

SUMMARY FOR POLICY MAKERS



**Faculty of Public Health
Royal Society of Medicine
Royal Society for Public Health
Association of Directors of Public Health
Royal College of Paediatrics and Child Health
School and Public Health School Nurses Association
British Association for Child and Adolescent Public Health**

This report explores simple steps to extend existing Government programmes on childhood nutrition and support the health of our next generation.

Access to nutritious food is a fundamental human right, and one of the key foundations for good health. Children must be well-nourished to learn and maximise educational attainment, and healthy eating in childhood is vital for development and good health and wellbeing throughout the life course¹. Whilst there are already provisions in place to support healthy eating in childhood, there is an opportunity to go further and secure the health and productivity of our next generation.

Currently, children and adolescents in the UK typically have suboptimal diets, and children from lower socio-economic groups are more likely to face barriers in accessing nutritious food, leading to diets that meet fewer dietary UK recommendations². Obesity rates are growing faster in children who live in areas with higher deprivation, and the most deprived areas of the UK now have more than double the rate of obesity at the time of reception and Year 6 than the least deprived

Food poverty or 'household food insecurity' is when a household cannot or is unsure if they can obtain enough food in socially acceptable ways⁵. In 2021/22, an estimated 4.7 million people in the UK lived in food-insecure households, or approximately seven per cent of the population. Households with children are at increased risk of household food insecurity; the most recent Food Foundation survey showed the prevalence of food insecurity was 24.4% in households with children and 17.7% in households without⁶. Children living in poverty are more likely to experience food insecurity: approximately 12% of all UK children in 2021/22 lived with food insecurity, but this rises to 21% of children living in households with relative poverty⁵. Nearly 30% of children were living in poverty in the UK in 2021/22, or 9 children out of a classroom of thirty⁷.

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Investing in childhood nutrition brings better health across the life-course⁸⁶.

A healthy, productive generation will reduce the burden on NHS and social care systems.

Food insecurity has negative consequences for child nutrition, development, physical and mental health, and social consequences such as educational attainment, all of which can affect lifelong health, well-being, and opportunity⁸⁻¹⁶.

As enshrined in the UN Convention on Human Rights, all children have a right to the best possible health, nutritious food and education¹⁷. Further, the UK is a signatory committed to leading on the Sustainable Development Goals and the UN Convention on the Rights of the Child^{18,19}. Improving children's diet in school and through increased fruit and vegetable intake is an opportunity to advance our commitment to these international agreements by improving our children's health and life chances.

This briefing focuses on three critical interventions to support all children to eat healthily and achieve their potential and relieve the burden and consequences of food insecurity for at-risk children: the Free School Meals programme, the National School Breakfast Programme and Healthy Start Scheme. The Free School Meal and National Breakfast Club programmes described are in England.

The Healthy Start scheme runs in England, Northern Ireland and Wales and there is an equivalent scheme in Scotland. The compiled evidence and recommendations are aimed at UK policymakers.



Free School Meal Programme (England)

Schools in England must provide eligible children with free school meals (FSM). Children in Reception, Year 1, and Year 2 (ages 4-7) receive universal FSM. Children in Year 3 and beyond are eligible if their parents receive certain benefits; for families receiving Universal Credit, there is a limit of £7,400 annual income (after tax and exclusive of benefits) ²⁰.

- The most substantial evidence for improving children's diet, health and education was found for universal provision (rather than extending access) of FSM, largely due to a positive impact on uptake ²¹⁻²⁹.
- There is robust evidence that universal FSMs can improve students' overall dietary quality and reduce the probability of children developing overweight or obesity ^{21 22 30-35}.
- Universal FSMs are demonstrated to increase academic performance ^{21 22 26 27}.
- The dietary, health and education benefits of universal FSM appear to be greatest for low-income children, with evidence of reduced socioeconomic inequality over the life course ^{22 29 34 36 37}.
- Economic analysis suggests expanding FSM provision in England would generate a positive return on investment ranging from £1.38 to £1.71 per £1 invested. The indirect Gross Value Added (GVA) benefit associated with universal FSM provision is estimated at £58.2 billion over 10 years, reflecting increased activity in the wider economy from local employment and spending effects ³⁸.



Recommendations – Free School Meal Programme

1. Priority Recommendation

Adopt universal school meal provision for all primary and secondary school children to improve the next generation's diet, health, and educational attainment. If a stepped approach is necessary, we recommend introducing universal provision of school meals to primary school children and then expanding the programme to secondary school children.

2. Implement sufficient monitoring and enforcement to ensure all food provided in schools meets the School Food Standards so the full benefits of a school meal are realised.
3. Any new programme should be accompanied by a full evaluation of the impact on health, education, and socioeconomic inequality across a child's lifetime.
4. Before enacting universal school lunch provision, enable the auto-enrolment process for Free School Meals to ensure eligible children receive what they are entitled to, and schools receive the pupil premium payments they need to support children from disadvantaged households.

National School Breakfast Programme (NSBP) (England)



The National School Breakfast Programme (NSBP) provides breakfast clubs for 2,700 primary, secondary, and special schools or alternative provisions in disadvantaged areas. School Breakfast Clubs offer breakfast to all pupils in an eligible school on school grounds before lessons begin, at no cost to them or their parents/carers. The Department of Education funds the programme; participating schools receive a 75% subsidy for the food and delivery costs until July 2024. Schools contribute 25% of costs³⁹.

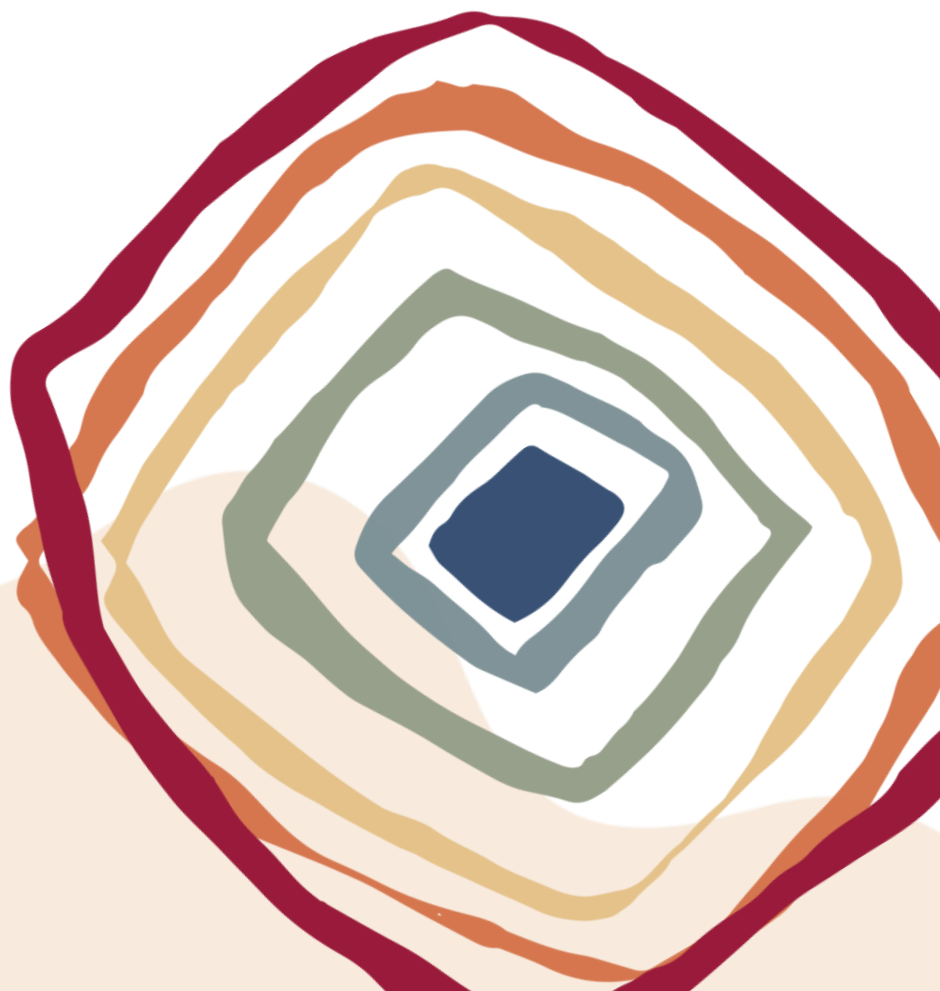
Eating breakfast is strongly associated with positive outcomes in children, including better health and educational attainment^{40 41}. Children from more deprived backgrounds are less likely to eat a nutritious breakfast or breakfast at all⁴²⁻⁴⁵.

The evidence base for NSBP's impact is limited, but the following key points were found in this review:

- The strongest evidence shows an association of the programme with reduced breakfast skipping in children living in more deprived communities and a reduction in the number of days skipped without permission ^{33 45-47}.
- People involved in the programmes report positive impacts on health and nutrition, educational attainment, school social relationships, classroom behaviour and the wider family (for example, breakfast at school reduces the burden on parents) ^{33 47-50}.
- Evidence related to educational attainment, health, development, home life, and classroom environment is limited and mixed. The impact on the nutritional value of children's diets was mixed, which may be connected to the nutritional content of breakfast foods provided ^{46 49-53}.
- An economic evaluation of the financial benefit of these programmes finds for every £1 spent on school breakfast programmes, over £4 of benefits can be returned over a lifetime ^{54 55}.

Recommendations – National School Breakfast Programme

1. Long-term funding for the NSBP should be confirmed well before the current programme's end date of July 2024 to allow schools and families to plan long-term and remove anxiety for families regarding future planning.
2. Monitor and enforce school food standards within the NSBP to ensure good nutritional quality and maximise the programme's benefit.
3. Expand the NSBP so that all schools meeting the Department of Education's criteria participate, ensuring the programme has the most impact.



Healthy Start Scheme (Northern Ireland, England, Wales)




The Healthy Start scheme provides money towards healthy food and access to free vitamins during pregnancy and early childhood for eligible families in Northern Ireland, England, and Wales. Families are eligible for Healthy Start if they receive income-based benefits ⁵⁶.

In England, there is a gap between when families stop receiving Healthy Start Vouchers/Card (when the child turns 4) and the age at which they begin receiving free school meals (at reception).

Uptake of the scheme has been on a downward trend in recent years; only 64.9% of eligible families accessed the scheme in May 2023 ^{57,58}. Uptake is influenced by awareness of the scheme, the application process, language barriers, and potential stigma ^{57,59-65}.

- Good evidence from England demonstrates that families participating in the Healthy Start scheme purchased more fruit and vegetables than they would have otherwise ^{57,65-70}.
- Evidence from Scotland, the United States, France, and Spain shows voucher schemes increase the quality and quantity of healthy foods purchased by those who receive them ^{34,71-79}.
- Research on the programme's cost-effectiveness needs to be more extensive and peer reviewed.

Recommendations – Healthy Start Scheme

1. Remove the variance of value and purchasing power of Healthy Start vouchers/card to provide consistency for parents by extending the £8.50 weekly value to eligible children until age five and increasing the value annually in line with inflation.
 2. Extend eligibility to all children living in households receiving Universal Credit to provide additional fruit and veg consumption for children most at risk of eating below the recommended 5-a-day minimum.
 3. Increase uptake by raising public awareness and ensuring the application process is accessible and straightforward; consider auto-enrolment or an opt-out process to increase uptake.
 4. Commission further research: particularly looking at the cost-effectiveness of a universal programme and increasing the monetary value.
 5. Make the Healthy Start vouchers permanently available to all children from households with no recourse to public funds, including expansion to include all children seeking asylum in a simple and accessible way that doesn't impact asylum claims.
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- A decorative graphic on the right side of the page features a light beige silhouette of a human head and neck in profile, facing right. Overlaid on and around this silhouette are several thick, wavy, concentric lines in various colors: dark blue, teal, olive green, yellow, orange, and a central dark red. The lines resemble a stylized brain or a series of waves emanating from the head.

Summary and Discussion Points

Good food is essential for children and adolescents to develop and achieve their potential. International agreements for which the UK holds a leadership role require the Government to support the health and wellbeing of children and adolescents within all legislation and policy. Evidence related to good health and development supports the call for universal free school meals, school breakfasts and increased provision of food to new mothers and their young children.

The Free School Meal and National Breakfast Club programmes described are in England. The Healthy Start scheme runs in England, Northern Ireland and Wales, and there is an equivalent scheme in Scotland. The compiled evidence and recommendations are aimed at UK policymakers. Recommendations were developed concerning current policy positions in England, recognising devolved powers and current variance across the Four Nations; however, the evidence reviewed, and recommendations would broadly apply to children throughout the UK.

Recommendations made within this paper are not a complete list of required actions but are part of a broader area of work necessary to improve the lives of children and adolescents. Our recommendations align with other policy asks, e.g., the 2023 Academy of Royal Medical College's recent report 'Securing Our Healthy Future: Prevention is Better Than Cure'⁸⁰, which includes a call for the UK Government to appoint a Cabinet-level Minister for Children and Young People to support a child health in all policies approach, and coordination of cross-departmental strategy to improve children's health and wellbeing and reducing health inequalities⁸⁰.

Considering the strength of the reviewed evidence, adopting universally provided school meals would be the priority within our recommendations. While evidence underpins all recommendations made in this paper, there is more evidence regarding the universal provision of school meals to children and adolescents and the positive impact on their dietary quality, educational achievement, lifetime health, well-being, and productivity. It is noted, however, that this is partly due to a smaller amount of published research regarding either the National School Breakfast Programme or Healthy Start Scheme, and recommendations regarding further research into each of these programmes should also be prioritised.

Costs associated with expanding Free School Meals across all primary and secondary schools in England have been estimated at £2.5 billion per year; put into perspective, obesity currently costs the NHS over £6 billion annually, a number expected to reach £9.7 billion by 2050^{81 82}; additionally, every £1 invested in universal FSM is estimated to bring a return of £1.70 over ten years, and £58 billion in added value to the economy (GVA)³⁸.

Even so, long-term costs must be considered. In this regard, we align with the Recipe For Change campaign and support the creation of new targeted levies on unhealthy food and drink, such as an expansion of the proven and effective Sugar Drinks Industry Levy or for the government to adopt the National Food Strategy recommendation of a new salt and sugar levy⁸³⁻⁸⁵. Manufacturers of unhealthy food would directly pay for these new levies, which would provide revenue to support the long-term viability of expanded food programmes outlined in this paper. They would also improve families' health across the UK through reformulation, reducing sugar and salt intake, saving the NHS billions of pounds, and supporting a healthy workforce. The solution proposed would generate revenue while improving children's diets and physical health in the present and the future.

References

1. Corkins MR, Daniels SR, de Ferranti SD, et al. Nutrition in Children and Adolescents. *Medical Clinics of North America* 2016;100(6):1217-35.
2. Buckland G, Northstone K, Emmett PM, Taylor CM. Adherence to UK dietary guidelines in school-aged children from the Avon Longitudinal Study of Parents and Children (ALSPAC) cohort. *Br J Nutr* 2023;130(3):454-66. doi: 10.1017/S0007114522003336 [published Online First: 20221028]
3. Libuy N, Bann D, Fitzsimons E. Inequalities in body mass index, diet and physical activity in the UK: Longitudinal evidence across childhood and adolescence. *SSM Popul Health* 2021;16:100978. doi: 10.1016/j.ssmph.2021.100978 [published Online First: 20211125]
4. NHS Digital. National Child Measurement Programme, England, 2021/22 school year 2022 [updated 12 December 2022]. Available from: <https://www.gov.uk/government/statistics/national-child-measurement-programme-ncmp-trends-in-child-bmi-between-2006-to-2007-and-2018-to-2019/national-child-measurement-programme-ncmp-trends-in-child-bmi>.
5. Francis-Devine B, Malik X, Danechi S. Food poverty: Households, food banks and free school meals. Research Briefing.: House of Commons Library, 2023.
6. Food Foundation. Food Insecurity Tracking: Overview of Surveys 2023 [Available from: <https://foodfoundation.org.uk/initiatives/food-insecurity-tracking#tabs/Overview-of-surveys>].
7. Child Poverty Action Group. Child Poverty Facts and Figures 2023 [Available from: https://cpag.org.uk/child-poverty/child-poverty-facts-and-figures#footnoteref2_dq76ukp].
8. Moradi S, Mirzababaei A, Mohammadi H, et al. Food insecurity and the risk of undernutrition complications among children and adolescents: A systematic review and meta-analysis. *Nutrition* 2019;62:52-60. doi: 10.1016/j.nut.2018.11.029 [published Online First: 2019/03/11]
9. Morales ME, Berkowitz SA. The Relationship between Food Insecurity, Dietary Patterns, and Obesity. *Curr Nutr Rep* 2016;5(1):54-60. doi: 10.1007/s13668-016-0153-y [published Online First: 2016/03/01]
10. Pourmotabbed A, Moradi S, Babaei A, et al. Food insecurity and mental health: a systematic review and meta-analysis. *Public Health Nutr* 2020;23(10):1778-90. doi: 10.1017/S136898001900435X [published Online First: 2020/03/17]
11. Hanson KL, Connor LM. Food insecurity and dietary quality in US adults and children: a systematic review. *Am J Clin Nutr* 2014;100(2):684-92. doi: 10.3945/ajcn.114.084525 [published Online First: 2014/06/20]
12. Wu XY, Zhuang LH, Li W, et al. The influence of diet quality and dietary behavior on health-related quality of life in the general population of children and adolescents: a systematic review and meta-analysis. *Qual Life Res* 2019;28(8):1989-2015. doi: 10.1007/s11136-019-02162-4 [published Online First: 2019/03/16]
13. de Oliveira KHD, de Almeida GM, Gubert MB, et al. Household food insecurity and early childhood development: Systematic review and meta-analysis. *Matern Child Nutr* 2020;16(3):e12967. doi: 10.1111/mcn.12967 [published Online First: 2020/02/14]
14. Lu S, Perez L, Leslein A, Hatsu I. The Relationship between Food Insecurity and Symptoms of Attention-Deficit Hyperactivity Disorder in Children: A Summary of the Literature. *Nutrients* 2019;11(3) doi: 10.3390/nu11030659 [published Online First: 2019/03/22]
15. Shankar P, Chung R, Frank D. Association of Food Insecurity with Children's Behavioral, Emotional, and Academic Outcomes- A Systematic Review. *Journal of Developmental & Behavioral Pediatrics* 2017;38(2):135-50.
16. St Pierre C, Ver Ploeg M, Dietz WH, et al. Food Insecurity and Childhood Obesity: A Systematic Review. *Pediatrics* 2022;150(1) doi: 10.1542/peds.2021-055571 [published Online First: 2022/06/14]
17. UNICEF. How We Protect Children's Rights With the UN Convention on the Rights of the Child 2023 [Available from: <https://www.unicef.org.uk/what-we-do/un-convention-child-rights/>].
18. Cabinet Office, Office for International Development, Foreign Commonwealth & Development Office. Implementing the Sustainable Development Goals: Gov.UK; 2021 [Available from: <https://www.gov.uk/government/publications/implementing-the-sustainable-development-goals/implementing-the-sustainable-development-goals--2> accessed 3 September 2023 2023].
19. UNICEF United Kingdom. The United Nations Convention on the Rights of the Child. In: United Nations, ed., 1989.
20. Long R, Danechi S. School Meals and Nutritional Standards (England). Research Briefing. London: House Of Commons Library, UK Parliament, 2023.
21. Cohen JFW, Hecht AA, McLoughlin GM, et al. Universal School Meals and Associations with Student Participation, Attendance, Academic Performance, Diet Quality, Food Security, and Body Mass Index: A Systematic Review. *Nutrients* 2021;13(3) doi: 10.3390/nu13030911 [published Online First: 2021/04/04]
22. Kitchen S, Tanner E, Brown V, et al. Evaluation of the Free School Meals Pilot: Impact Report. Research Report DFE-RR227: Department for Education, 2010.
23. Holford A, Rabe B. Impact of the Universal Infant Free School Meal policy: Institute for Social and Economic Research, 2020.
24. Smerillo NE, Reynolds AJ, Temple JA, Ou SR. Chronic absence, eighth-grade achievement, and high school attainment in the Chicago Longitudinal Study. *J Sch Psychol* 2018;67:163-78. doi: 10.1016/j.jsp.2017.11.001 [published Online First: 20171122]

25. Cohen JF, Gorski MT, Gruber SA, et al. The effect of healthy dietary consumption on executive cognitive functioning in children and adolescents: a systematic review. *Br J Nutr* 2016;116(6):989-1000. doi: 10.1017/S0007114516002877 [published Online First: 20160804]
26. Heim G, Thuestad RO, Molin M, Brevik A. Free School Meal Improves Educational Health and the Learning Environment in a Small Municipality in Norway. *Nutrients* 2022;14(14) doi: 10.3390/nu14142989 [published Online First: 20220721]
27. Altindag DT, Baek D, Lee H, Merkle J. Free lunch for all? The impact of universal school lunch on student misbehavior. *Economics of Education Review* 2020;74 doi: 10.1016/j.econedurev.2019.101945
28. Policy brief addressing food insecurity and obesity Case study: the DIATROFI program. 9th European Public Health Conference: Parallel Sessions; 2016.
29. Lundborg P, Rooth D-O, Alex-Petersen J. Long-Term Effects of Childhood Nutrition: Evidence from a School Lunch Reform. *The Review of Economic Studies* 2022;89(2):876-908. doi: 10.1093/restud/rdab028
30. Evans CE, Mandl V, Christian MS, Cade JE. Impact of school lunch type on nutritional quality of English children's diets. *Public Health Nutr* 2016;19(1):36-45. doi: 10.1017/S1368980015000853 [published Online First: 20150504]
31. Evans CEL, Melia KE, Rippin HL, et al. A repeated cross-sectional survey assessing changes in diet and nutrient quality of English primary school children's packed lunches between 2006 and 2016. *BMJ Open* 2020;10(1):e029688. doi: 10.1136/bmjopen-2019-029688 [published Online First: 20200113]
32. Spence S, Delve J, Stamp E, et al. The impact of food and nutrient-based standards on primary school children's lunch and total dietary intake: a natural experimental evaluation of government policy in England. *PLoS One* 2013;8(10):e78298. doi: 10.1371/journal.pone.0078298 [published Online First: 20131030]
33. Stevens L, Oldfield N, Wood L, Nelson M. The impact of primary school breakfast clubs in deprived areas of London: Findings: School Food Trust, 2008.
34. Parnham JC, Chang K, Rauber F, et al. The Ultra-Processed Food Content of School Meals and Packed Lunches in the United Kingdom. *Nutrients* 2022;14(14) doi: 10.3390/nu14142961 [published Online First: 20220720]
35. Simmonds M, Llewellyn A, Owen CG, Woolacott N. Predicting adult obesity from childhood obesity: a systematic review and meta-analysis. *Obes Rev* 2016;17(2):95-107. doi: 10.1111/obr.12334 [published Online First: 20151223]
36. Gordanier J, Ozturk O, Williams B, Zhan C. Free Lunch for All! The Effect of the Community Eligibility Provision on Academic Outcomes. *Economics of Education Review* 2020;77 doi: 10.1016/j.econedurev.2020.101999
37. Vik FN, Van Lippevelde W, Overby NC. Free school meals as an approach to reduce health inequalities among 10-12-year-old Norwegian children. *BMC Public Health* 2019;19(1):951. doi: 10.1186/s12889-019-7286-z [published Online First: 20190716]
38. Impact on Urban Health. Expanding free school meals: a cost benefit analysis 2023 [Available from: <https://urbanhealth.org.uk/insights/reports/expanding-free-school-meals-a-cost-benefit-analysis>]
39. Department for Education. Guidance: National school breakfast club programme. Support for school breakfast club provision. 2023 [updated 23 March 2023. Available from: <https://www.gov.uk/guidance/national-school-breakfast-club-programme#:~:text=Schools%20in%20disadvantaged%20areas%20are,pecial%20schools%20and%20alternative%20provision>]
40. Littlecott HJ, Moore GF, Moore L, et al. Association between breakfast consumption and educational outcomes in 9-11-year-old children - CORRIGENDUM. *Public Health Nutr* 2016;19(9):1583. doi: 10.1017/S1368980015003365 [published Online First: 20151113]
41. Adolphus K, Lawton CL, Dye L. Associations Between Habitual School-Day Breakfast Consumption Frequency and Academic Performance in British Adolescents. *Front Public Health* 2019;7:283. doi: 10.3389/fpubh.2019.00283 [published Online First: 2019/12/12]
42. Coulthard JD, Palla L, Pot GK. Breakfast consumption and nutrient intakes in 4-18-year-olds: UK National Diet and Nutrition Survey Rolling Programme (2008-2012). *Br J Nutr* 2017;118(4):280-90. doi: 10.1017/S0007114517001714 [published Online First: 20170817]
43. Levin KA. Urban-rural differences in adolescent eating behaviour: a multilevel cross-sectional study of 15-year-olds in Scotland. *Public Health Nutr* 2014;17(8):1776-85. doi: 10.1017/S1368980013002127 [published Online First: 20130821]
44. Macdiarmid J, Loe J, Craig LC, et al. Meal and snacking patterns of school-aged children in Scotland. *Eur J Clin Nutr* 2009;63(11):1297-304. doi: 10.1038/ejcn.2009.87 [published Online First: 20090826]
45. Moore GF, Tapper K, Murphy S, et al. Associations between deprivation, attitudes towards eating breakfast and breakfast eating behaviours in 9-11-year-olds. *Public Health Nutr* 2007;10(6):582-9. doi: 10.1017/S1368980007699558 [published Online First: 20070315]
46. Shemilt I, Harvey I, Shepstone L, et al. A national evaluation of school breakfast clubs: evidence from a cluster randomized controlled trial and an observational analysis. *Child Care Health Dev* 2004;30(5):413-27. doi: 10.1111/j.1365-2214.2004.00453.x
47. Harvey-Golding L, Donkin LM, Defeyter MA. Universal Free School Breakfast: A Qualitative Process Evaluation According to the Perspectives of Senior Stakeholders. *Front Public Health* 2016;4:161. doi: 10.3389/fpubh.2016.00161 [published Online First: 20160802]

48. Graham AL, Russo R, Blackledge J, Defeyter MA. Breakfast and Beyond: The Dietary, Social and Practical Impacts of a Universal Free School Breakfast Scheme in the North West of England, UK. *International Journal of Sociology of Agriculture & Food* 2014;21:261–74.
49. Nelson M, Lowes K, Hwang V, et al. The contribution of school meals to food consumption and nutrient intakes of young people aged 4-18 years in England. *Public Health Nutr* 2007;10(7):652-62. doi: 10.1017/S1368980007382529 [published Online First: 20070306]
50. Donin AS, Nightingale CM, Owen CG, et al. Regular breakfast consumption and type 2 diabetes risk markers in 9- to 10-year-old children in the child heart and health study in England (CHASE): a cross-sectional analysis. *PLoS Med* 2014;11(9):e1001703. doi: 10.1371/journal.pmed.1001703 [published Online First: 20140902]
51. Murphy S, Moore GF, Tapper K, et al. Free healthy breakfasts in primary schools: a cluster randomised controlled trial of a policy intervention in Wales, UK. *Public Health Nutr* 2011;14(2):219-26. doi: 10.1017/S1368980010001886 [published Online First: 20100706]
52. Belderson P, Harvey I, Kimbell R, et al. Does breakfast-club attendance affect schoolchildren's nutrient intake? A study of dietary intake at three schools. *Br J Nutr* 2003;90(6):1003-6. doi: 10.1079/bjn20031011
53. Jenkins KT, Benton D, Tapper K, et al. A cross-sectional observational study of the nutritional intake of UK primary school children from deprived and non-deprived backgrounds: implications for school breakfast schemes. *Int J Behav Nutr Phys Act* 2015;12:86. doi: 10.1186/s12966-015-0238-9 [published Online First: 20150625]
54. Franklin J, Kenward T, Freeman K, et al. The economic cost-effectiveness of the Magic Breakfast model of school breakfast provision: Magic Breakfast, Heinz, Pro Bono Economics, 2021.
55. Nelson M. School food cost-benefits: England. *Public Health Nutrition* 2012;16(6):1006-11. doi: 10.1017/s136898001200420x
56. Powell T, Harker R, Francis-Devine B, et al. Healthy Start scheme and increases in the cost of living. Research Briefing. London: UK Parliament, 2023.
57. Parnham J, Millett C, Chang K, et al. Is the healthy start scheme associated with increased food expenditure in low-income families with young children in the United Kingdom? *BMC Public Health* 2021;21(1):2220. doi: 10.1186/s12889-021-12222-5 [published Online First: 20211217]
58. NHS. NHS Healthy Start: Information for health professionals, local authorities and supporting organisations. 2022
59. Browne S, Dundas R, Wight D. Assessment of the Healthy Start Voucher scheme: a qualitative study of the perspectives of low income mothers. *The Lancet* 2016;388 doi: 10.1016/s0140-6736(16)32248-6
60. Lucas PJ, Jessiman T, Cameron A, et al. Healthy Start Vouchers Study: The Views and Experiences of Parents, Professionals and Small Retailers in England: School for Policy Studies, University of Bristol. Social Science Research Unit, Institute of Education, 2013.
61. Lucas PJ, Jessiman T, Cameron A. Healthy Start: The Use of Welfare Food Vouchers by Low-Income Parents in England. *Social Policy and Society* 2015;14(3):457-69. doi: 10.1017/s1474746415000020
62. Scottish Government. Take-Up Rates of Scottish Benefits: October 2022, 2022.
63. Egger L. From Food Welfare to Healthy Start: A Social and Economic Perspective. City University of London, 2021.
64. Moonan M, Maudsley G, Hanratty B, Whitehead M. An exploration of the statutory Healthy Start vitamin supplementation scheme in North West England. *BMC Public Health* 2022;22(1):392. doi: 10.1186/s12889-022-12704-0 [published Online First: 20220224]
65. McFadden A, Green JM, Williams V, et al. Can food vouchers improve nutrition and reduce health inequalities in low-income mothers and young children - a multi-method evaluation of the experiences of beneficiaries and practitioners of the Healthy Start programme in England. *BMC Public Health* 2014;14(148)
66. Ford FA, Mouratidou T, Wademan SE, Fraser RB. Effect of the introduction of 'Healthy Start' on dietary behaviour during and after pregnancy: early results from the 'before and after' Sheffield study. *Br J Nutr* 2009;101(12):1828-36. doi: 10.1017/S0007114508135899 [published Online First: 20081119]
67. Griffith R, von Hinke S, Smith S. Getting a healthy start: The effectiveness of targeted benefits for improving dietary choices. *J Health Econ* 2018;58:176-87. doi: 10.1016/j.jhealeco.2018.02.009 [published Online First: 20180224]
68. Cooke SJ, DeClerck F, Barrios E, et al. Biodiversity, agriculture and sustainable production: GBF Target 10. *PLOS Sustainability and Transformation* 2023;2(3) doi: 10.1371/journal.pstr.0000048
69. Scantlebury RJ, Moody A, Oyebo O, Mindell JS. Has the UK Healthy Start voucher scheme been associated with an increased fruit and vegetable intake among target families? Analysis of Health Survey for England data, 2001-2014. *J Epidemiol Community Health* 2018;72(7):623-29. doi: 10.1136/jech-2017-209954 [published Online First: 20180307]
70. Ohly H, Crossland N, Dykes F, et al. A realist review to explore how low-income pregnant women use food vouchers from the UK's Healthy Start programme. *BMJ Open* 2017;7(4):e013731. doi: 10.1136/bmjopen-2016-013731 [published Online First: 20170421]
71. Messer B. Rose Vouchers for fruit and veg. Lambeth project final evaluation: Food Matters,, 2017.
72. Laws R, Adam M, Esdaile E, et al. What Works to Improve Nutrition and Food Sustainability across the First 2000 Days of Life: A Rapid Review. *Nutrients* 2022;14(4) doi: 10.3390/nu14040731 [published Online First: 20220209]
73. Chatterji P, Brooks-Gunn J. Breastfeeding Practice and Well-Child Care Among Unmarried, Low-Income Mothers. *American Journal of Public Health* 2004;94:1324-27.
74. Khanani I, Elam J, Hearn R, et al. The impact of prenatal WIC participation on infant mortality and racial disparities. *Am J Public Health* 2010;100 Suppl 1(Suppl 1):S204-9. doi: 10.2105/AJPH.2009.168922 [published Online First: 20100210]

75. Tester JM, Leung CW, Crawford PB. Revised WIC Food Package and Children's Diet Quality. *Pediatrics* 2016;137(5) doi: 10.1542/peds.2015-3557 [published Online First: 20160407]
76. Ng SW, Hollingsworth BA, Busey EA, et al. Federal Nutrition Program Revisions Impact Low-income Households' Food Purchases. *Am J Prev Med* 2018;54(3):403-12. doi: 10.1016/j.amepre.2017.12.003
77. Vercammen KA, Moran AJ, Zatz LY, Rimm EB. 100% Juice, Fruit, and Vegetable Intake Among Children in the Special Supplemental Nutrition Program for Women, Infants, and Children and Nonparticipants. *Am J Prev Med* 2018;55(1):e11-e18. doi: 10.1016/j.amepre.2018.04.003 [published Online First: 20180618]
78. Hamner HC, Paolicelli C, Casavale KO, et al. Food and Beverage Intake From 12 to 23 Months by WIC Status. *Pediatrics* 2019;143(3) doi: 10.1542/peds.2018-2274 [published Online First: 20190207]
79. Alexandra Rose Charity. Rose Vouchers for Fruit and Veg Project Impact and Outcomes Report, 2023.
80. Academy of Royal Medical Colleges. Securing our healthy future: Prevention is better than cure, 2023.
81. Cribb J, Farquharson C, McKendrick A, Waters T. The policy menu for school lunches: options and trade-offs in expanding free school meals in England. IFS Report R253: Institute for Fiscal Studies, 2023.
82. Public Health England. Health matters: obesity and the food environment. Guidance. 2017 [Available from: <https://www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment/health-matters-obesity-and-the-food-environment-2>].
83. National Food Strategy: The Plan. An independent review for Government 2022 [Available from: <https://www.nationalfoodstrategy.org>].
84. Change RF. Evidence briefing 1: Health and economic benefits of an upstream sugar and salt levy, 2023.
85. Change RF. Evidence briefing 2: Health and economic impact of an upstream sugar levy on select categories of food. 2023
86. Jones NL, Gilman SE, Cheng TL, et al. Life Course Approaches to the Causes of Health Disparities. *American Journal of Public Health* 2019;109(S1)

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