

Magic breakfast: evaluating school breakfast provision

Submission date 16/02/2016	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 24/02/2016	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 18/05/2017	Condition category Other	☐ Individual participant data

Plain English summary of protocol

Background and study aims

Magic Breakfast is a charity in the UK that provides free, nutritious breakfasts to schoolchildren that may otherwise be too hungry to learn. A hungry child is not able to concentrate properly and will therefore not learn as much as they could for half a day's lessons (that is, before they eat their lunch). The aim of this study is to find out whether offering a free breakfast to pupils in disadvantaged schools in England can improve pupils' academic attainment. The study will also explore the mechanisms through which attainment changes (for example whether pupils' concentration in class improves). This is useful for England, where the number of school breakfast clubs are increasing, but there are no existing tests of how well breakfast clubs work.

Who can participate?

Schools are eligible for the trial if they educate primary aged pupils (age 4-11), are in England, and have at least 35% of pupils eligible for free school meals. Schools must also have no large-scale existing breakfast club provision.

What does the study involve?

Schools are randomly assigned to one of two groups. Those in the treatment group receive support from the charity Magic Breakfast to run a universal, free, breakfast club before the school day, between September 2014 and July 2015. Those schools in the control group run as usual. All children's English and Maths skills are then assessed along with their behaviour, levels of concentration, health and attendance at school. The number of children eating breakfast at school is also counted. The control group receive the same support as the treatment group between September 2015 to July 2016.

What are the possible benefits and risks of participating?

The possible benefits of participating in the trial are that pupil hunger decreases, pupil concentration and behaviour improves, and this leads to an improvement in pupil attainment. There are no expected negative side effects from the trial.

Where is the study run from?

The study is run from the Institute for Fiscal Studies, London. It takes place in a number of primary schools in England.

When is the study starting and how long is it expected to run for?
February 2014 to December 2016

Who is funding the study?
Education Endowment Foundation

Who is the main contact?
Ms Ellen Greaves

Contact information

Type(s)
Public

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Study information

Scientific Title
The causal impact of universal free breakfast provision on pupil hunger, health, concentration, behaviour and attainment

Study objectives

The aim of this study is to find out whether offering a free breakfast to pupils in disadvantaged schools in England can improve pupils' academic attainment. The principal questions addressed by the study are:

1. What is the impact of free universal breakfast club delivery before the school day on teacher assessed levels of KS1 attainment in English (reading, writing and speaking and listening) and maths?
2. What is the impact of breakfast club delivery on teacher assessed levels and test scores (and associated levels) of KS2 attainment in English and maths?
3. What mechanisms are likely to explain any improvement in academic attainment?
 - 3.1. Breakfast consumption
 - 3.2. Classroom behaviour and concentration
 - 3.3. Attendance at school
 - 3.4. Health (proxied by measures of underweight, normal weight, and overweight)
4. Does the impact of breakfast club delivery vary across groups of pupils and different types of schools?
 - 4.1. Pupils eligible and not eligible for free school meals
 - 4.2. Pupils with low prior attainment
 - 4.3. Pupils that have and don't have breakfast
 - 4.4. Boys and girls
 - 4.5. Schools with and without a high participation in the breakfast club
5. What is the cost effectiveness of free universal breakfast club delivery before the school day?

Ethics approval required

Old ethics approval format

Ethics approval(s)

UCL Research Ethics Committee, 15/05/2014, ref: 5749/001

Primary study design

Interventional

Study design

Interventional clustered randomised controlled trial.

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Academic performance of relatively disadvantaged pupils in England.

Interventions

Primary (or infant/junior) schools are randomly allocated to one of two groups:

1. The treatment group will receive support from the charity Magic Breakfast to establish and run a universal free breakfast club, between September 2014 and July 2015
2. The control group will receive this support one year later, between September 2015 and July 2016

Intervention Type

Other

Primary outcome(s)

1. Teacher assessed levels of KS1 attainment in English (reading, writing and speaking and listening) and maths
2. Teacher assessed levels and test scores (and associated levels) of KS2 attainment in English and maths

These outcomes will be measured through the National Pupil Database (NPD), which is an administrative dataset collected and maintained by the Department for Education (DfE). This outcome will be measured in May 2015.

Key secondary outcome(s)

1. Breakfast consumption: This outcome will be measured through two surveys of pupils, one at baseline (September 2014) and one at the end of the academic year (May 2015)
2. Classroom behaviour and concentration: These outcomes will be measured through two surveys of classroom teachers, one at baseline (September 2014) and one at the end of the academic year (May 2015)
3. Attendance at school: This outcome will be measured through the National Pupil Database (NPD), which is an administrative dataset collected and maintained by the Department for Education (DfE). This outcome will be recorded for the following periods: Autumn 2014, Spring 2015, Summer 2015
4. Health (proxied by measures of underweight, normal weight, and overweight): This outcome will be measured through the National Child Measurement Programme (NCMP), which records pupils' height, weight, and corresponding BMI for pupils at the start and end of primary school. We will access school-level averages for each school, measured at some point in the 2014-2015 academic year

Completion date

01/12/2016

Eligibility

Key inclusion criteria

1. Primary (or infant/junior) schools in England
2. Schools where at least 35% of pupils are eligible for free school meals
3. Schools where there is no significant existing breakfast provision

Participant type(s)

Other

Healthy volunteers allowed

No

Age group

Child

Sex

All

Key exclusion criteria

1. Schools outside England
2. Schools that are not infant/junior/primary level

3. Schools where fewer than 35% of pupils are eligible for free school meals
4. Schools where there is significant existing breakfast provision

Date of first enrolment

01/06/2014

Date of final enrolment

01/08/2014

Locations

Countries of recruitment

United Kingdom

England

Study participating centre**Institute for Fiscal Studies**

7 Ridgmount Street

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Sponsor information

Organisation

Education Endowment Foundation

ROR

<https://ror.org/03bhd6288>

Funder(s)

Funder type

Government

Funder Name

Education Endowment Foundation

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Funder report results	results			No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes