

Evidence Summary

Food Insecurity Interventions



VERSION CONTROL

Confidentiality
PUBLIC

Version	Publishing Date	Comments	Author
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Food Insecurity Interventions

Food insecurity is a growing challenge to an increasing proportion of the UK population. High inflation and high fuel costs resulting in conflicting household budget demands has led to many families and individuals struggling to buy enough food to function, and to achieve the nutritious diet essential for health. National and local initiatives have been developed to aid those experiencing food insecurity. Within Derbyshire, a variety of interventions exist to address food insecurity.

This Evidence Summary will focus on and give an account of the types of interventions currently available and summarise the evidence available to support the effectiveness of these interventions. The summary has been undertaken to help inform a Health Needs Assessment of Food Insecurity for Derbyshire.

KEY FINDINGS:

Food banks:

- Used by people of all ages experiencing financial difficulties.
- Provide short-term immediate help, but do not address the causes of food insecurity.
- Stigma and exclusion associated.

Holiday and Activity Clubs:

- Children living in food insecure households disproportionately benefit, with less associated stigma.
- Mainly benefit from the social interactions around food, rather than receiving a healthy meal.

Breakfast clubs:

- Provide a healthy and varied breakfast and creates opportunities for social interactions.
- Some children are excluded from attending due to cost.

Vouchers:

- Healthy Start vouchers are used to increase consumption of fruit and vegetables if the individual values nutrition.
- Free school meal distribution is more effective than school food voucher programmes, with minimal stigmatisation attached.
- Fruit and vegetable voucher scheme gained a high level of acceptance

Community initiatives:

- Charity run food pantries provide an important supply of food. However, accessibility is often an issue.
- Community gardens provide individuals with a purpose.
- Community initiatives, such as cookery classes help to re-engage individuals with food and cooking.

Who is this summary for?

This Evidence Summary was undertaken for Health Improvement, Derbyshire County Council.

Information about the evidence summary

The materials used to produce this summary have been drawn from information sources available to KIT. No assessment of quality has been incorporated into the process of synthesis.



This summary includes:

- Key findings from evidence identified in a non-systematic search of journals available to Public Health.



This summary does not include:

- Critically appraised evidence
- Recommendations

Further information about the methodology and content for this evidence summary can be obtained on request by emailing:

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INTRODUCTION

UK prevalence of food insecurity has been steadily increasing over the past two decades. The impact of the COVID-19 pandemic resulted in an increased demand for food aid. Now, with the impact of the Ukraine War affecting global food and fuel supplies; rapidly rising UK inflation, the freezing of tax allowances and increased NI contributions; salaries, universal credit and pensions not keeping pace with inflation, many people are finding themselves in a financially unstable position where they require assistance to afford to eat.

In research literature, commissioned reports and Government documents, food insecurity definitions are aligned with the definition of food insecurity from the UN Food and Agriculture Organisation.

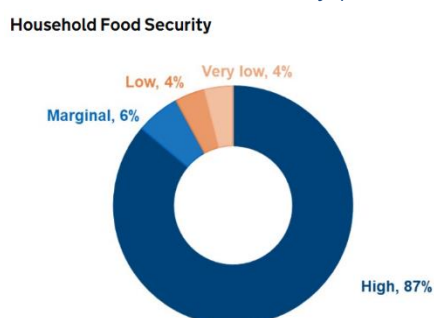
*A person is food insecure when they lack regular access to enough safe and nutritious food for normal growth and development and an active and healthy life. This may be due to unavailability of food and/or lack of resources to obtain food*¹.

Strategies to help people in this situation have traditionally involved emergency food parcels and “soup kitchens” usually supported by religious groups and donations. From the beginning of the 21st century food banks, a place where food is given to people who do not have enough money to buy it, have become increasing more widespread across the UK. Food banks resulted in recipients feeling ashamed and stigmatised by their community. The approach to food insecurity is now changing with the Trussell Trust exploring ways to reduce and remove the need for food banks within society by signposting users to access ways to improve their situation and encouraging volunteering to provide valuable work experience². Communities are encouraged to establish social initiatives where individuals can contribute and have ownership of the solution, i.e., Community Cafés, Pantries and Gardens. Business initiatives to reduce food waste from supermarkets, food manufacturing and restaurants provide food supplies to food banks and cafes without requiring donations from a population who cannot afford to give. Government initiatives such as free school meals for households on very low incomes, Sure Start vouchers and holiday clubs with meals provide help to families enduring poverty.

1.1 Prevalence of food insecurity in Derbyshire

The Department for Work and Pensions measures UK Food Security through the Family Resources Survey (FRS), which shows that 8% of the population suffer from low or very low levels of food security³.

Figure 1 Household Food Security (DWP 2019 - 2020, Family Resources Survey)



Research from the Food Foundation has found that in 2020/21 the poorest fifth of UK households would need to spend 47% of their disposable income on food to meet Eatwell Guide costs. This compares to just 11% for the richest fifth⁴.

In Derbyshire levels of income deprivation vary across the districts. Over 11% of the Derbyshire population (89,597 people) are likely to be food insecure (Table 1). Income deprivation is based on the number of people out of work and those on low earnings. It is likely that these percentages of the population are food

insecure and unable to afford a healthy diet leading to potential obesity and ill health, therefore incurring significant health care costs.

Table 1 Local Income Deprivation ONS 2021

District	Income Deprived in 2019		Rank of most income deprived in 316 English local authority areas
	Percentage	Number	
Amber Valley	10.9%	14,042	157
Bolsover	14.7%	11,952	79
Chesterfield	15.3%	16,054	71
Derbyshire Dales	6.8%	4,925	270
Erewash	12.0%	13,840	135
High Peak	9.7%	8,985	190
North East Derbyshire	11.2%	11,448	145
South Derbyshire	8.3%	9,090	225
Derbyshire County	11.1% (average)	89,597	

Measures are derived from the Indices of Multiple Deprivation produced by the Ministry of Housing, Communities and Local Government (2019). Population figures ONS Mid-2020 population estimates.

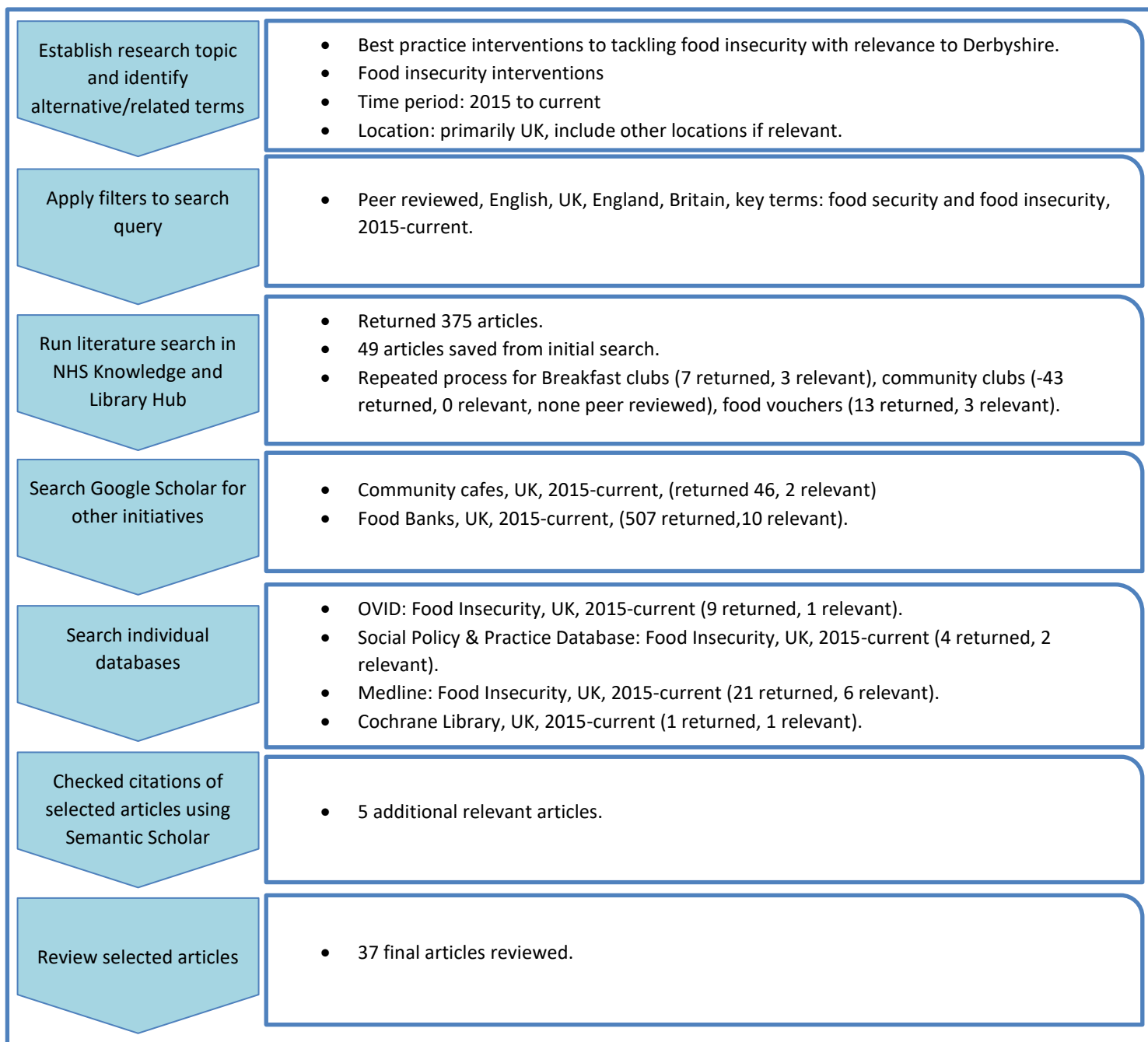
1.2 Evidence Summary Purpose

This document provides a brief summary of key reports produced by the UK government and charities to explain food insecurity, impact and interventions. The report will then summarise the interventions available and the relevant evidence on the effectiveness of these to address food insecurity, primarily focusing on UK locations. It will consider interventions available to children and adults. It will not go into detail of Derbyshire specific interventions for example the Feeding Derbyshire network. This evidence summary will inform part of the Food Insecurity Health Needs Assessment for Derbyshire.

2 LITERATURE SEARCH STRATEGY

2.1 Methodology

The 'PICOS' literature search strategy template was used to refine the target population, intervention, comparator, outcome(s) and setting, in order to identify literature that focused on best practice approaches to tackling food insecurity with relevance to Derbyshire. Within this search strategy, developing world literature was excluded to ensure that only research with similar settings to Derbyshire was included to allow for information to be abstracted and related to the population.



3 KEY UK REPORTS

This section outlines the most recent reports produced by the UK government to review the status of food insecurity. UK charitable organisations such as the Joseph Rowntree foundation and The Trussell Trust also assess the scope of food insecurity in the UK and their findings are outlined below. Also included in this section are other interventions concentrated mainly in Scotland and Wales, initiated by local government or charitable organisations but not covered by literature reviews.

3.1 Commissioned Reports (government)

The UK Government accepted the recommendation in the part one of National Food Strategy to monitor food insecurity⁵. The first government commissioned report, published in December 2021, used data collected from the Family Resources Survey for the financial year ending March 2020⁶. Food Security is defined as people in the UK having physical and economic access to food at all times. The key messages from the 2021 report:

- 92% of households regard themselves as being food secure in the financial year 2019 – 2020
- In the last decade food and non-alcoholic drinks have become relatively cheaper. Housing and transport make up the largest share of household spend.
- Access to food shops is adequate, at least 84% of the population can reach a shop within 15 minutes by walking or public transport.

However, since the report's publication, circumstances in the UK and across the world have changed considerably; due to the Ukraine war, food and fuel prices have increased rapidly, and inflation is high. Therefore, more of the UK population is likely to be food insecure.

The Food Standards Agency (FSA) conducts a biannual survey, Food and You 2, which measures self-reported consumer knowledge, attitudes and behaviours related to food safety and other food issues amongst adults. The latest report, Wave 3, was published in January 2022, reflecting survey fieldwork conducted between 28th April 2021 and 25th June 2021⁷.

Key measures of food security are reported. The FSA follows the World Food Summit definition of food security, meaning that all people always have access to enough food for a healthy and active lifestyle. The survey uses the 10 item U.S. Adult Food Security Module and a 12-month reference period.

The latest survey found that across England, Wales, and Northern Ireland, 85% of respondents were classified as food secure (72% high, 13% marginal) and 15% of respondents were classified as food insecure (9% low, 6% very low).

The survey methods used by the Family Resources Survey and the Food and You 2 Survey may account for the differing results. The latest Family Resources Survey reports that 93% of households consider themselves to be food secure⁸. The Food and You 2 survey reports this figure at 85%. The Family Resources Survey used data collected by telephone interview in the year ending March 2021, the Food and You 2 survey collected data by completion of an online or postal survey between April to June 2021. Respondents may have been more willing to report their level of food security/insecurity through the confidentiality of an online/postal survey rather than admitting to an interviewer over the phone that they could not afford to eat. This could account for the difference between the figures.

3.2 Commissioned Reports (UK charities)

3.2.1 Joseph Rowntree Foundation

The Joseph Rowntree Foundation is an independent social change organisation working to reduce UK poverty. In January 2022 the foundation produced a report “The essential guide to understanding poverty in the UK”. Though the statistics focused on poverty relevant to food insecurity. Poverty is defined as a person’s lack of ability to afford what they need and to participate in activities routinely undertaken by others in society.

Key findings

22% of the UK population (14.5 million people) are in poverty, this can be broken down into 8.1 million working age adults, 4.3 million children and 2.1 million pensioners.

3.2.2 Trussell Trust

The Trussell Trust supports a nationwide network of food banks, providing emergency food and support to people locked in poverty. The Trust also campaigns for change to end the need for food banks in the UK. In May 2021, the Trussell Trust published a second report building on previous evidence: State of Hunger, building the evidence on poverty, destitution, and food insecurity in the UK². This report details the increased use of food banks, the reasons for use, groups particularly at risk and the underlying drivers of food bank need. The report was researched and written by academics from Heriot Watt University, Edinburgh and funded by Asda supermarkets. It is a comprehensively researched and informative report covering all aspects of food banks.

The Trussell Trust State of Hunger research programme uses the adult version of the Household Food Security Survey Module (HFSSM) to measure the level of food insecurity in the household. HFSSM is a validated, commonly used tool in research on household food insecurity in Western countries⁹. The version of HFSSM used in State of Hunger surveys asked about food insecurity on the ‘past 12 months’ basis.

Three levels of household food insecurity were derived: severe food insecurity (HFSSM score 6-10), moderate food insecurity (score 3-5), and marginal food insecurity (score 1-2). To be classified as severely food insecure, i.e., to score at least six points on HFSSM, one needed to be hungry due to lack of money or skip meals/cut portion sizes more than occasionally. In relation to this scale, in this study hunger is understood as ‘household food insecurity’ as measured by the severe or moderate household food insecurity categories.

Key findings

Hunger is understood as ‘household food insecurity’, which itself is defined as ‘a household-level economic and social condition of limited or uncertain access to adequate food.

Destitution is the condition of people who cannot afford to buy the absolute essentials that we all need to eat, stay warm and dry, and keep clean.

- Increased food bank use results from unmet needs, not a growth in the number of food banks.
- In 2019/20 700,000 households (2.5%) used a food bank.
- At the start of the first lockdown (March – June 2020) food parcel need spiked by 85% in the Trussell Trust network and 126% in the independent food aid network.

Reasons for Food Bank Use:

- Extreme low income
- Destitution

- House payments (allowance not sufficient to cover cost, bedroom tax)

Groups particularly at risk:

- Young people – tend to have high levels of food insecurity but not referred to food banks.
- Children - 49% increase in support to households with children between 2018/19 and 2019/20. Particularly larger families where the two child limit to child benefit applies and other benefit caps.
- Those with no-recourse to public funds – i.e., migrants.
- Those with ill-health and disability - 7 out of 10 households referred have someone with ill health or a disability. Four times the rate of the general population. 62% of working age people referred to food banks in early 2020 had a disability as defined by the Equality Act 2010.

The underlying drivers for food bank use can be classified as compounded financial strain due to adverse life events, ill health, and insufficient or interrupted income from the welfare safety net. Additionally, food bank users have a lack of formal or informal support networks such as family or friends or more formalised social care.

3.3 Interventions not reviewed in literature

3.3.1 Scotland

Public Health Scotland has a subdivision responsible for food and health. Community Food and Health (Scotland), CFHS, aims to ensure that everyone in Scotland has the opportunity, ability, and confidence to access a healthy and acceptable diet for themselves, their families, and their communities¹⁰. They work within low-income communities to address health inequalities and barriers (availability, affordability, skills, and culture) to healthy and affordable food. Communities are supported to identify these barriers, develop local responses to address them and identify where other involvement or actions are required. Though the evidence based reviews of these projects is sparse, there are studies outlined below, on the Community Food and Health website: <https://www.communityfoodandhealth.org.uk/community-based-activity/case-studies/>.

There are case studies describing community cafes and retailing; community development, community gardening, cookery skills, working with asylum seekers, youth, and disabled populations.

3.3.2 Wales

The Welsh government are developing a Community Food Strategy and are in the consultation phase with interested populations¹¹.

Food Sense Wales is an organisation working to create a food system for Wales that's good for people and the planet. It co-produces a variety of projects including:

Sustainable Food Places: (previously Sustainable Food Cities) is one of the UK's fastest-growing social movements. Its network brings together pioneering food partnerships from towns, cities, boroughs, districts, and counties across the UK that are driving innovation and best practice on all aspects of healthy and sustainable food. Food Sense Wales is Sustainable Food Place's national partner in Wales and has an ambition to see a food partnership in every local authority in Wales, creating a network that would form the foundation for developing the vision, infrastructure and action needed to make Wales's food system fit for Future Generations. Scotland and Northern Ireland are also working with Sustainable Food Places.

<https://www.sustainablefoodplaces.org/>

3.3.3 Other Charity Interventions

Children's Right 2 Food: Is a project created across the UK by the Food foundation, supported by Dame Emma Thompson and Marcus Rashford. It is campaigning for:

- a. A new Children's Right2 Food commission to monitor and improve children's food.
- b. A nutritious start in life for every child, including expanding the health start scheme.
- c. Free school meals for all children.
- d. Stop the stigma, take steps to ensure no child is humiliated by hunger.
- e. Put health before profits, businesses and government must help to make the healthiest options the easiest to choose.

<https://foodfoundation.org.uk/initiatives/childrens-right2food>

Food Power: this project ran from 2017 – 2021 and worked with local communities across the UK to strengthen their ability to reduce food poverty and tackle its root causes. Food Sense Wales worked with Sustain and Church Action on Poverty as part of a successful bid to develop solutions to food poverty through local alliances and people powered change. Examples of solutions were community pantries, increase awareness and uptake of health start vouchers, and training community volunteers to cook and deliver nutritious meals to vulnerable families.

<https://www.foodsensewales.org.uk/good-food-movement/food-power/>

4 LITERATURE – EVIDENCE SUMMARY MAPPING

This section summarises the literature relating to different types of interventions to address food insecurity, identified by using the methodology outlined in section 2.

4.1 Food Banks

Evidence suggests that operational characteristics are an important part of access to food banks, with lower opening hours resulting in a lower volume of usage. One of the main drivers for using food banks is disruption to income from social security benefits, as well as chronic low income, debt, those experiencing severe financial shock, unemployment, and disability.

Food banks provide social contact and support to users, as well as providing food, toiletries and sometimes fuel. The food provided is usually not ideal and lacks a range of food that allows people to make choices and form a balanced diet. An informal and flexible approach within food banks compared to welfare offices allows a more personal approach and for support to be tailored to individuals' needs. Those offering advice and counselling as additional resources help to reduce local food insecurity.

Food banks are used by people of all ages experiencing financial difficulties, but also play a role in the provision of care to children generally, but particularly where childhood deprivation is high. Moreover, a study of older people using food banks showed that they were almost entirely reliant on emergency food, often lived alone and were on low incomes. However, there appears to be a forgotten care gap in the UK where a substantial number of older people are living in food insecurity and experience issues when accessing food aid.

There is a consensus that food banks provide a short-term immediate response to food insecurity and help to treat the consequences of food insecurity, but do not address the causes or affect long-term improvement. Furthermore, food parcels are hugely valued, but receiving food aid is a last resort with a considerable amount of embarrassment, stigma and exclusion associated with using food banks. Resulting in users being apprehensive and ashamed to be accessing food banks, with more reluctance reported in rural areas.

This refers to articles located in Appendix 1, rows 1-15.

4.2 Holiday Clubs

Free food for holiday clubs is procured from a variety of sources including, weekly food donations, local stores and wholesalers, local restaurants, and by utilising local catering colleges, community food growing organisations etc., but there are often resource constraints. There is vast variation in holiday club provision in terms of operating hours, staffing, costs, and costs to the child.

A large proportion of children attending holiday clubs live in food insecure households and households that also face frequent episodes of hunger. Therefore, children living in these circumstances disproportionately benefit from holiday clubs, compared to those from food secure households. Although children attending holiday clubs appear to be aware of poverty and food insecurity, there is less stigmatisation associated with attending the clubs.

The benefits of attending holiday clubs are centred more around the opportunities created to experience social interactions around food, enhance food experiences and food confidence, learn new skills, gain confidence, and promote positive behaviour, rather than receiving a healthy meal. Furthermore, holiday clubs help with childcare costs and family budgets. However, meals at holiday clubs aren't always healthy and consist more of snack-style meals. Meals aimed to meet school dinner nutritional standards, but this was sometimes limited by food availability.

Furthermore, evidence suggests that parents/carers in food insecure households restrict food intake and change shopping habits when school holidays are approaching in an attempt to make food last longer. This suggests that children's exposure to periods of food insecurity and sub-optimal nutrition is not restricted to school holidays.

Some studies conclude that it is unknown whether holiday clubs can positively impact children's wellbeing and healthy eating, whilst others suggest that holiday clubs appear to be helping reduce the problems associated with children living in food insecure households during summer holidays.

This refers to articles included in Appendix 1, rows 16-23.

4.3 Breakfast Clubs

Breakfast clubs provide a healthy and varied breakfast that offers more options and more nutritious food than that available at family's homes. Children and adults are encouraged to socially interact with others at breakfast clubs which strengthens existing social networks and creates stronger community bonds. Families report that attending breakfast clubs creates a routine in school holidays which makes it easier to return to school routines. Additionally, families are able to access or are made aware of other community and healthcare facilities during club sessions. However, some children are excluded from attending the clubs due to cost.

This refers to articles included in Appendix 1, rows 21, 22 and 24.

4.4 Vouchers

The use of Healthy Start vouchers depends on the individual and their values regarding nutrition. Studies suggest that if the pregnant woman values healthy eating, then the vouchers are used to increase their consumption of fruit and vegetables, which results in nutritional benefits. Alternatively, vouchers are used to make other purchases or simply to reduce the cost of the usual fruit and vegetable shop, resulting in no nutritional gain.

The uptake of Healthy Start vouchers increases when there is an understanding of the redemption process and when a welfare rights advisor is appointed. This staff member also makes pregnant women aware of

other benefits available, which results in these being successfully claimed. Midwives often do not have the capacity to aid with completing forms, however, welfare officers present in the same location also help with this. An issue with the usage of Healthy Start vouchers concerns the disempowerment of women when vouchers are used by a different person.

Free school meal distribution is considered to be much more effective than school food voucher programmes, both in reducing food insecurity and promoting healthy eating. The participation of all students receiving free school meals minimised social stigmatisation, whereas children felt embarrassed to collect vouchers. Overall, free school meals help to alleviate child food insecurity and provide control over the nutritional content of meals given to children. Whereas school food vouchers help to manage family household budgets but do not encourage healthy eating unless parents are already conscious of nutritional requirements.

Evidence suggests that the fruit and vegetable voucher scheme gained a high level of acceptance, with the majority of eligible households joining the scheme and spending their vouchers. Local councillors and public health are supportive of this scheme. Households reported that the scheme made them more aware and conscious about healthy food choices and resulted in them eating more fruit and vegetables. However, more research is needed to assess the impact on diets accurately.

This refers to articles included in Appendix 1, rows 25-28.

4.5 Community Initiatives – pantries, gardens, cafes

For people experiencing food insecurity, charity run food pantries provide an important supply of adequate food. However, there are many issues concerning the accessibility of pantries, both in terms of opening hours and the availability of food. Pantries are often not reliably open during their stated opening hours, along with an insufficient quantity and quality of food. Management of food supplies is often poor with regulations that are arbitrarily applied and broken. These issues result in pantries being difficult to access and a challenge for new or inexperienced users.

Community gardens have been reported to positively impact visitors by providing individuals with a purpose. They allow individuals to take ownership and maintain respect much more than the concept of food banks. Furthermore, they improve the diet of those accessing them, and facilitate access to community involvement and help and support to those who would otherwise not access it through a more formal approach.

Self-organised food-based community initiatives such as crafting, and snack building links to reducing reliance on the NHS to provide social interaction. Self-organising is considered to be more than a free time activity but is a valuable asset for building resilience and social sustainability. Family based activities such as picnics in local parks allow parents and children to reclaim spaces that are usually unused due to feeling unsafe. Community projects that provide advice and education have developed to also act as food banks.

Community initiatives such as cookery classes have had positive impacts on participants by re-engaging them with food and cooking. The classes further benefited participants from them gaining a sense of empowerment by increasing confidence and improving skills when cooking food, sharing the social experience, and also sharing food with family and friends at home. This activity also helped to reduce feelings of social isolation and provided an opportunity to connect with wider society in a positive way. However, tackling food insecurity needs to go beyond this type of initiative.

This refers to articles included in Appendix 1, rows 29-33.

5 REFERENCES

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6 APPENDIX

Reference number	Initiative type	Citation	Title	Country	Overview	Key Results	Limitations
1	Food bank	Douglas, F., Sapko, J., Kiezebrink, K. and Kyle, J. (2015). Resourcefulness, Desperation, Shame, Gratitude and Powerlessness: Common Themes Emerging from A Study of Food Bank Use in Northeast Scotland. <i>AIMS Public Health</i> , 2(3), pp.297–317. doi:10.3934/publichealth.2015.3.297.	Resourcefulness , Desperation, Shame, Gratitude and Powerlessness: Common Themes Emerging from A Study of Food Bank Use in Northeast Scotland	A city in northeast Scotland	<p>Background: Current trend in food bank use is showing an increase in demand. Little is known about the experiences of those utilising food banks</p> <p>Aims: To establish who was attending a food bank, there reasons for attending and what they did with and thought of the food they received.</p> <p>Methods: A researcher volunteered in the food bank for 4 months, in order to increase understanding of the food bank & users before interviewing. Though 22 people were identified for interview only 5 males and 2 females agreed. Grounded theory approaches were used to analyse data and produce themes. An audit of food bank records produced a demographic understanding of users.</p> <p>Conclusion: Those who use food banks only do so after severe financial shock. Experience great shame and emotional challenge. They are resourceful in using food carefully & efficiently.</p>	<p>Disruptions to income from social security benefits were one of the main drivers for visiting a food bank.</p> <p>Clients could budget and cook but many faced significant challenges in storing and accessing cooking facilities.</p> <p>Chronic low income or debt were common</p> <p>Ill health was common</p> <p>Users did not feel they could refuse food they didn't like but would pass it on to others so as not to waste it.</p>	<p>Those that were interviewed were self-selecting. However, they were representative of the food bank clientele demographic.</p> <p>One small study in one Scottish city so results were not particularly generalisable.</p>
2	Food bank	Loopstra, R., Lambie-Mumford, H. and Fledderjohann, J. (2019). Food bank operational characteristics and rates of food bank use across Britain. <i>BMC Public Health</i> , 19(1).	Food bank operational characteristics and rates of food bank use across Britain	UK	<p>Background: Explores the operating hours & locations of food bank across the UK and examines how this affects volume and demographic of use.</p> <p>Aims: Hypothesise that better accessibility of food banks is positively associated with number of food parcels distributed. That poor access to food banks moderates' associations with unemployment, in work poverty and disability.</p> <p>Methods: Analysis using data from The Trussell Trust Food bank network linked with local authority data for working age unemployment rates, disability and working tax claimants.</p>	<p>Weekday operating hours primarily between 10am and 2pm, but at any given hour only 20% food banks open. Lower opening hours were associated with lower volume of usage. Disability & unemployment are associated with higher usage, however poor accessibly lowered usage by disability. Opening hours restricted use by those in work.</p>	<p>No reference of restrictions imposed by referral agencies or accessing referral agencies.</p> <p>The number of referral people can have within a time period was also not taken into account</p> <p>Does not consider availability of food banks outside of the Trussell Trust.</p>

The effectiveness of food insecurity interventions

Reference number	Initiative type	Citation	Title	Country	Overview	Key Results	Limitations
		doi:10.1186/s12889-019-6951-6.			Conclusion: Operational characteristics are an important part of access to food banks, raising questions about the capacity of food banks to meet the needs of people at risk of food insecurity.		
3	Food bank	Strong, S. (2022). Taking back taste in food bank Britain: on privilege, failure and (un)learning with auto-corporeal methods. [online] orcid.org. Available at: https://orcid.org/0000-0003-2400-0307 [Accessed 17 May 2022].	Taking back taste in food bank Britain: on privilege, failure and (un)learning with auto-corporeal methods.	Valleys of south Wales UK	<p>Background: Charitable food parcels have previously been assessed on nutritional content or whether they can be cooked with limited equipment or for long they should last (feed an individual/family). They are not measured on by taste. The author/researcher explains the concept of taste being a product of background and education.</p> <p>Aims: To assess the “taste” of food parcels by attempting to live on the contents for a month and explored personal and societies beliefs and judgements.</p> <p>Methods: Volunteered twice a week for 15 months at food bank, found recipients too grateful for the food to consider the taste of it. Attempted to replicate food parcels and live on them for a month, keeping a diary of tastes, issues and thoughts.</p> <p>Conclusion: Explored relationships between power & food, social contacts.</p>	Food banks treat the consequences of food insecurity rather than the causes.	<p>Very subjective. No clear scientific method or control.</p> <p>However, a lot of considerations of the ethic of “do no harm”.</p>
4	Food bank	Purdam, K., Esmail, A. and Garratt, E. (2019). Food insecurity amongst older people in the UK. <i>British Food Journal</i> , 121(3), pp.658-674. doi:10.1108/BFJ-05-2018-0301	Food insecurity amongst older people in the UK	UK	<p>Background: 1.4% of people claiming emergency food parcels from The Trussell Trust (2017) were aged 65 years and older. There are also many independent food banks and informal sources of emergency food that are largely undocumented, and so the true number of people, including older people, experiencing food insecurity may be substantially higher.</p> <p>Aims: To present findings from research into food insecurity amongst older people aged 50 years and older in the UK.</p> <p>Methods: Secondary analysis of national-level survey data and semi-structured interviews with</p>	There is a forgotten care gap in the UK where a substantial number of older people are living in food insecurity. Many older people live alone and in poverty, and increasing numbers are constrained in their spending on food and are skipping meals. Food insecurity amongst older people can be hidden.	<p>The broad categorisation of older people aged 50 years and older includes people in very different circumstances and of varying levels of health.</p> <p>The qualitative component of the research was undertaken across various sites in a single city in Northwest England.</p>

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					<p>older people receiving emergency food from food banks.</p> <p>Conclusion: Alongside affordability, physical access to food appeared to play a part in older people's nutrition. All the older people interviewed were in urgent need, some were almost entirely reliant on emergency food and many had felt shame and stigma from needing to visit a food bank. Initiatives need to be multifaceted and target older people across a range of older age groups and particularly older people living alone and those living on low incomes.</p>		<p>Many older people are in poor health and may therefore be unable to access a food bank. Therefore, the experiences of this group have not been included in this study.</p>
5	Food bank	<p>Lawson, L. and Kearns, A. (2018). <i>Food and beyond: exploring the food bank experience</i>. GoWell Glasgow community Health and Wellbeing Research & Learning Programme.</p>	Food and beyond: exploring the food bank experience.	Glasgow	<p>Background: Food bank usage growing in Scotland</p> <p>Aims: To investigate the reasons behind food bank use, as well as access, experience, and consequences of use</p> <p>Methods: qualitative research, 23 in-depth semi structured interviews of food bank users in last 5 years.</p> <p>Conclusion: Food banks play an important role in providing social contact and support to users as well as providing food, toiletries and in some cases fuel.</p>	<p>Most use of food banks is triggered by change in benefits resulting in no or lower income.</p> <p>Many users had chronic & multiple physical and mental health problems</p> <p>Users lacked any other form of support or coping</p> <p>Users were ashamed & embarrassed to be using a food bank</p> <p>Users were pleasantly surprised at how empathic & supportive food bank volunteers are</p> <p>Food provided was not ideal, sometimes too much, however would never be wasted, sometimes returned via supermarket donation points, or shared with family/friends.</p>	<p>Out of the 145 food bank users sampled 23 were interviewed.</p> <p>Small Scottish sample, questionable if results are transferrable to England.</p>

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Reference number	Initiative type	Citation	Title	Country	Overview	Key Results	Limitations
6	Food bank	Lambie-Mumford, H. and Green, M.A. (2015). Austerity, welfare reform and the rising use of food banks by children in England and Wales. <i>Area</i> , 49(3), pp.273-279. doi: 10.1111/area.12233	Austerity, welfare reform and the rising use of food banks by children in England and Wales.	England and Wales	<p>Background: Since 2010, UK social policy has been dominated by austerity and welfare reform. These policy platforms sit on a wider set of shifts in policy framings, in terms of both understanding the issue of poverty and the most effective solutions to it. The resulting strategies employed have had significant impacts on children and their household incomes.</p> <p>Aims: Within the context of the changing nature of state welfare and the drive for more privatised provision, this paper focuses on the effects of this on assistance to children in particular, employing charitable food banks as a case study.</p> <p>Methods: The paper explores patterns in food bank provision among children in England and Wales using data collected by the Trussell Trust Food bank Network.</p> <p>Conclusion: The results show that the provision of food parcels to children by charitable food banks has grown considerably since the impacts of austerity, welfare reform and rising costs of living began in 2012/13. The results indicate that food banks are playing a bigger role in the provision of care to children generally in this context, but particularly where childhood deprivation is high.</p>	<p>Previous research on charitable food initiatives has shown that children (like adults) do not have any rights to access food charity provision. Food banks are not population-wide responses and while the food bank franchise model does protect consistency in provision within this Network, when looking across independent food banks and other food initiatives there is significant variability.</p> <p>There is also significant stigma and exclusion associated with food bank use and food bank uptake is most often a last resort.</p> <p>Food banks work to relieve symptoms of food insecurity; they do not address the root causes.</p>	While this is the first and largest national network of food banking projects, it does not represent all food banks in the UK.
7	Food bank	Caplan, P. (2020). <i>Food Poverty and Charity in the UK: food banks, the food industry and the state</i> . London UK: Goldsmiths University of London.	Food Poverty and Charity in the UK: food banks, the food industry, and the state	London and west Wales	<p>Background: The author is an eminent anthropologist, who has conducted much research in UK food poverty over the last 10 years</p> <p>Aims: To understand the social complexity of food bank use, operation and existence</p> <p>Methods: fieldwork and qualitative interviews</p> <p>Conclusion: Much stigma attached to food bank use; food poverty is far greater than those measured by attending a food bank. Increased move to increase the dignity of uses and provide access to support.</p>	<p>Most food bank use is necessitated by changes to benefits, benefits refused, delays in receipt of benefits, change of personal circumstances, and ill health.</p> <p>Many of those who have been in receipt of parcels from food banks return (payback) as volunteers or donate food when able.</p>	<p>This report is published by Goldsmiths, University of London and formed the basis of other peer reviewed published work by the author.</p> <p>Contains a lot of detailed case studies notes.</p>

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Reference number	Initiative type	Citation	Title	Country	Overview	Key Results	Limitations
8	Food bank	Wainwright, D., Buckingham, A. and Wainwright, E. (2018). Why do people use food banks? A qualitative study of food bank users in an English city. <i>Voluntary Sector Review</i> , 9(3), pp.311–329. doi:10.1332/204080518x15428930047072.	Why do people use food banks? A qualitative study of food bank users in an English city.	Bristol UK	<p>Background: Rapid growth of food banks in Britain has caused debate as to the reasons behind their increased existence.</p> <p>Aims: what reasons do participants give for using FB? How do they use the support they receive to manage other problems in addition to hunger? How does use of food banks affect people? How does FB compare with statutory welfare services?</p> <p>Methods: qualitative study of users at 3 Trussell Trust FB in Bristol. 25 semi structured interviews, thematic analysis.</p> <p>Conclusion: primary causes of FB visits are benefit sanctions and delays. All participants faced long term disadvantages. The more informal & flexible approach of FB compared with statutory welfare offices meant that support could be tailored to individuals needs and a more personal approach.</p>	<p>All participants suffered significant financial hardship Short term financial difficulties due to changed circumstance, usually connected with benefits.</p> <p>Users were apprehensive and embarrassed to be using a FB, but found FB workers to be non-judgemental, friendly & helpful.</p> <p>FBs have more able to use discretion than statutory services.</p>	<p>Study was limited to Trussell Trust FB and the Bristol area.</p> <p>The researchers' preconceptions were not discussed</p>
9	Food bank (rural)	May, J., Williams, A., Cloke, P. and Cherry, L. (2020). Still bleeding: The variegated geographies of austerity and food banking in rural England and Wales. <i>Journal of Rural Studies</i> , 79, pp.409–424.	Still bleeding: The variegated geographies of austerity and food banking in rural England and Wales.	England & Wales	<p>Background: Most research focuses on the context of food poverty within urban area. Rural areas face different challenges in terms of accessibility, social judgement, and great impact of austerity cuts.</p> <p>Aims: Use available stats to analysis austerity in rural England & Wales. Outline a geography of food banks in rural areas. Examine the rural context of food insecurity and poverty</p> <p>Methods: Stats from ONS, datasets from Local Authorities, changes in welfare. Stats from Trussell Trust and Independent food aid network. Interviews with 91 food bank managers at 22 food banks in 7 towns and cities.</p> <p>Conclusions: Cuts due to austerity have had a big impact on local welfare provision – lack of social infrastructure has had a disproportionate effect on</p>	<p>Far more reluctance to use food banks in rural areas.</p> <p>Also, more “judgement” and hostility from affluent residents</p> <p>Pockets of poverty in amongst richer towns/villages</p> <p>Cuts to public transport or increased fares have made it increasingly difficult to shop cheaply or even reach food banks from rural areas.</p>	Method referred to but not clearly explained

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		doi:10.1016/j.jrurstud.2020.08.024.			rural areas leading to greater poverty and food insecurity.		
10	Food bank	Fallaize, R., Newlove, J., White, A. and Lovegrove, J.A. (2020). Nutritional adequacy and content of food bank parcels in Oxfordshire, UK: a comparative analysis of independent and organisational provision. <i>Journal of Human Nutrition and Dietetics</i> , [online] 33(4), pp.477–486. doi:10.1111/jhn.12740.	Nutritional adequacy and content of food bank parcels in Oxfordshire, UK: a comparative analysis of independent and organisational provision	Oxfordshire England	<p>Background: With the rise in demand for food parcels from food banks it is even more important that they meet UK nutritional requirement</p> <p>Aims: To explore whether a typical food parcel meets adult daily nutritional and energy requirements.</p> <p>Methods: 2 Trussell Trust food bank parcels and 9 independent food bank parcels were surveyed in Oxfordshire</p> <p>Conclusion: Food parcels exceed energy requirements and were disproportionately higher in carbohydrate and sugars. Vitamin D and retinol are lower, with the Trussell Trust parcel worse than independent food banks.</p>	<p>Parcels provided energy, carbohydrate, sugar, protein and fibre that significantly exceeded the DRVs.</p> <p>62.2% of energy was provided as carbohydrate and 569% DRV by sugars</p> <p>Access to cold storage issues would improve on what can be provided.</p>	<p>Assumptions were made about the use/consumption of the food parcel content.</p> <p>Food parcel contents were assessed not actual consumption</p> <p>It was not known over what time period a food parcel was consumed or whether it was shared or consumed by one individual</p>
11	Food bank	Puddephatt, J.-A., Keenan, G.S., Fielden, A., Reaves, D.L., Halford, J.C.G. and Hardman, C.A. (2020). 'Eating to survive': A qualitative analysis of factors influencing food choice and eating behaviour in a food-insecure population.	Eating to survive': A qualitative analysis of factors influencing food choice and eating behaviour in a food-insecure population	Liverpool UK	<p>Background: Food insecurity affects 8.4 million in UK. Often associated with poor diet quality & obesity</p> <p>Aims: Explore factors that influence food choice & eating behaviour in a food insecure population</p> <p>Methods: Semi structured interviews of 24 adults attending a food bank and income support charity. Inductive thematic analysis</p>	<p>6 themes – income, cost of food, accessibility to shops, health issues, food rationing strategies, worsened health outcomes.</p> <p>Interviewees knew the basics of a healthy diet, but could not afford it, also knew how to cook, budget & meal plan. Initiatives should be focussed on reducing cost of</p>	<p>Recruitment was purposive and aided by a £20 supermarket voucher.</p> <p>No demographic data collected.</p> <p>Too small a sample to compare those with children and those without.</p>

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		<i>Appetite</i> , 147, p.104547. doi:10.1016/j.appet.2019.104547.			Conclusion: Income is the biggest factor, affecting cost & accessibility to health food.	healthy food not cookery lessons.	
12	Food bank	Hardcastle, S.J. and Caraher, M. (2021). The role of food banks in the context of food insecurity: Experiences and eating behaviours amongst users. <i>Appetite</i> , [online] 163, p.105208. doi:10.1016/j.appet.2021.105208.	The role of food banks in the context of food insecurity: Experiences and eating behaviours amongst users	Australia	Background: Food insecurity is associated with poor diet quality & obesity, however, influences on food choices and eating behaviour are unclear. Aims: To investigate the role of food banks in the context of food insecurity and explore food choices and eating behaviours amongst users. Methods: face to face interviews with 33 food bank users in Perth, w Australia, as they collected a food hamper. Interview transcripts analysed used thematic analysis. Conclusion: Four main themes – tides you over until pay day food hamper supporting meals and fruit & veg consumption. Food choices supplementing hunger. Household gate keeping and food control.	Food hamper contained fresh produce and dairy, designed to last a week to ten days. Due to social norms and culture meat often bought to supplement the hamper food. Lack of control/gate keeping over food resulted in hamper being consumed very quickly. Households in this theme would often daily shop to prevent members consuming all the food.	Only one food bank involved. Face to face interviews increased the likelihood of “socially desirable responses”.
13	Food bank	Ginsburg, Z.A., Bryan, A., Rubinstein, E.B., Frankel, H.J., Maroko, A.R., Schechter, C.B., Stowers, K.C. and Lucan, S.C. (2019). Unreliable and Difficult-to-Access Food for Those in Need: A Qualitative and Quantitative Study of Urban Food Pantries.	Unreliable and Difficult-to-Access Food for Those in Need: A Qualitative and Quantitative Study of Urban Food Pantries.	Bronx district, New York, US	Background: For those who are food insecure, charity run food pantries provide important access to adequate food. However, access (in various forms) is limited. Aims: To examine the qualitatively & quantitatively five dimensions of access in food pantries. Availability (item variety) Accessibility (hours of operation) Accommodation (cultural sensitivity) Affordability (cost & time) Acceptability (quality of food) Methods: 50 food pantries in Bronx, NY. Qualitative data from researcher observations and field notes from unstructured interviews with pantry workers. Quantitative data from frequencies of access aspects.	Only 50% pantries were open in the hours listed online. Even when open food could be unavailable, often of insufficient quantity or poor quality. Rules developed to manage food supplies were arbitrarily applied and broken, according to perceptions of the volunteers who ran the pantry. Visiting the pantry would be difficult for a new or inexperienced user.	Very unstructured qualitative analysis. Non-random and incomplete sampling No data was collected from clients

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		Study of Urban Food Pantries. <i>Journal of community health</i> , [online] 44(1), pp.16–31. doi:10.1007/s10900-018-0549-2.			Conclusion: Pantries are not reliably accessible both in terms of opening hours and availability of food.		
14	Food bank And community cafe	Caplan, P. (2017). Win-win?: Food poverty, food aid and food surplus in the UK today. <i>Anthropology Today</i> , 33(3), pp.17–22. doi:10.1111/1467-8322.12350.	Win-win?: Food poverty, food aid and food surplus in the UK today	Fishguard West Wales UK	Background: Growing levels of food poverty in the UK and increasing public awareness of its existence. Also increasing public disquiet about food waste. Using food waste to solve the food poverty issue seems like a win-win. Aims: To deconstruct popular views of food surplus and food aid and argue that the solution may contribute towards normalisation of the problem and not address the cause. Methods: Case Study of the Tesco/Fareshare relationship and a café recycling local surplus food. Conclusion: Food poverty and food waste are both problems that need addressing, however bringing both together does not solve the complex and fundamental issues of either or contribute to social justice.	The partnership between supermarkets, food waste & food banks/charities is smoothly run by apps. However Low paid Tesco staff need to use food banks Local cafes utilising food waste are shunned by locals who don't want to eat leftovers or be seen as poor. There are corporate image gains from being seen to help those in need and reduce food waste.	This is a social science paper which doesn't follow the scientific rigour of methodology of other studies. The location and number of Tesco and Fareshare partnerships interviewed is not clear. A lot of the evidence is anecdotal.
15	Food bank plus & community	Crisp, R., McCarthy, L., Parr, S., Pearson, S. and Perry, N. (2016). <i>Community-led approaches to reducing poverty in neighbourhoods: A review of evidence and practice</i>	Community-led approaches to reducing poverty in neighbourhoods: A review of evidence and practice	England	Background: Since 2010 UK governments have promoted community led activities as part of the "Big society" and Localism Act 2011. Devolvement of power to citizens and communities, alongside cuts in local govt budgets. Aims: Reviews evidence of effectiveness of community led approaches to tackling poverty at the neighbourhood level.	Food banks provide a short-term immediate response to food insecurity but do little to affect long term improvement. Food Bank plus model which includes advice & counselling hubs within the food bank go some way to reducing local food insecurity.	Report is about reducing poverty, not just food insecurity. Has not been published. Report produced in conjunction with Joseph Rowntree Foundation.

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		<p><i>review of evidence and practice Sheffield Hallam University.</i> [online] Shu.ac.uk. Available at: https://www.shu.ac.uk/centre-regional-economic-social-research/publications/community-led-approaches-to-reducing-poverty-in-neighbourhoods-a-review-of-evidence-and-practice [Accessed 26 May 2022].</p>			<p>Methods: Literature search using academic search engines. Websites of organisations involved in community work, call for relevant literature via academic & practitioner mailing lists.</p> <p>Conclusion: Poverty related outcomes vary across and within approaches. No silver bullet in terms of the best single approach to tackle poverty. Ongoing finance, skills & leadership of key individuals are important to success of projects. Scale is a continual challenge; valuable outcomes may only be achievable for a small number of people.</p>	Good example of a Community Group in Wales p13.	
16	Holiday club	<p>Long, M.A., Stretesky, P.B., Graham, P.L., Palmer, K.J., Steinbock, E. and Defeyter, M.A. (2018). The impact of holiday clubs on household food insecurity—A pilot</p>	The impact of holiday clubs on household food insecurity – A pilot study	UK	<p>Background: Holiday clubs are becoming a popular solution to help feed children in the UK during school holidays, but little is known about the way these clubs can impact food insecurity in a child's household.</p> <p>Aims: To investigate whether holiday clubs have the potential to reduce food insecurity among households in the United Kingdom</p> <p>Methods: Uses a pilot study that examines seven holiday clubs in the UK to draw conclusions about the programme and their impact on the food security of households.</p>	<p>The holiday clubs in this study appear to be helping UK households that suffer from food insecurity. Therefore, these clubs may be helping to reduce the problems associated with children living in food insecure households during summer holidays across the UK.</p>	Relatively small sample of respondents to the three statements about parents' experience of holiday clubs.

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		study. <i>Health & social care in the community</i> , 26(2), pp.e261-e269. doi: 10.1111/hsc.12507			Evaluation included a qualitative study on holiday club staff views and experiences and a quantitative study on children who attended the clubs' food intake and nutritional knowledge. Conclusion: A large percentage of children attending holiday clubs come from food insecure households and households that also face frequent episodes of hunger. Children from food insecure households disproportionately benefit from holiday clubs, compared to those from secure households.		
17	Holiday club	Holley, C.E., Mason, C. and Haycraft, E. (2019). Opportunities and challenges arising from holiday clubs tackling children's hunger in the UK: Pilot club leader perspectives. <i>Nutrients</i> , 11(6), p.1237. doi:10.3390/nu11061237	Opportunities and Challenges Arising from Holiday Clubs Tackling Children's Hunger in the UK: Pilot Club Leader Perspectives.	UK	Background: Information is lacking into what constitutes effective practice in the delivery of school holiday initiatives that include free food, and how they can be evaluated. Aims: To provide insight from individuals who implemented a pilot of a national project which provided free food for children at UK community summer holiday sports clubs in 2016. Methods: Focus groups were conducted with all 15 leaders of the holiday clubs to understand: (1) what opportunities are provided by community holiday sports clubs which include free food; (2) what challenges arose as a result of offering free food within a broader community holiday club sports offer. Conclusion: Offering free food at such clubs creates multiple opportunities for attending children, including, experiencing social interactions around food; enhancing food experiences and food confidence; and promoting positive behaviour. However, free food provision is associated with challenges including resource constraints and tensions around project aims.	Providing free food at UK community summer holiday sports clubs offers multiple opportunities to attending children. However, future work should determine whether holiday clubs can positively impact children's wellbeing and healthy eating.	The limited data gathered in this study prevents conclusions being drawn about the efficacy of a particular format of a successful club, or what a club must offer to be successful or what constitutes success for holiday hunger clubs.
18	Holiday clubs	Mann, E., Widdison, C., Sattar, Z. and	Procurement and delivery of food at holiday provision clubs	London UK	Background: There is no universal state provision during school holidays, and no obligation to stick to school food dietary regulations	Food procured from a variety of sources. Weekly food donations, sourced from local stores & wholesalers,	Study concentrated on holiday clubs in a London, capital city with great

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Reference number	Initiative type	Citation	Title	Country	Overview	Key Results	Limitations
		Defeyter, M.A. (2021). Procurement and delivery of food at holiday provision clubs. <i>Journal of Agriculture, Food Systems, and Community Development</i> , pp.1–13. doi:10.5304/jafscd.2021.111.009.			<p>Aims: Paper examines how holiday clubs source food.</p> <p>Methods: Mixed methods design, Kitchen Social 2018 – 2019, management data, survey of holiday club staff, structured observational data.</p> <p>Conclusion: holiday clubs adopt a variety of procurement strategies including relying on donated food.</p>	<p>receiving meals prepared by local restaurants. Utilising local catering colleges, community food growing organisation etc.</p> <p>Tried to adhere to school dinner nutritional standards but sometimes limited by food available.</p> <p>Numbers of children attending changed daily.</p> <p>Skills of staff/volunteers were not always as hoped for.</p>	<p>infrastructure, finding may not be transferrable to smaller towns or rural areas.</p>
19	Holiday clubs	Shinwell, J., Finlay, E., Allen, C. and Defeyter, M.A. (2021). Holiday Club Programmes in Northern Ireland: The Voices of Children and Young People. <i>International Journal of Environmental Research and Public Health</i> , 18(3), p.1337. doi:10.3390/ijerph18031337.	Holiday Club Programmes in Northern Ireland: The Voices of Children and Young People	Northern Ireland	<p>Background: In Northern Ireland nearly 305 of children are entitled to free school meals, many of these are thought to be at risk from holiday hunger Holiday clubs can address this aspect food insecurity.</p> <p>Aims: To investigate children's & young people's views of holiday clubs</p> <p>Methods: 3 holiday clubs, purposive sampling. Semi structured interviews in focus groups. Thematic analysis using Nvivo</p> <p>Conclusion: Both primary & secondary children showed high levels of awareness of poverty, food insecurity however they did not feel stigmatised attending holiday clubs. Benefits centred more around opportunities to socialise, learn new skills and gain confidence, than receive a health meal.</p>	<p>Though all children received meals at the holiday clubs these weren't always healthy and snack style meals were more popular. Holiday clubs were popular with children as it gave them purpose in the holidays, it increased sectarian mixing, helped older children gain youth leadership qualifications.</p> <p>Enables children to access food socially.</p> <p>Helps with childcare costs & family budgets.</p>	<p>Children may be influenced by others in focus groups.</p> <p>No statement of authors background and rigorous thematic coding checking.</p>

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Reference number	Initiative type	Citation	Title	Country	Overview	Key Results	Limitations
20	Holiday clubs	Shinwell, J. and Defeyter, M.A. (2021). Food Insecurity: A Constant Factor in the Lives of Low-Income Families in Scotland and England. <i>Frontiers in Public Health</i> , 9. doi:10.3389/fpubh.2021.588254.	Food Insecurity: A Constant Factor in the Lives of Low-Income Families in Scotland and England	Scotland & North England	<p>Background: During school holidays families struggle with food budgets particularly when the safety net of free school meals is not available.</p> <p>Aims: To investigate how low-income families feed their children during termtime and how these strategies differ during school holidays.</p> <p>Methods: Purposive sampling to recruit 21 parents whose children attended holiday clubs. Semi structured interviews. Grounded theory analysis in Nvivo.</p> <p>Conclusion: Low-income families are constantly experiencing food insecurity which becomes more severe in school holidays. Parents/carers restrict food intake/change shopping habits in the run up to holidays in attempt to make food last longer and have sufficient to prevent children going hungry.</p>	<p>Food insecurity is cyclical and aligns with the academic year. Dietary intake may begin to be compromised up to 1 month before school summer holidays when parents anticipate the struggle they will face and reduce expenditure, as well as stockpiling food.</p> <p>Finding suggest that children are potentially being exposed to longer periods of food insecurity and sub-optimal nutrition than was previously thought.</p> <p>This may contribute to poor mental health and wellbeing in children as well as adults.</p>	Small sample size makes it not possible to generalise.
21	Holiday/ Breakfast club	Defeyter, M.A., Graham, P.L. and Prince, K. (2015). A Qualitative Evaluation of Holiday Breakfast Clubs in the UK: Views of Adult Attendees, Children, and Staff. <i>Frontiers in Public Health</i> , 3. doi:10.3389/fpubh.2015.00199.	A Qualitative Evaluation of Holiday Breakfast Clubs in the UK: Views of Adult Attendees, Children, and Staff.	North West England & Northern Ireland	<p>Background: During school holidays families often struggle financially provide consistent & nutritious food for their children. Community based breakfast clubs are one way of tackling this.</p> <p>Aims: To determine uses and impacts associated with holiday breakfast club participation and investigate areas for future development</p> <p>Methods: Qualitative interviews with 17 children, 18 adult attendees and 15 breakfast club staff. Purposive sample from 6 breakfast clubs, inductive approach to thematic analysis of transcribed interviews.</p> <p>Conclusion: Highlighted need for holiday food provision, multiple nutritional, social and financial benefits for those who accessed holiday breakfast clubs.</p>	<p>Food insecurity is an issue for many families exacerbated by long summer holiday. Breakfast clubs provided a wider variety of nutritious food than home. Children & adults strengthened existing social networks and created stronger community bonds. Routine in holidays made it easier to return to school routines. Families were able to access or made aware of other community/healthcare facilities</p>	<p>Sponsored by Kellogg's.</p> <p>Small sample from one region only.</p>

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Reference number	Initiative type	Citation	Title	Country	Overview	Key Results	Limitations
22	Holiday/ Breakfast club	Lambie-Mumford, H. and Sims, L. (2018). 'Feeding Hungry Children': The Growth of Charitable Breakfast Clubs and Holiday Hunger Projects in the UK. <i>Children & Society</i> , 32(3), pp.244–254. doi:10.1111/chso.12272.	Feeding Hungry Children': The Growth of Charitable Breakfast Clubs and Holiday Hunger Projects in the UK	UK	<p>Background: Scoping study</p> <p>Aims: To bring child feeding initiatives into the critical food & poverty debate Critically assess the state of evidence on these projects and their perceived role. Outline next steps to build a systematic body of research of child feeding projects in the context of food & poverty research</p> <p>Methods: Literature review, policy document review and website content analysis</p> <p>Conclusion: Breakfast clubs have been around since 1990's changing role & need with political landscape and increased poverty. Lack of convincing evidence of operational and outcome-based evaluations.</p>	Vast variation in breakfast & holiday club provision in terms of hours operated, staffing, costs, cost to child. No clear evaluations conducted	More concerned with setting political landscape
23	Holiday hunger/ hunger in schools	Gooseman, A., Defeyter, M.A. and Graham, P.L. (2019). Hunger in the primary school setting: evidence, impacts and solutions according to school staff in the North East of England, UK. <i>Education 3-13</i> , 48(2), pp.191–203. doi:10.1080/03004279.2019.1602155.	Hunger in the primary school setting: evidence, impacts and solutions according to school staff in the North East of England	NE of England	<p>Background: The issue of holiday hunger has received a lot of attention in the recent years, though research is limited.</p> <p>Aims: To investigate the views of primary school staff on existence, impacts & possible solutions to holiday hunger.</p> <p>Methods: 12 North East England primary school staff, semi structured interviews. Thematic analysis</p> <p>Conclusion: Holiday hunger forms part of a broad, year-round experience of deprivation and poor nutritional habits. Multi-agency approach needed to address the range of complex inter-related needs.</p>	<p>Key themes of hunger: physical effects, social, emotional & behavioural effects Cognition & learning</p> <p>Key solutions: Year-round multi-agency approach Education Financial considerations Difficult to address</p>	Results from two schools in the North east only so may not be transferrable.

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24	Breakfast clubs	Graham, P.L., Russo, R. and Defeyter, M.A. (2015). The Advantages and Disadvantages of Breakfast Clubs According to Parents, Children, and School Staff in the North East of England, UK. <i>Frontiers in Public Health</i> , [online] 3(156). doi:10.3389/fpubh.2015.00156.	The Advantages and Disadvantages of Breakfast Clubs According to Parents, Children, and School Staff in the North East of England, UK.	North East England UK	<p>Background: Provision of breakfast clubs popular in the UK, but very little research into their effectiveness</p> <p>Aims: Investigate the views of key users and stakeholders' groups on breakfast clubs in the North East</p> <p>Methods: Semi structured interviews (14 parents & 17 staff) focus groups (21 children) Thematic analysis. Purposive sampling until saturation. 4 well established breakfast clubs</p> <p>Conclusion: Generally positive, some discussion around less nutritious food and adherence to school food plan.</p>	<p>Provided healthy and varied breakfast</p> <p>Social interaction</p> <p>Affordable & reliable childcare</p> <p>Some children excluded due to cost</p>	<p>Funded by Kelloggs</p> <p>No fathers interviewed</p> <p>Small number of schools in one UK area</p>
25	Healthy Start vouchers	Mackenzie, G. and Dougall, A. (2016). Increasing Healthy Start food and vitamin voucher uptake for low income pregnant women (Early Years Collaborative Leith Pioneer Site). <i>BMJ Quality Improvement Reports</i> , 5(1), p.u210506.w4243.	Increasing Healthy Start food and vitamin voucher uptake for low income pregnant women (Early Years Collaborative Leith Pioneer Site).	Edinburgh Scotland	<p>Background: Healthy Start food and vitamin vouchers provide support to low-income families but at least 25% of eligible adults & children miss out.</p> <p>Aims: to increase uptake of vouchers to 90% of those eligible.</p> <p>Methods: Use improvement models to identify ways to improve sign up. Starting with one midwife & one pregnant woman, then expanding out to full team and other teams across the city.</p> <p>Conclusion: Uptake of vouchers increased, aided by understanding the process, testing improvements, sharing team & small area data and employing a welfare rights advisor. Employment of an advisor resulted in other benefits being successfully claimed to.</p>	<p>Over 50% of midwives across the teams had developed their own screening process for vouchers, resulting in applications being "allowed" much later in the pregnancy than 10 weeks.</p> <p>Pregnant women, in some cases, needed help and encouragement to complete application forms correctly.</p> <p>Govt departmental changes meant applications previously accepted were rejected.</p>	<p>Very much a "hands on" local project, with changes in measurement halfway through. However useful for wider lessons on improvement projects.</p>

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						<p>Midwives did not have capacity to help with form filling, appointment of a welfare officer in the same location made a big difference.</p> <p>Useful implementation lessons for a similar project.</p>	
26	Healthy Start vouchers	Ohly, H., Crossland, N., Dykes, F., Lowe, N. and Hall-Moran, V. (2017). A realist review to explore how low-income pregnant women use food vouchers from the UK's Healthy Start programme. <i>BMJ Open</i> , 7(4), p.e013731. doi:10.1136/bmjopen-2016-013731.	A realist review to explore how low-income pregnant women use food vouchers from the UK's Healthy Start programme	UK and US	<p>Background: Healthy Start was introduced in 2006, by UK government to improve the nutrition of pregnant women & young children. Vouchers can be used to purchase fruit, veg, cow's milk and formula. A similar scheme exists in the US.</p> <p>Aims: to explore how low-income pregnant women use the vouchers, the potential impacts of the programme and which women experience these impacts & why.</p> <p>Methods: A realist review of selected studies from UK and US. 38 primary studies included, only 4 from UK. Combination of evidence synthesis and realist analysis techniques used to modify, refine and substantiate theories in a context-Mechanism-Outcome configuration.</p> <p>Conclusion: Pregnant women either use the vouchers to increase their consumption of fruit, veg & milk or to reduce their food expenditure and save money for other purchases.</p>	<p>Use of vouchers very much dependant on individual.</p> <p>If woman values healthy eating, vouchers will be used to increase purchase of fruit/veg etc which will result in nutritional benefits. Or at the discretion of the retailer vouchers will be used to make other purchases or simply reduce the cost of the usual fruit/veg shop. No nutritional gain.</p> <p>The woman may be disempowered, by the vouchers being used by a different person i.e., mother/partner. Unknown nutritional gain.</p>	<p>More US studies than UK studies so results may not be completely transferred to all UK situations.</p> <p>Not enough evidence to link to sociodemographic or cultural characteristics.</p> <p>A lot more research needed.</p>
27	Fruit & Veg vouchers	Relton, C., Crowder, M., Blake, M. and Strong, M. (2020). Fresh street: the development and feasibility of a place-based, subsidy for fresh fruit and vegetables	Fresh street: the development and feasibility of a place-based, subsidy for fresh fruit and vegetables	Barnsley UK	<p>Background: Many UK communities experience food insecurity, and consume energy dense, nutrient poor diets – low in fruit & veg.</p> <p>Aims: Develop an area based approach to promote fruit & veg consumption and healthy eating</p> <p>Methods: FV vouchers to given to all households in four streets of a deprived area. These could be exchanged at local greengrocers or market stalls</p>	<p>Local councillors & public health supportive of the scheme.</p> <p>83% of eligible households joined the scheme.</p> <p>89% of vouchers were "spent".</p>	<p>Feedback was verbal, self reported and recorded by researchers.</p> <p>Unwillingness to complete questionnaires</p>

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		based, subsidy for fresh fruit and vegetables. <i>Journal of Public Health</i> . doi:10.1093/pubmed/daa190.			Conclusion: Scheme reported high levels of acceptance. More research is needed to assess impact on diets.	Households reported that the scheme made them think about healthy food choices and eat more FV.	No assessment of whether FV vouchers increased consumption of fruit and veg or helped with budgeting.
28	Free school meals and food vouchers	Dalma, A., Zota, D., Kouvari, M., Kastorini, C.-M., Veloudaki, A., Ellis-Montalban, P., Petralias, A., Linos, A., Belogianni, K., Critselis, E., Georgakopoulos, P., Haviaris Anna, M., Karagas, R.M., Karnaki, P., Linos, C., Lykou, A., Markaki, I., Mitraka, K., Pantazopoulou, A. and Papadimitriou, E. (2018). Daily distribution of free healthy school meals or food-voucher intervention? Perceptions and attitudes of parents	Daily distribution of free healthy school meals or food-voucher intervention? Perceptions and attitudes of parents and educators.	Greece	Background: Adequate nutrition is essential for child development, the impact of the economic crisis in Greece has resulted in many families facing food insecurity. Aims: to qualitatively evaluate the optimal intervention (voucher or free lunch) aimed at reducing food insecurity and promoting healthy eating in schools within socioeconomically disadvantaged areas. Methods: 34 schools randomly assigned to one of two interventions, free daily lunch box or a monthly family food voucher to the same value. Focus groups of parents & educators. Conclusion: Meal distribution considered much more effective, than food voucher programme both in reducing food insecurity and promoting healthy eating.	Social stigmatisation minimised in the free lunch approach through the participation of all students. Food voucher participants were embarrassed to collect vouchers. Meals alleviated child food insecurity; vouchers helped managed family household budget. Food vouchers did little to encourage healthy eating unless parents were already conscious of nutritional requirements.	Some population bias. Generalisability to other countries.

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		and educators. <i>Appetite</i> , 120, pp.627–635. doi:10.1016/j.appet.2017.10.025.					
29	Community initiative: Community Gardens	Sonnino, R. and Hanmer, O. (2016). Beyond food provision: Understanding community growing in the context of food poverty. <i>Geoforum</i> , 74, pp.213–221. doi:10.1016/j.geoforum.2016.06.011.	Beyond food provision: Understanding community growing in the context of food poverty.	Newport & Cardiff South Wales UK	<p>Background: Rising food & fuel prices have refined the geography of hunger, now an issue in wealthy countries. Shift in the responsibility from state to individual.</p> <p>Aims: To enhance theoretical and practical understanding of food poverty through the focus on community gardening.</p> <p>Methods: Focussed on South Wales, deprived areas, 4 community food growing initiatives. Formal and informal interviews, field observations.</p> <p>Conclusion: Some good quotes. Community gardens give individuals a purpose and respect and facilitate access to community involvement and other forms of help.</p>	<p>Community gardens provide ownership.</p> <p>Improve diet of those accessing them.</p> <p>Enable help and support to be given to those who would not access it through a more formal/office approach.</p> <p>Move away from the “hand out/begging” concept of food banks.</p>	A political geographical paper, no structure to methodology and analysis.
30	Community initiative: Community food aid	Power, M., Doherty, B., Small, N., Teasdale, S. and Pickett, K.E. (2017). All in it together? Community food aid in a multi-ethnic context. <i>Journal of Social Policy</i> , 46(3), pp.447-471.	All in it together? Community food aid in a multi-ethnic context	Bradford, England.	<p>Background: Emergent evidence on UK food aid has raised questions about its inclusivity and institutionalisation issues.</p> <p>Aims: Uses data from a multi-ethnic, multi-faith city in the north of England (Bradford) to better understand what constitutes community food aid. To explore how community food aid meets the needs of a multi-ethnic, multi-faith population.</p> <p>Methods: Desk-based research, using the Internet and local government resources and dialogue with key informants in Bradford’s food security programmes. Following this there were two separate phases of qualitative research.</p>	It is the first academic study in the UK to look in detail at the faith-based arrangements of Christian and Muslim food aid providers and explore how faith-based food aid organisations interact with people of other faiths. As such, it raises concerns about the accessibility of community food aid.	This is a small-scale study of community food aid in one city. The sample of community food aid providers is biased towards emergency provision and includes only secular, Muslim, and Christian organisations. The study did not interview users of food aid and, therefore, findings are the perceptions of staff.

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		doi:10.1017/S0047279417000010			Conclusion: This study identifies UK food aid as multifaceted and dynamic. Faith-based food aid is common, and most faith-based providers are Christian. There is little Muslim provision of (or utilisation of) food aid, despite the local demographic context.		
31	Community initiative: Food-based activities	Blake, M.K. (2019). More than Just Food: Food Insecurity and Resilient Place Making through Community Self-Organising. <i>Sustainability</i> , 11(10), p.2942. doi:10.3390/su11102942.	More than Just Food: Food Insecurity and Resilient Place Making through Community Self-Organising	UK	Background: In the context of neoliberalism, individual & community resilience is seen as necessary for dealing with ongoing austerity cuts. This paper looks at the ability of communities to organise methods of dealing with food insecurity and at the same time rebuilding community cohesion. Aims: To show our low-income communities can utilise food-based activities to help reduce the vulnerabilities of food insecurity. Methods: two qualitative case studies based in examining northern towns. Plus, additional qualitative data collected from interviews with 6 charities involved with food insecurity. Quantitative data supplied from Fare Share. Conclusion: Self-organising is more than a free time activity; however, it is a valuable asset for building resilience and social sustainability.	Utilising surplus food and providing social cooking times (not lessons) allows families to try new food and widen their diet. Organised food-based activities such as crafting, and snack build community links reducing reliance on the NHS to provide social interaction Family based activities like picnics at local parks allow parents & children to “reclaim” spaces that they felt were too dangerous. Useful quotes on living with poverty and food insecurity	Case studies and interviews carried out predominately by one person, with no mention of their background. Mainly informal fieldwork and chats, no sample sizes or justification of sampling etc.
32	Community initiative: Cookery classes evaluation	Purdam, K. and Silver, D. (2020). Social policy and embedded evaluation: Assessing the impact of a food insecurity project in the United Kingdom. <i>Social Policy &</i>	Social policy and embedded evaluation: Assessing the impact of a food insecurity project in the United Kingdom	UK	Background: Social policy making needs robust evaluation to assess its impact. Aims: What were the impacts of an intervention aimed at tackling food insecurities using cooking & food budgeting skills training. In what ways did the intervention change with evidence from the embedded evaluation during its delivery. What were benefits & challenges of using an embedded approach for the participants, delivery organisations and evaluators	The classes had helped to re-engage the participants with food and cooking. The classes had a positive impact on their lives including feeling more confident about cooking, having improved their skills, and being able to take food home to share with family and friends. The participants gained confidence and a sense of empowerment from	Study was small without a control group. Some participants were vulnerable/homeless, continual attendance at classes was often challenging.

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		<i>Administration</i> , 54(7), pp.999–1015. doi:10.1111/spol.12583.			<p>Methods: 18 month project, 47 classes with 108 participants. Mixed method approach, quantitative data, project steering group meetings, semi structured interviews, life history interviews. SPSS and word used for coding.</p> <p>Conclusion: A lot of the paper was about the embedded evaluation approach. Findings suggest that the classes had a positive impact on many participants who felt more confident cooking and valued the shared social experience. However given the acute problems of many of the participants policies aimed at tackling food insecurity need to go further than cooking classes and budgeting skills.</p>	<p>the experience of cooking and sharing food with others and also from cooking for other people outside of the classes. These activities helped reduce feelings of social isolation and provided a means for connecting with wider society in a positive way.</p>	
33	Community initiative	Douglas, F., MacKenzie, F., Ejebu, O.-Z., Whybrow, S., Garcia, A.L., McKenzie, L., Ludbrook, A. and Dowler, E. (2018). 'A Lot of People Are Struggling Privately. They Don't Know Where to Go or They're Not Sure of What to Do': Frontline Service Provider Perspectives of the Nature of Household Food Insecurity in Scotland.	A Lot of People Are Struggling Privately. They Don't Know Where to Go or They're Not Sure of What to Do	Scotland	<p>Background: Household food insecurity becoming for more significant issue in Scotland. Food insecurity data is not collected nationally, and it is felt that attendance at food banks does not accurately quantify the issue.</p> <p>Aims: To explore frontline service providers perceptions of the nature of food insecurity in Scotland, to inform national policy and the provision of locally based support.</p> <p>Methods: Qualitative research informed by Grounded Theory. Semi structured interviews of 10 informants representing community food programmes, 15 informants representing organisations concerned with care and support of vulnerable groups. Located in urban, rural and islands.</p> <p>Conclusion: 3 major themes emerged. Faces & Factors of food insecurity – associated with emergent food insecure groups and those groups previously recognised to be at risk. Stoicism & struggle – witnessed at individual level. Community participation yet pessimism – in relation to the challenge of responding to local feeding needs now and in the future.</p>	<p>Older people often “hiding” insecurity through pride, only evidenced from empty cupboards. Though better placed to deal with food insecurity as income more consistent and they tended to have equipment & facilities for cooking.</p> <p>Unpredictable wages in rural areas triggered insecurity.</p> <p>Mothers & pregnant mothers failing to get sufficient nutrition as they are giving up food to children.</p> <p>Community project that provided advise, education etc now having to act as food banks also.</p>	<p>Small sample size makes generalisation problematic. Though finding align with other studies.</p> <p>Did not engage directly with the people who had lived experience of food insecurity.</p> <p>Does not capture the views of “hard to reach” groups.</p>

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		<i>International Journal of Environmental Research and Public Health</i> , 15(12), p.2738. doi:10.3390/ijerph15122738.					
34	Food waste, cooking skills and food insecurity	Armstrong, B., Reynolds, C., Martins, C.A., Frankowska, A., Levy, R.B., Rauber, F., Osei-Kwasi, H.A., Vega, M., Cediél, G., Schmidt, X., Kluczkowski, A., Akparibo, R., Auma, C.L., Defeyter, M.A.A., Tereza da Silva, J. and Bridge, G. (2021). Food insecurity, food waste, food behaviours and cooking confidence of UK citizens at the start of the COVID-19 lockdown. <i>British</i>	Food insecurity, food waste, food behaviours and cooking confidence of UK citizens at the start of the COVID-19 lockdown	UK	<p>Background: There is little in-depth understanding of the prevalence of food insecurity and association with food waste and wider food management behaviours.</p> <p>Aims: Pilot study to explore food insecurity, food waste, food related behaviours & cooking confidence following 2020 COVID-19 lockdown</p> <p>Methods: Cross sectional online survey of 473 UK consumers in first lockdown 2020</p> <p>Conclusion: Provides an insight into behaviours and highlights the need for more education around food waste and as well as food management – ie storage, planning and using up leftovers.</p>	<p>39% of participants experienced food insecurity. Being younger, great BMI and living in a smaller household associated with food insecurity.</p> <p>Food secure participants reported wasting less food than food insecure.</p> <p>Participants were most confident with boiling, microwaving & stir frying, less with pressure cooker or sous vide</p>	<p>Behaviours could be influenced by lockdown</p> <p>Food insecure could be more conscious of food waste and record it more accurately as opposed to food secure, therefore skewing the results</p>

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		<i>Food Journal</i> , 123(9), pp.2959–2978. doi:10.1108/bfj-10-2020-0917.					
35	Social background	Jovanovski, N. and Cook, K. (2019). The vulnerable-empowered mother of academic food discourses: a qualitative meta-synthesis of studies of low-income mothers and food provisioning. <i>Health Sociology Review</i> , 28(2), pp.107–125. doi:10.1080/14461242.2019.1578984.	The vulnerable-empowered mother of academic food discourses: a qualitative meta-synthesis of studies of low-income mothers and food provisioning	Western countries	<p>Background: Society frames parents, particularly low-income mothers as being solely responsible for their children’s health & wellbeing.</p> <p>Aims: To identify how low-income mothers are positioned in academic literature</p> <p>Methods: Meta synthesis of 18 qualitative studies to identify how mothers’ food choices and feeding are positioned and how researchers make recommendations for child health.</p> <p>Conclusion: Low-income mothers face multiple challenges relating to cost, convenience, concerns about health & wellbeing. Many research interventions focus on behavioural interventions rather than structural interventions</p>	<p>Article explores the idea of vulnerable empowered mothers, vulnerable to food poverty because of low income but expected to be “empowered” through food provisioning practices. Compared with “good” middle class mothers who are ethically responsible and feed their children on organic home cooked food.</p> <p>Interesting comment about how “they” would like to be involved with community projects but do not have time/energy after working and caring for children</p>	<p>Limitations</p> <p>No UK studies were included 110 USA, Australia, rest northern Europe</p>
36	Systematic review	De Marchis, E.H., Torres, J.M., Benesch, T., Fichtenberg, C., Allen, I.E., Whitaker, E.M. and Gottlieb, L.M. (2019). Interventions	Interventions Addressing Food Insecurity in Health Care Settings: A Systematic Review	US	<p>Background: Recognition that food insecurity is associated with poor health, US Health Systems are exploring ways to help patients access food resources</p> <p>Aims: Systematic review of interventions to address food insecurity</p> <p>Methods: 23 studies met criteria,</p>	<p>Based on study size and sample size, of the 23 reviewed 74% were rated low quality. However where health or utilisation effects were reported, they were generally positive.</p>	<p>Different metrics used in studies made comparisons difficult.</p> <p>Studies were low quality</p> <p>Wide range of populations and settings made comparison difficult.</p>

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		Addressing Food Insecurity in Health Care Settings: A Systematic Review. <i>The Annals of Family Medicine</i> , 17(5), pp.436–447. doi:10.1370/afm.2412			Conclusion: Low number and quality of studies limit inferences about the effectiveness of food insecurity interventions		Some interventions also targeted other health outcomes at the same time, not just food insecurity.
37	Distribution of Food waste	Thapa Karki, S., Bennett, A.C.T. and Mishra, J.L. (2020). Reducing food waste and food insecurity in the UK: The architecture of surplus food distribution supply chain in addressing the sustainable development goals (Goal 2 and Goal 12.3) at a city level. <i>Industrial Marketing Management</i> , [online] 93. doi:10.1016/j.indman.2020.09.019.	Reducing food waste and food insecurity in the UK: The architecture of surplus food distribution supply chain in addressing the sustainable development goals	South East England city	<p>Background: Research into the distribution of food waste to organisers of food aid is limited</p> <p>Aims: This research explores actors and organisations in the value chain of surplus food distribution at the city level.</p> <p>Methods: 12 qualitative, semi structured interviews and participant observation. Data analysis was by an inductive qualitative approach, which enables methodological flexibility in analysing data associated with social reality</p> <p>Conclusion: Findings reveal hierarchical power dynamics between surplus food suppliers and third-sector organisations. With distributors experiencing challenges to access limited surplus food. Acknowledges that supplying surplus food to “food banks” does not solve the issue of the existence of surplus food or food insecurity.</p>	<p>Lack of a legislative framework requiring supermarkets to donate surplus food, which has created uncertainty in food stock and competition between organisations. UK needs to follow the example of other EU countries to develop a regulatory framework on food donation and simplify the recovery and distribution of surplus food to people in need.</p> <p>Good Samaritan Laws” like those in Italy and the US might provide the necessary support for the retailers and third-sector organisations in freely donating and distributing the food</p>	<p>Only focused on the third-sector organisations involved in surplus food distribution to the people in need at the city level. The third-sector organisations while complying with food safety regulations, also produce food waste.</p> <p>Different methods, suppliers and apps were not investigated</p>

