

University of Leeds press release

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Peer-reviewed

Observational study

People

[*with a picture*](#)

Skipping breakfast linked to lower GCSE grades

Students who rarely ate breakfast on school days achieved lower GCSE grades than those who ate breakfast frequently, according to a new study in Yorkshire.

Researchers, from the University of Leeds, have for the first time demonstrated a link between eating breakfast and GCSE performance for secondary school students in the UK.

Adding together all of a student's exam results, they found that students who said they rarely ate breakfast achieved nearly two grades lower than those who rarely missed their morning meal.

The research is published today in the journal *Frontiers in Public Health*.

Lead researcher Dr Katie Adolphus, from the University of Leeds' School of Psychology, said: "Our study suggests that secondary school students are at a disadvantage if they are not getting a morning meal to fuel their brains for the start of the school day.

"The UK has a growing problem of food poverty, with an estimated half a million children arriving at school each day too hungry to learn. Previously we have shown that eating breakfast has a positive impact on children's cognition.

"This research suggests that poor nutrition is associated with worse results at school."

The Government in England run a national, means-tested free school lunch programme accessible to all students, but there is no equivalent for breakfast.

Charities Family Action and Magic Breakfast deliver a breakfast programme funded by the Department for Education, which provides free breakfasts for more than 1,800 schools located in the most socio-economically deprived parts of England.

Separately, Magic Breakfast supports breakfast provision in a further 480 UK schools. However, this leaves many of the 24,000 state-funded schools in England without free breakfast provision for children not getting breakfast at home.

Some schools compensate by offering breakfast clubs they have to fund themselves, or funded by companies such as Kellogg's.

The Leeds researchers say their findings support the calls to expand the current limited free school breakfast programme to include every state school in England. A policy proposal from Magic Breakfast to introduce school breakfast legislation is currently being considered by politicians, which has been supported by Leeds academics.

Alex Cunningham, CEO of Magic Breakfast, said: "This study is a valuable insight, reinforcing the importance of breakfast in boosting pupils' academic attainment and removing barriers to learning. Education is crucial to a child's future life success and escaping poverty, therefore ensuring every child has access to a healthy start to the day must be a priority.

“We are grateful to the University of Leeds for highlighting this positive impact and welcome their findings, highlighting once again the importance of our work with schools.

GCSE performance

The researchers surveyed 294 students from schools and colleges in West Yorkshire in 2011, and found that 29% rarely or never ate breakfast on school days, whilst 18% ate breakfast occasionally, and 53% frequently. Their figures are similar to the latest national data for England in 2019, which found that more than 16% of secondary school children miss breakfast.

GCSE grades were converted to point scores using the Department for Education’s 2012 system, where A* = 58, A = 52, B = 46, and so on. Adding up students’ scores across all subjects gave students an aggregated score.

Those who rarely ate breakfast scored on average 10.25 points lower than those who frequently ate breakfast, a difference of nearly two grades, after accounting for other important factors including socio-economic status, ethnicity, age, sex and BMI.

Looking at performance for each individual GCSE, they found that students who rarely ate breakfast scored on average 1.20 points lower than those who frequently ate breakfast, after accounting for other factors. Each grade equates to six points, so the difference accounted for a drop of a fifth of a grade for every GCSE an individual achieved.

Nicola Dolton, Programme Manager for the National School Breakfast Programme, from Family Action, said: “The National School Breakfast Programme is delighted to see the publication of this thorough and compelling research, highlighting the impact that breakfast consumption has on a child’s GCSE attainment.

“This report provides impressive evidence that eating a healthy breakfast improves a child’s educational attainment, which supports our own findings of improvements in a child’s concentration in class, readiness to learn, behaviour and punctuality.”

The research was funded by the Economic and Social Research Council and The Schools Partnership Trust Academies.

Notes to editors

A picture of students eating breakfast, credit Ginger Pixie Photography/Magic Breakfast, is available here:

<https://drive.google.com/open?id=1TIQOpig9u7OoQyWK2XM3gaLqvZp0mrDe>

Picture caption: ‘Students from Leeds City Academy enjoying their free breakfast, which is offered to all the academy’s students daily, supported by Magic Breakfast’

For interview requests please contact Simon Moore, Press Officer at the University of Leeds, on 0113 34 38059 or s.i.moore@leeds.ac.uk.

The paper, published in the journal *Frontiers in Public Health*, is titled ‘Associations between habitual school-day breakfast consumption frequency and academic performance in British adolescents’ and will be available online here:

<https://www.frontiersin.org/articles/10.3389/fpubh.2019.00283/abstract>