

## Rapid evidence assessment

The first part of the study involved a REA focused on a set of priority research areas. Findings were used to inform and influence the design of the primary research methodology and the cost model developed. Detailed findings and a full reference list of the included studies are presented in Appendix 1.

### 3.1 Research questions of interest for the REA

**Research question 1: What are the costs incurred by people living with a food hypersensitivity?**

**Research question 2: What are the burdens of living with a food hypersensitivity more generally?**

The REA identified a small body of research on the costs, and general burdens, of living with an FHS.

On food costs, the research suggested that the cost of restricted diets is greater than unrestricted diets, and thus places a financial burden on individuals with FHS. Most of this research, however, was focused specifically on coeliac disease and the comparison of GF products with gluten-containing products. All studies that used a basket of goods type approach were for GF diets apart from one study on the six-food elimination diet. This specific diet is required for eosinophilic esophagitis and excludes food allergens such as dairy, wheat, eggs, soy, nuts, and seafood. There were few studies looking across the breadth of FHS.

On non-food costs, there were a variety of areas in which a higher cost or burden was identified for FHS. This included lost productivity, job-related opportunity costs, and time spent on food shopping and preparation. Restrictions, which impose a burden but not necessarily a financial cost, were found for eating out and socialising (restricted choices, avoidance of events) and travelling (restrictions on holidays). Health and wellbeing impacts were also considerable, although that was out of scope for this study ([footnote 1](#)).

**Research question 3: What research has been done in related areas on price differentials/representative 'baskets of goods' between groups?**

Studies looking at the cost or burden for other chronic conditions and disabilities were also reviewed. There was a significant body of relevant research, but it predominantly focused on three elements: direct medical costs, indirect productivity costs (both of which were in scope for this study), and intangible costs, for example, quality of life impacts (which were out of the scope of this study).

**Research question 4: What statistics are available on food consumption patterns and costs among groups?**

Direct non-medical costs were seldom reported in the literature. Additionally, no studies were found which attempted a price differential or representative basket of goods approach which this

study is focused on.

The REA also looked for existing statistics on food consumption in the UK, which could be used to compare against the amount paid by individuals with FHS. The main source for food expenditure data in the UK is the ONS Living Costs and Food Survey ([footnote 2](#)), and some useful information is provided from the FSA's Food and You Survey Wave 4 ([footnote 3](#)).

## 3.2 How the REA informed the FHS survey in this study

The methodology was designed based on the evidence of what had worked in previous relevant studies.

Direct surveying was identified as the most appropriate method for collecting information on the burden of FHS. Although relying on individuals to report their food consumption habits may be limited by recall bias, the method allows for the calculation of an average price differential for a more heterogeneous group of people living with FHS (for example, coeliac disease, food allergy or food intolerance and other undiagnosed FHS conditions) versus those who are not. The survey directly asked respondents to estimate their average weekly food shop cost as the primary measure for estimating food consumption cost differentials. This approach is suited to producing an estimate of the price differentials between people living with FHS on restricted diets and people on non-restricted diets, breaking this down by factors such as type and severity of FHS. The price differential also considers the effect of socio-economic and demographic factors on the relationship between price and type/ severity of FHS.

The literature also highlighted that asking survey respondents to complete a food diary was a useful secondary method for understanding information on a representative basket of food items; that could be compared between FHS groups and comparator households. Data and results for food diary costs is appended and weekly grocery costs is used as the primary measure for analysis. Additionally, only 45.7% (n = 577) of FHS household survey respondents completed the weekly food diary costs, while 100% (n = 1,530) of non-FHS group households completed it. Due to the discrepancy in response rates, it is not ideal when comparing food diary costs between FHS and non-FHS households. The survey questionnaire and the food diary is available in Appendix 4 for FHS households and Appendix 5 for non-FHS households. Although there were precedents in the literature, it should be noted they used much narrower subsets, for example, coeliac disease and gluten-free products.

The literature and qualitative research highlighted that non-food costs could be collected in the FHS household survey through direct questions, on:

- lost productivity
- job-related opportunity costs
- health and wellbeing
- time spent on food shopping and food preparation
- eating out and socialising
- travelling

1. This will be captured in the FOODSENSITIVE study.
2. [ONS \(2020\) Family spending in the UK: April 2018 to March 2019](#)
3. [The Food & You Survey Wave 4 \(2016\)](#)