

# Breastfeeding for longer may be linked to better exam results in later life

June 5 2023

---



Credit: Unsplash/CC0 Public Domain

Children who are breastfed for longer appear to be more likely to gain slightly better results in their school GCSEs at age 16 compared with non-breastfed children, suggests a study published online in the journal

*Archives of Disease in Childhood.*

The evidence of improved educational outcomes is still apparent even when various factors are taken into account such as people's socio-economic status and their parents' intelligence.

Previous studies have suggested that children breastfed for longer have improved educational outcomes later in life. However these are relatively scarce, and most have not taken into account potential factors that could influence outcomes such as the fact that mothers from a higher socioeconomic status or with higher intelligence scores are more likely to breastfeed their children for longer and have children who get higher results in exams.

A team of researchers from the University of Oxford, therefore, set out to analyze data on a large group of British children who were included in the Millennium Cohort Study, which enrolled 18,818 children born in 2000-2002 living in the UK and who were followed up at ages three, five, seven, 11, 14, 17 and 22.

This data was linked to the National Pupil Dataset, which stores longitudinal academic data of students enrolled in English state schools.

For the new study, the researchers analyzed a nationally representative group of 4,940 participants from England up to age 16 and looked at the results of their secondary education standardized examinations (set by the English Department of Education), specifically their General Certificate of Secondary Education (GCSEs) in English and Mathematics. The attainment 8 score, which is the sum of all the GCSEs taken by the children, was also analyzed.

Around a third (32.8%) of the participants were never breastfed, and the remainder were breastfed for different periods. Only 9.5% were

breastfed for at least 12 months.

Analysis of the results showed that longer breastfeeding was associated with better educational outcomes.

Only around a fifth (19.2%) of children who were breastfed for at least 12 months failed their English GCSE compared with 41.7% of those who were never breastfed, while 28.5% of those breastfed for at least 12 months achieved a high pass (A and A\*) compared with 9.6% among non-breastfed children.

For the Mathematics GCSE, only 23.7% of children who were breastfed for at least 12 months failed their test compared with 41.9% of those never breastfed, while 31.4% of those breastfed for at least 12 months achieved a high pass (A and A\*) compared with 11% among non-breastfed children.

After taking into account confounding factors, the overall association showed that compared with children never breastfed, children breastfed for at least 12 months were 39% more likely to have a high pass for both exams and were 25% less likely to fail the English exam.

Additionally, those breastfed for longer had a better overall performance in their GCSEs (higher attainment 8 score) than those never breastfed.

The study had some limitations in that it was not possible to link the National Pupil Dataset for approximately 4,000 children because they were lost to follow-up or did not consent, while a further 1,292 children were not followed up to age 14, when maternal cognitive ability was measured.

Additionally, other factors that could potentially influence the association were not considered.

Nevertheless, the authors said their findings were nationally representative for children enrolled in state schools in England and the large sample size allowed them to detect outcome differences between several breastfeeding duration groups.

They had also taken into account the confounding effects of several markers of family-level and area-level socioeconomic status and maternal intelligence.

They concluded, "Breastfeeding duration was associated with improved [educational outcomes](#) at age 16 among [children](#) living in England, after controlling for important confounders."

"However, the effect sizes were modest and may be susceptible to residual confounding. Breastfeeding should continue to be encouraged, when possible, as potential improvements in [academic achievement](#) constitute only one of its potential benefits."

"Future studies should adjust for both socioeconomic circumstances (comprehensively) and maternal general intelligence."

**More information:** Association between breastfeeding duration and educational achievement in England: results from the Millennium Cohort Study, *Archives of Disease in Childhood* (2023). [DOI: 10.1136/archdischild-2022-325148](#). [adc.bmj.com/lookup/doi/10.1136...dischild-2022-325148](http://adc.bmj.com/lookup/doi/10.1136...dischild-2022-325148)

Provided by British Medical Journal

Citation: Breastfeeding for longer may be linked to better exam results in later life (2023, June 5) retrieved 2 May 2024 from

<https://medicalxpress.com/news/2023-06-breastfeeding-longer-linked-exam-results.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.