

Household food insecurity in the UK: 7.

Discussion

Our searches identified a range of research and reporting on household food insecurity related to the themes explored for this review. There are now a variety of data and analyses of different measures of household food insecurity, enabling descriptions of the prevalence of the problem across the UK and estimates of levels of risk in local areas. Research on risk factors for food insecurity has explored the impact of socio-economic and demographic factors as well as policy drivers including social security. Experiences of household food insecurity amongst families with children has been the focus of increasing amounts of research in recent years, as have the experiences of older adults and those living with health conditions and disabilities. Research on potential outcomes of household food insecurity covered dietary and health outcomes, with very little research returned on food safety outcomes. Research on responses to household food insecurity has looked at the impact of free school meals, breakfast and holiday clubs, Healthy Start and Best Starts programmes, multi-stakeholder policy approaches and community food provision, although rarely in relation to validated survey measures of household food insecurity. In this discussion section we reflect on what we see as some of the key gaps in the existing evidence landscape.

7.1 Research on definitions, concepts and measurement of household food insecurity

The use of different survey instruments to measure food insecurity, as well as different recall periods and use of different survey methods, mean that there are now many sources of data on food insecurity in the UK that may appear inconsistent with one another when reporting on scale of the problem. There are strengths and weaknesses to the different methods in use and so it is important that these are recognised when the data are reported. An acknowledgement of these differences will help in the reporting, as else, inconsistency in the figures reported may be interpreted as unreliable data.

Importantly, there are benefits to different government departments and third sector organisations engaging in collection of data on food insecurity because they allow us to learn different things. For example, the Food Foundation's Food Insecurity Tracker and FSA's Consumer Insights Tracker both allow for timely data on food insecurity to be released, allowing for insight into within-year fluctuations in levels of food insecurity. However, these data sources do not include the full AFSSM and are based on data from relatively small population samples collected from online survey. In contrast, data from the FRS are not released until about 12 months after the end of the year-long fieldwork period. Yet, the sampling methodology used in this survey likely results in better coverage of the population, and the sample size of households participating in this survey is much larger (about 19,000 households including about 32,000 adults). The FSA's Food and You 2 survey has a sample size of around 4,500 households (and about 6,700 adults), recruited using a probabilistic sampling approach. In addition to the full AFSSM, it includes a range of food-related questions that are not included in the FRS, allowing for exploration of different topics in relation to food insecurity. But there is also some delay between the fieldwork

period and when results are reported. For example, Wave 5 data were collected between 26 April and 24 July 2022 and published in March 2023.

To aid in interpretation of the survey data on food insecurity, a comparison of the different measures in use across all nations of the UK would be beneficial. This could be complemented by research on the agreement and discrepancies between different survey instruments. The FSA's work on wider issues around food insecurity (Connors et al., 2022) could also be built upon to explore manifestations of food insecurity that may not be captured by the validated survey modules currently used in the UK (i.e. the USDA AFSSM).

The use of household surveys to obtain estimates of food insecurity in local areas is also relatively rare. Instead, proxy measures are often used or indices of local level risk have also been developed. There is a need for research that examines the validity of indices and proxy measures in relation to local survey-based measures of food insecurity.

7.2 Drivers of individual/household level access to food

We identified relatively few analyses of the quantitative data on food insecurity that are available, especially from the FRS. There is a need for more multivariate analyses of a wider variety of risk factors for food insecurity to move towards greater understanding of the potential causal drivers of food insecurity. For example, we did not identify any general population studies exploring relationships between housing costs and food insecurity, debt and food insecurity, and different elements of the benefit system in relation to food insecurity, though these have been examined in relation to food bank use and among benefit claimants specifically. Also, of the studies we identified on this theme, almost all were from academia or third sector organisations, with almost none from Government.

Whilst there are now large datasets that include survey measures of food insecurity, many of these datasets are still not large enough to understand risks of small subgroups in population. This results in crude classification of socio-cultural-ethnic groups. This limits what can be learned from sub-group analyses. Targeted sampling or over-sampling of some groups who are underrepresented in household surveys would be beneficial for understanding risks in smaller subgroups in the population, such as those highlighted below. There is also a need for intersectional approaches to research in this area, both quantitative and qualitative. Some underexplored risk factors for food insecurity include age, ethnicity, immigration status, and gender differences, and how these intersect with one another.

We also identified only a few studies that have used mediation approaches to try to understand whether poverty mediates the risk of food insecurity observed for some sub-groups in the population. More of these, with clearer conceptual frameworks, would be beneficial for understanding the relationship between socio-demographic characteristics, food insecurity and measures of poverty and deprivation.

7.3 Experiences of different population groups

We need more nuanced analyses to understand experiences of different cultures and communities in relation to food insecurity. In particular, as above, there needs to be a focus on intersections with other characteristics, for example: food practices and cultures, disadvantaged communities, health, and language barriers. Analyses of risks of household food insecurity also show that life-limiting health problems or disabilities that limit every day activities are significantly associated with severe food insecurity, so more research is needed into the dynamics of this relationship and individual experiences. Other groups at significant risk of severe food insecurity, where more research on their experiences would be beneficial, are those experiencing unemployment, and those living in the lowest income quartile. Younger adults (16-24 and 24-34

years) and those with low levels of education are also at higher risk of any level of food insecurity, so more research is needed on these relationships. Research is also needed on the experiences of groups who wouldn't be captured by household surveys, for example those who are homeless, or temporarily housed. Students living away from home may be another subgroup of interest, as research from North America has suggested high levels of food insecurity among university students and unique drivers for food insecurity in this population (Bruening et al., 2017).

7.4 Outcomes associated with food insecurity

Research into the outcomes of household food insecurity appears to be an emerging area. Much of the research identified was published in the last three years and involves quantitative research looking at health and dietary consumption. However, there remains a need for better measures of diet and health outcomes on surveys that also measure food insecurity. There is relatively little qualitative work on diet and health outcomes. The lack of longitudinal data is notable here, and this is needed to better understand the temporal relationship between food insecurity and different outcomes.

Our searches didn't reveal any research examining social outcomes, educational achievements, child developmental outcomes, or child and youth mental health. Whilst FSA commissioned research has looked at some aspects of food safety (food safety in community food providers' practice and in practices designed to make food go further), there is a lot of scope in this area for more research.

7.5 Interventions aimed at reducing food insecurity and/or improving food access

Whilst there is research on free school meals and the Healthy Start programme that are focused on implementation, take-up, and nutritional outcomes, none so far have evaluated the impact on household food insecurity specifically. There were important examples of econometric approaches to evaluating Healthy Start and UFSM but more of these types of analyses are needed in relation to food insecurity measures to understand how policy changes influence insecure and insufficient access to food. There has been very little evaluation of initiatives or projects that have included before-after designs or examined food insecurity outcomes to answer questions like "what interventions prevent food insecurity?" and "what interventions ameliorate food insecurity in the short and/or long term?". In particular, given the potential role that the social security system can play in prevention and relief of food insecurity, a robust examination of the social security system in relation to food insecurity is needed.

Current research has not systematically measured or mapped the scale of community support for food and/or buying essentials, beyond data provided by organisations such as IFAN and Trussell Trust. Very little research has been done to examine the food safety practice of the many organisations in the community food provision space.

7.6 Potential future research for the Food Standards Agency

Above, we have identified some key gaps in the landscape of research on food insecurity in the UK. Not all of these are relevant to the remit of the FSA but may be of interest to other Government departments, academics, wider civil society organisations or funding bodies. Below, we outline some key ideas that we think the FSA could invest in, given the work they have already done in this area and their strengths in social science and food safety.

- Expand analyses of data collected through Food and You 2.

The Food and You 2 dataset is incredibly rich, especially now that it has been running as a repeat cross-sectional survey since 2020. It offers many opportunities for a more robust analysis of risk factors for food insecurity, but these should move beyond descriptive statistics and use more advanced statistical techniques to allow for better understanding of independent contribution of different risk factors for food insecurity.

Importantly, this dataset contains information on food-safety related behaviours and outcomes. As already highlighted, there is very little research that has examined how experiences of food insecurity may make people more likely to engage in risky food behaviours or at risk of negative food safety outcomes.

Food and You 2 also collects information on food sensitivities and special diets. We also identified very little on these experiences in relation to food insecurity in the UK literature.

- A better understanding of the food safety-related practices of community food providers.

Building on the work that the FSA has already commissioned on how food safety is considered for people receiving community food provision, there is a need to better understand the potential risks posed by use of surplus food redistribution by community food organisations, their food safety practices, and in turn, how this surplus food is received and used by recipients. Whilst redistribution of surplus food is often viewed as a 'saving food from landfill', there has been little examination of what happens to surplus food once it reaches community food organisations. This may be of interest to the FSA for a number of reasons; first, what impact does it have on individual/household level food insecurity? Second, does the redistribution of surplus food pose any food safety risks to people receiving it and how does this depend on the practices of the organisations who are distributing it? There is also a need to better understand what proportion of surplus food may not be utilised if it does not meet aesthetic standards or the needs of people using community food organisations. This may be of interest given the FSA's strategic focus on sustainability.

- Further understanding of the use and interpretation of different survey measures of household food insecurity in the UK.

The FSA engages in measurement of food insecurity regularly through its Consumer Insights Tracker as well as through the Food and You 2 survey. As above, it also has explored different measures of food insecurity in its work on wider issues around food insecurity (Connors et al., 2022).

Given the discrepancy in figures from these different sources, as well as discrepancies in relation to other data on food insecurity collected in the UK, the FSA could take forward a review focused on explaining and interpretation of different household food insecurity measures in use in the UK.