family income?', *British Educational Research Journal*, 36(4), 2010, pp673–90
3. A Holford, 'Take-up of free school meals: price effects and peer effects', *Economica,* 82(328), 2015, pp976–93
4. Department for Education, 'The link between absence and attainment at KS2 and KS4, 2013/14 academic year', March 2016, available at: gov.uk/government/publications/absence-and-attainment-at-key-stages-2-and-4-2013-to-2014
5. We derived these results by comparing how absences changed between infant and junior pupils in primary schools before and after the UIFSM policy was introduced.
6. A Holford and B Rabe, 'Going universal – the impact of free school lunches on child body weight outcomes', draft research paper, March 2020, available at: iser.essex.ac.uk/files/projects/FSM/UIFSM_Bodyweight_Outcomes_20200306.pdf
7. CE Evans, DC Greenwood, JD Thomas and JE Cade, 'A cross-sectional survey of children's packed lunches in the UK: food- and nutrient-based results', *Journal of Epidemiology and Community Health*, 64(11), 2010, pp977–83
8. 14.99 per cent of Year 4 pupils were FSM registered in 2017–18, compared with 13.77 per cent of years 1 and 2, a gap of 1.22 per cent. Calculation based on a mean cohort size of 42 pupils (126 infants) and pupil premium of £1,320 per eligible pupil, across 15,782 schools