

Impact
on **Urban**
Health

Investing in Children's Future:

A Cost Benefit Analysis
of Free School Meal
Provision Expansion

Executive Summary
October 2022



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Foreword

Every child should have the opportunity to be healthy, no matter where they live. This includes access to a nutritious diet, but families living in poorer areas are more likely to be flooded with unhealthy food options, and experience worse physical and mental health as a result. For many children and young people, free school meals are their main source of hot, nutritious food.

Healthy, free meals at school help enable all children to have the same opportunities to learn and thrive, no matter where they grow up. The impact has been shown to last well into adulthood, with evidence linking free school meals to improved educational attainment and a host of social, financial and health benefits.

At a time when households are facing unprecedented financial pressures, the Government has the opportunity to unlock the huge potential of school food to better support families.

Impact on Urban Health and our partners are clear that provision of free school meals is falling far short of what's needed. Current eligibility criteria means that around a third of children living in poverty in the UK do not qualify for free school meals. As a result, too many children are going without the nutritious food they need to thrive.

That's why we commissioned PwC to undertake the most ambitious analysis to date into the societal and economic benefits of increasing free school meal provision in England. Together with our partners, we believe that this ground-breaking analysis more than provides the evidence required for a transformational policy shift in school food.

Amidst serious cost of living pressures that are impacting the nation's health and wellbeing, the case for the Government to invest in our children's present and future health has never been stronger.

We're proud to work with our partners, including the School Food Review coalition, to make that case and work towards a better, more equitable school food system.

Rebecca Sunter

Programme Director, Impact on Urban Health

1. Executive summary

1.1 Why expand free school meal provision?

All children deserve the chance to grow up healthy, no matter where they live. Yet rising poverty rates mean that more families are finding it difficult to afford healthy food. In 2020/21, 2.5 million people in the United Kingdom accessed food banks, up by almost 600,000 people from the previous year.

In England alone over 1.74 million children were eligible for free school meals in 2020/21, 300,000 more than in the previous academic year. Record inflation and increasing energy prices are to push more households into poverty. Therefore, it is more important than ever that proactive steps are taken to protect children's health and wellbeing. Expanding free school meals is a powerful way to achieve this.

The COVID-19 pandemic shone a spotlight on the importance of free school meals for families who rely on school food for regular access to nutritious food. Existing evidence (UK and international) on the benefits of free school meal provision indicates that free school meals have long been contributing significant and lasting benefits to individuals and society. The research shows a positive impact on educational attainment, mental and physical health and productivity improvements over the short, medium and long-term.

However, this evidence base contains significant gaps, particularly at the UK level where research has often focused on disparate benefits from free school meals. For example, studies have focused on obesity and child nutrition or educational performance, rather than a comprehensive consideration of the costs and benefits of increasing such provision over time.

In light of this context and the constraints of the current evidence base, Impact on Urban Health commissioned PwC to undertake an assessment of the costs and benefits of expanding free school meal provision in England.

- The cost benefit analysis (CBA) undertaken explores two different expansion scenarios in England over a twenty-year period (2025-2045), to inform the debate and decision making around future provision:
 - Expansion Scenario 1 (UC) - Free school meal provision for all state school pupils receiving Universal Credit.
 - Expansion Scenario 2 (UFSM) - Free school meal provision for all state school pupils i.e. Universal Free School Meals.

1.2 Topline Findings

The CBA found that both expansion scenarios presented a positive return on investment (ROI).

For each scenario the total discounted core benefit has been estimated, as follows:

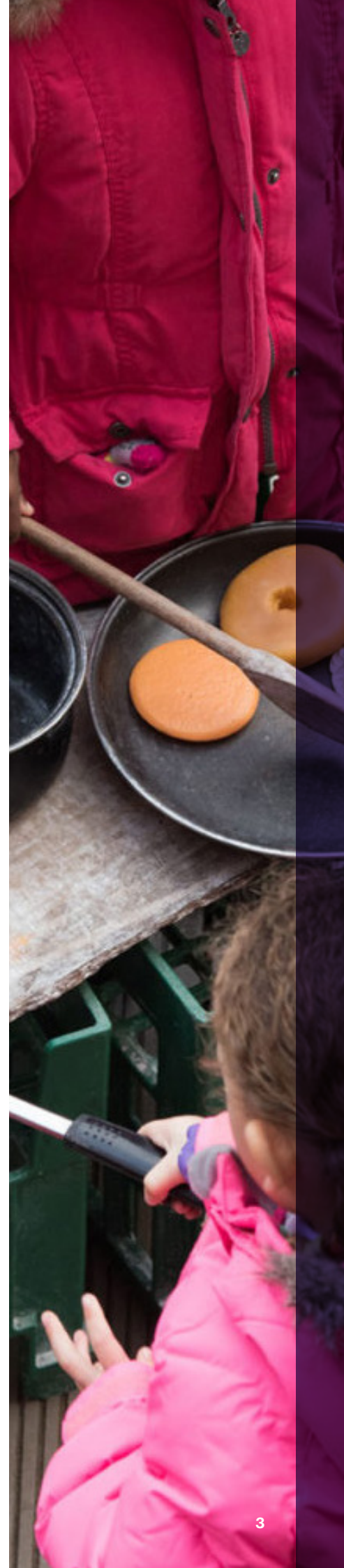
- **Expansion scenario 1** (Universal Credit)
 - £8.9bn = Total discounted core benefit for all pupils receiving Universal Credit from 2025-2045.
 - Every £1 invested is estimated to generate £1.38 in the core benefits.
- **Expansion scenario 2** (Universal Free School Meals)
 - £41.3bn = Total discounted core benefit for all pupils in state-funded schools from 2025-2045.
 - Every £1 invested is estimated to generate £1.71 in the core benefits.

1.2.1 Points to note:

These findings are based on benefits for newly eligible children under each expansion scenario rather than the total benefits, which includes those currently in receipt of free school meals.

- **Core benefits** are those arising directly from the children in receipt of free school meals.
- **Wider indirect benefits** are generated over and above the core benefits, impacting the wider economy and supply chain.*

*The benefits are all discounted meaning they are the present value of the benefits accruing in the future



1.3 How were these results calculated?

1

Conduct scoping and literature

An initial scoping phase and a literature review to engage, map, and consult stakeholders, define the scope and methodology of the CBA, agree on scenarios and metrics, complete a gap analysis, and plan for dissemination.

2

Review Theory of Change (ToC)

A review of Impact on Urban Health's existing food and children's health ToC and the development of a revised ToC for Free School Meals expansion through a workshop with Impact of Urban Health and stakeholders.

3

Undertake Cost-Benefit analysis

Development of a CBA model to quantify benefits of Free School Meals expansion over 20 years, applicable to different expansion scenarios.

4

Draft and finalise report

Collating and drafting of findings and analysis into a final agreed report.

1.3.1 Stakeholder engagement

Engagement with a range of organisations across the school food sector was a critical success factor for the CBA. This included discussions with academics, NGOs and policymakers to understand the free school meal policy context, and key areas of concern relating to free school meal provision and expansion. It was a collaborative effort that provided expertise and insight into the practical challenges of free school provision and the robustness of the existing evidence base.

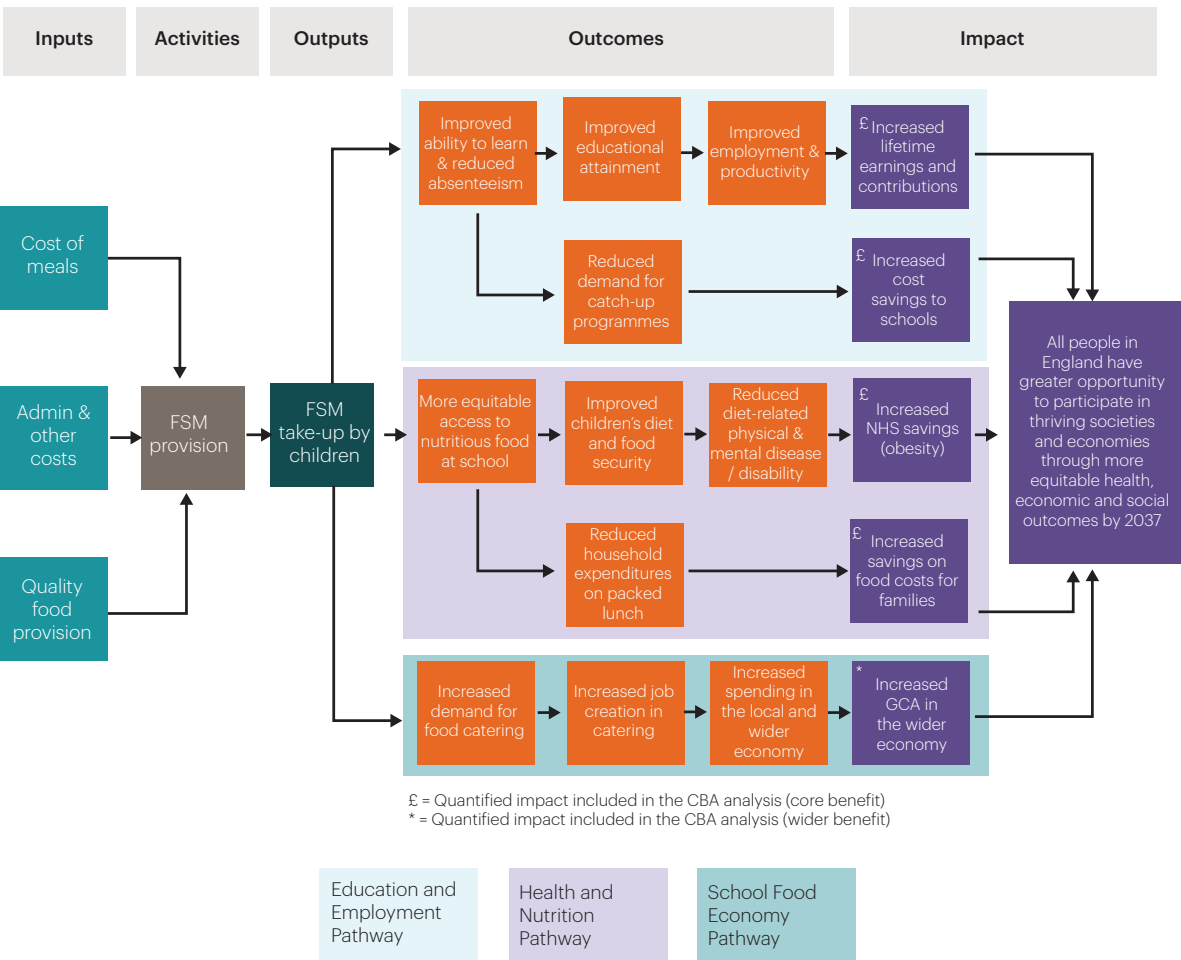
A full list of organisations involved is available at Section 5.5 of the full report.

1.3.2 Developing a Theory of Change (ToC)

The first stage of the CBA focused on developing a ToC to identify the spectrum of benefits that would result from the expansion of free school meal provision. The ToC also aided in understanding the barriers and enablers of such expansion.

A broad system-level ToC was developed first (see Appendix 3 of the full report), and a more streamlined version was then constructed, based on the robustness of available evidence (Figure 1).

Figure 1: Free School Meals Theory of Change (CBA version)



1.3.3 Developing the CBA

The CBA was then developed through the creation of a framework to assess value for money under each of the two expansion scenarios:

- **Expansion Scenario 1 (UC)** - Free school meal provision for all state school pupils receiving Universal Credit.
- **Expansion Scenario 2 (UFSM)** - Free school meal provision for all children across all state funded education settings i.e. Universal Free School Meals.

01	Education & Employment pathway (core benefit)	<ul style="list-style-type: none"> • Increased cost savings to schools • Increased lifetime earnings and contributions
02	Health & Nutrition pathway (core benefit)	<ul style="list-style-type: none"> • Increased savings on food costs for families • Increased NHS savings (obesity)
03	School Food Economy pathway (wider benefit)	<ul style="list-style-type: none"> • Increased GVA in the wider economy

1.3.4 Key secondary evidence sources informing the pathways

The evidence suggests that providing free school meals results in:

Education and Employment:

- Improved ability to learn and reduced absenteeism in the short term. This is linked to reduced costs on schools (e.g. catch-up programmes).¹
- Improved educational attainment in the medium term, leading to improved productivity and employment in the medium-to-longer term.² The evidence also suggests a link between improved productivity and employment, contributing to improved lifetime earnings and wider contributions in the longer term.^{3,4}

Health and Nutrition:

At school

- Improved nutritional balance of food consumed during the school day. Children taking a packed lunch to school were found to consume a lower-quality diet over the whole day, including higher levels of sugar and sodium and fewer vegetables.⁵
- Improved eating habits at school and during childhood, helping to improve children's health and reduce incidence of childhood obesity.⁶ This is as a result of a more standardised and equitable approach to school nutrition, with increased involvement of schools in educating around healthy eating habits.

At home

- Lower costs for food provision and reduced financial pressures for households living on lower incomes, increasing their ability to purchase more nutritious food at home.⁷
- Improved overall household food security in the medium term, contributing to improved dietary choices and habits into adulthood.⁸

At population level

- Decreased incidence of adult obesity and reduction in diet-related disease and disability at the population level, saving costs for the NHS over the long term.⁹

School Food Economy:

- The evidence links increased demand for school catering to the expansion of employment opportunities and increased spending in the school food economy (catering/provision).
- If the catering supply chain expands its operations to meet increased demand, evidence suggests that this can help strengthen local and wider economies around school food provision, such as via local procurement of food and catering supplies.¹⁰

A detailed breakdown of the costs and benefits can be found in the main report, along with a review of further qualitative benefits associated with free school meal provision across the three pathways.

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1. https://www.centreforsocialjustice.org.uk/wp-content/uploads/2021/06/Cant_Catch_Up_FULL-REPORT.pdf
 2. <https://www.iser.essex.ac.uk/2020/12/02/final-report-published-on-the-impact-of-universal-infant-free-school-meals-policy>
 3. <https://www.econstor.eu/bitstream/10419/177038/1/dp11234.pdf>
 4. <https://bmjopen.bmj.com/content/7/4/e013840>
 5. <https://eprints.leedsbeckett.ac.uk/id/eprint/3308/1/impact-of-school-lunch-type-on-nutritional-quality-of-english-children-s-diets.pdf>
 6. <https://foodandnutritionresearch.net/index.php/fnr/article/view/7702>
 7. <https://commonslibrary.parliament.uk/research-briefings/sn04195/>
 8. <https://www.iser.essex.ac.uk/2020/12/02/final-report-published-on-the-impact-of-universal-infant-free-school-meals-policy>
 9. <https://pubmed.ncbi.nlm.nih.gov/26696565/>
 10. <https://www.rockefellerfoundation.org/wp-content/uploads/2021/11/True-Cost-of-Food-School-Meals-Case-Study-Full-Report-Final.pdf>

1.4 Key findings in detail

1.4.1 Expansion scenario 1: Universal Credit

Total core benefit:
£8.9bn

Benefit-cost ratio (2025-2045):
1.38

Every £1 invested in this scenario is estimated to generate £1.38 in the core benefits.

The breakdown of the total discounted core benefit for the Universal Credit scenario between 2025-2045 is estimated to be:

- Increased cost savings to schools: **£81m** (0.92%).
- Increased lifetime earnings and contributions: **£2.9bn** (32.55%).
- Increased NHS savings (childhood obesity): **£3m*** (0.03%).
- Increased savings on food costs for families: **£5.9bn** (66.50%).

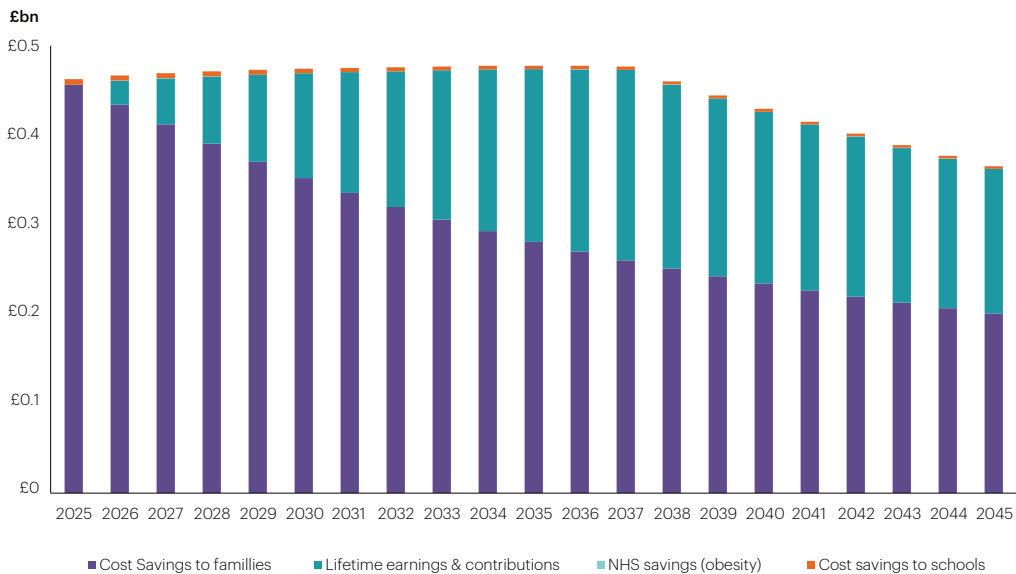
Education & Employment Pathway
(2025-2045)

£3.0bn (33.46%)

Health & Nutrition Pathway
(2025-2045)

£5.9bn (66.54%)

Figure 2: Universal Credit scenario core benefit profile (2025-2045)**



*The NHS cost savings are accounting only for the reduction in the cost of treating childhood obesity. The £3m cost saving does not include the potential reduction in costs that children in receipt of FSM may bring to the NHS as they grow older. Further details on the methodology for the Cost Benefit Analysis can be found in the full report.

**The decline in annual benefits is due to the forecasted fall in the schooling population over the 20-year time period rather than changes or reductions to the amount of benefits accrued per pupil over time.

Figure 3: Universal Credit scenario total cost vs total core benefit by school type (2025-2045)

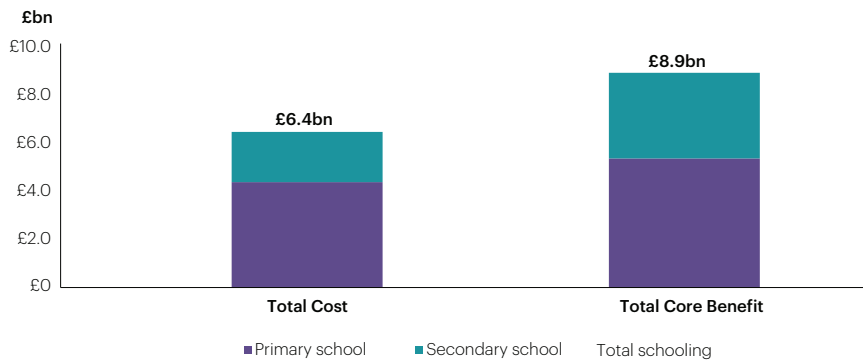


Figure 3 highlights the total discounted cost and benefit by eligible school type (i.e., excluding nursery provision).

Wider benefit: The estimated total discounted benefit of increasing Gross Value Added in the wider economy for free school meal expansion between 2025 and 2045 in England is an additional **£16.2bn on top of core benefits.**

Total combined core and wider benefit:
£25.1bn



1.4.2 Expansion scenario 2: Universal free school meals

Total core benefit:
£41.3bn

Benefit-cost ratio (2025-2045):
1.71

Every £1 invested in this scenario is estimated to generate £1.71 in the core benefits.

The breakdown of total discounted benefit for the Universal Free School Meals scenario between 2025-2045 is estimated to be:

- Increased cost savings to schools: **£0.3bn** (0.70%).
- Increased lifetime earnings and contributions: **£18.5bn** (44.76%).
- Increased NHS savings (childhood obesity): **£12m** (0.03%).
- Increased savings on food costs for families: **£22.5bn** (54.51%).

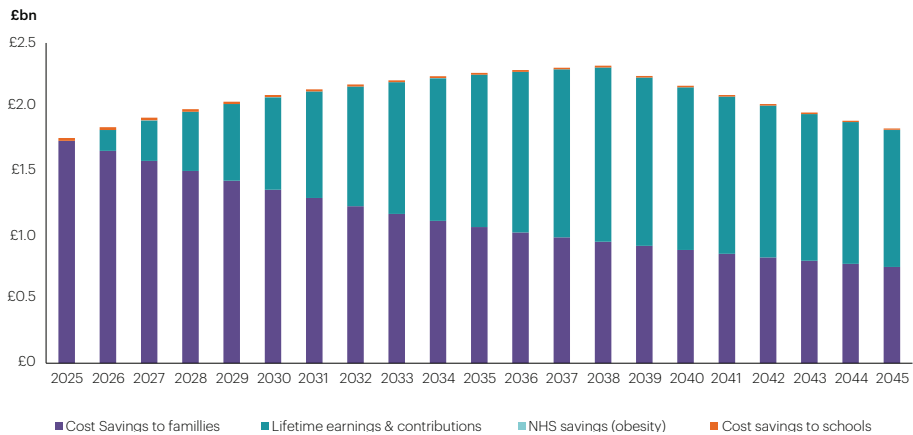
Education & Employment
Pathway (2025-2045)

£18.8bn (45.46%)

Health & Nutrition Pathway
(2025-2045)

£22.5bn (54.54%)

Figure 4: Universal Free School Meals scenario core benefit profile (2025-2045)*



*The decline in annual benefits is due to the forecasted fall in the schooling population over the 20-year time period rather than changes or reductions to the amount of benefits accrued per pupil over time.

Figure 5: Universal Free School Meals scenario total cost vs total core benefit by school type

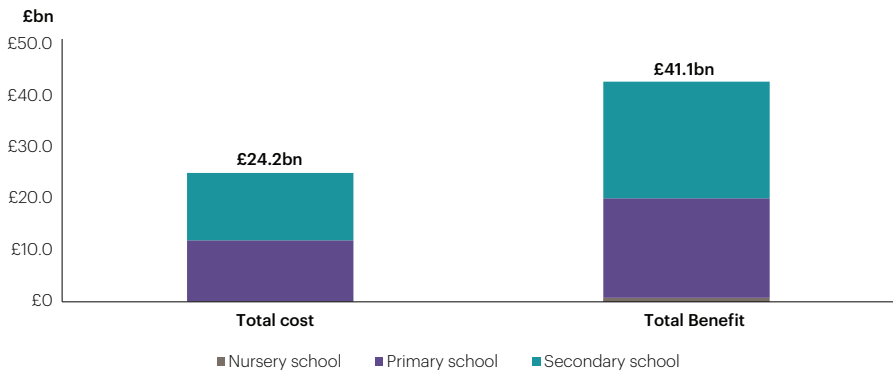


Figure 5 highlights the total discounted cost and benefit by eligible school type (i.e., excluding nursery provision).

Wider benefit: The estimated total discounted benefit of increasing Gross Value Added in the wider economy for the FSM expansion between 2025 and 2045 in England is an additional **£58.2bn on top of core benefits.**

Total combined core and wider benefit:
£99.5bn

1.4.3 Reminder of points to note

These findings are based on benefits for newly eligible children under each expansion scenario rather than the total benefits, which includes those currently in receipt of free school meals.

Core benefits are those arising directly from the children in receipt of free school meals. In this CBA, the Education and Employment and Health and Nutrition pathways contribute to the core benefits outlined.

Wider indirect benefits are generated over and above the core benefits, impacting the wider economy and supply chain. In this CBA, the School Food Economy pathway contributes to the wider benefits outlined.



1.5 Limitations

As expected with any project of this scale, there were some limitations in undertaking this analysis. These included:

- The use of secondary data to estimate costs and benefits for the CBA.
- The omission of wider benefits due to the lack of data (for example in relation to the wellbeing of teaching staff).
- The lack of consideration of the opportunity cost or counterfactual scenario of the Government using the funding for free school meals for alternative uses (instead focusing on key wider benefit areas to reduce the risk of double counting).
- The undertaking of the analysis on a gross basis (rather than net basis, i.e. accounting for displacement and leakage etc, per Green Book (2022)).

A complete list of these limitations has been provided within the main report and appendix.

1.6 Conclusion

These findings, explored in depth in the main report, paint a clear picture. The data and supporting evidence indicate that expansion of free school meals in England would not only multiply the existing benefits to individuals and society but could prove to be a prudent and timely investment in children's health, education and future working life opportunities now and for the future.

At a time when families are increasingly struggling to access and afford healthy food, the provision of free, nutritious meals in schools is a powerful tool in the Government's armoury to provide targeted support and accrue long term social and economic benefits.

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