## Impact of the Universal Infant Free School Meal Policy

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#### Where next for children's food provision?

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# Universal Infant Free School Meal Policy

- □ Introduced from Sep 2014
- All children in state-funded English infant schools (R, Y1, Y2) receive free meal in term-time
- Cost: ~£400/child per year plus considerable capital spending
- Aims (DfE 2014)
  - improve children's educational attainment, social skills and behaviour;
  - ensure children have access to a healthy meal and develop longterm healthy eating habits;
  - help families with cost of living;
  - remove disincentives to work



## Options before Universal Infant Free School Meals

- Means-tested Free School Meals
  - Free School Meal (FSM) available to eligible pupils whose parents receive qualifying benefits (~18%)
  - All other children can purchase same meal at cost (about £2.30).
  - Since 2008: High nutritional standards and limits on portion sizes
- Alternative meal: the packed lunch (Evans et al., 2018)
  - 1.1% of lunches meet school food standards, 11% meet calorie standard
  - 1/3 include confectionary, savoury snack <u>and</u> sweetened drink
- Move from a high-quality means-tested school meal programme to a free, universal programme



## • • Our project

- Take-up of lunches
- Children's bodyweight outcomes
- Absences from school
- Educational outcomes at ages 5 and 7

#### Changes in meal take-up



Note: Sources: FSM-eligible series 2007-2014 derived from 'Schools. pupils and their characteristics' and 2015-2018 from Spring School Census. Not FSM-eligible series: 2008-2010: 'National Indicators' from the Department for Communities and Local Government: 2011- 2012: 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 FSM-eligible and the FSM-eligible takeup known from the 'Schools, pupils and their characteristics' series. enables the proportions of primaryage not-FSM eligible children taking school meals to be derived. 2015-2018 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.



### Main results on take-up

- 50 percentage point increase in take-up of school meals once they became free
  - → suggests price of school dinner is a major factor affecting take-up
- Newly eligible families save £19/week on food bills
- 3 percentage point increase in take-up among children who were already eligible
  - $\rightarrow$  suggests factors other than price affect take-up
  - $\rightarrow$  no evidence of stigma effects
  - $\rightarrow$  evidence that take-up among FSM-eligible juniors reduced
- Drop in FSM registration among infants by about 1.2 percentage points

# • UIFSM and children's bodyweight

- Child overweight and obesity is a serious worldwide public health problem. In England 1 in 4 children overweight or obese at age 4/5.
- □ Children consume a large fraction of their food energy at school
  → School meal provision an obvious policy lever to increase rates of healthy weight among children
- Use National Child Measurement Programme (NCMP) data for Reception children; visits are staggered across the year
- Variation in date of measurement can compare weight by duration of exposure throughout first year of school (0 to 190 meals)
- Compare this to pre-UIFSM years expect gap to get larger over year as more meals are eaten



### Treatment effects of UIFSM



Note: Data source: National Child Measurement Programme. Estimated treatment effect of exposure to UIFSM (academic years ending 2015-2018, relative to pre-UIFSM period 2009-2014). Derived from school fixed effect regression controlling for exposure to UIFSM pilot schemes, pupil premium exposure, proportion measured black (and missing indicator), proportion measured girls, cubic year-trend interacted with IDACI quintile and demeaned proportion black and girls, half-term block dummies interacted with demeaned proportion black and girls.

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#### Impact of UIFSM on bodyweight

- By end of school year:
  - $\rightarrow$  1.1%pt increase in healthy weight prevalence (base: 76%)
  - $\rightarrow$  0.7%pt reduction in obesity prevalence (base: 10%)
  - $\rightarrow$  4.1% of a standard deviation lower BMI
- □ Is this effect large?
  - No, not in absolute terms
  - Yes, compared to other school-based interventions that have been implemented or trialled in schools
- **o** Benefits accrue to children from a wide range of backgrounds
- <u>Cost-benefit:</u> if the effect size is maintained, UIFSM are value for money in terms of reduced direct healthcare and productivity costs of obesity



## Absences from school

- UIFSM could reduce absences through better health; incentives for parents; social factors
- Use National Pupil Database absence data to measure absences pre and post UIFSM, using Y3 & Y4 as comparison group
- Findings:
  - UIFSM reduce absences for FSM-eligible but not newly eligible children
  - FSM-eligible children miss 1.2 school days less in total, of these 0.7 days for health reasons (illness/medical appointments)
  - UIFSM help close absence gaps
  - Likely driven by social factors, given that take-up remained stable

## • • Attainment

- Evaluation of free school meal pilots (London) found KS1 and KS2 pupils made 4 and 8 weeks more progress when receiving free lunches (Brown et al., 2012)
- Cannot perform similar evaluation as we have no comparison group for which nothing changed
  - Changes for FSM-eligible children in take-up and absences
- Find a positive association between children having a school meal and their attainment at ages 5 and 7.

## Main policy messages

o UIFSM has reduced registration for means-tested FSM. Aut

Auto-enrolment

- UIFSM helps:
  - reduce obesity
  - reduce absences from school
  - families with the cost of living.



- The policy seems to be cost effective in economic terms, but it is critical that the benefits persist.
- **o** This will be a challenge in the context of COVID-19.

Need:

- High take-up despite distancing requirements
- Adherence to school food standards even if meals are delivered 'takeaway style'
- Continued collection of the NCMP to monitor longer-term outcomes.







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<u>Thanks to</u>: The Nuffield Foundation Our Advisory Group Feedback & discussion

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