Quantitative research survey findings: nonfood direct costs differentials

The average kitchen equipment and medical costs of FHS households are described below. These results are presented without 23 outliers (footnote 1) for medical costs and no outliers for kitchen equipment costs. Questions on additional kitchen equipment and medical costs due to FHS were not asked of the non-FHS group because these questions were not relevant to them.

The vast majority of additional kitchen equipment was purchased to manage cross contamination risks (for example separate toasters and separate chopping boards); it was far less common to purchase equipment to make allergen free food (for example breadmakers). The average one-off spending by an FHS household on additional kitchen equipment is £21.03 p.a. However, there are 767 / 1,225 (63%) households which did not spend on additional kitchen equipment. If these observations are excluded, the average then increases to £56.234 p.a. over 458 observations. The table below shows the kitchen equipment costs broken down by type of FHS.

Table 6.1: Kitchen equipment costs due to FHS broken down by FHS type (sample sizes varies depending on exclusion of those that did not have any costs) in England, Northern Ireland, and Wales according to an FHS household survey conducted online between November 2020 and January 2021.

FHS type	FA, n=340	CD, n=651	FIO, n=234
Mean costs including those that did not spend on additional kitchen equipment due to FHS $(\ensuremath{\pounds})$	16.12	26.26	13.59
Standard error (SE)	4.23	2.05	3.03

FHS type	FA, n=58	CD n=351	FIO, n=49
Mean costs excluding those that did not spend on additional kitchen equipment due to $\ensuremath{FHS}(\ensuremath{\mathtt{\Sigma}})$	94.50	48.70	64.90
Standard error (SE)	22.39	3.38	11.95

The table above shows that for mean costs, including those that did not spend on additional kitchen equipment, individuals with CD spend twice as much compared to those in the FIO group and approximately 63% more than those with FA. However, that shifts when excluding those that did not spend on additional kitchen equipment. When examining only those that did spend on additional kitchen equipment, those in the FA group spend more than the other two FHS types. Although, it must be noted that the sample size for both FIO and FA have decreased more than those in the CD group once households that did not spend on additional kitchen equipment have been excluded.

The average monthly medical cost due to FHS with the exclusion of the 23 outliers is £16.89. However, there are 508 / 1,202 (42%) observations which did not have any monthly medical costs. If these 508 observations are removed, the average then increases to £29.26 over 694 observations.

Table 6.2: Monthly medical cost due to FHS broken down by FHS type (sample size varies depending on exclusion of those who did not incur costs) in England, Northern Ireland, and Wales according to an FHS household survey conducted online between November 2020 and January 2021 (footnote 2).

FHS type	FA, n=325	CD, n=648	FIO, n=229
Mean costs including those that did not have any monthly medical costs due to FHS $(\ensuremath{\mathfrak{E}})$	27.98	11.08	17.60
Standard error (SE)	13.05	2.31	1.90

FHS type	FA, n=222	CD, n=333	FIO, n=139
Mean costs excluding those that did not have any monthly medical costs due to FHS $(\ensuremath{\mathfrak{E}})$	40.96	21.56	29.00
Standard error (SE)	19.05	4.43	2.72

Table 6.2 shows that those in the FA group have £16.90 and £10.38 higher monthly medical costs than those in the CD and FIO groups respectively, when including those who had no monthly medical costs due to FHS. Looking only at those who had monthly medical costs, those in the FA group still have higher costs, £19.40 and £11.96 more in monthly medical costs compared to those in the CD and FIO groups respectively.

- 1. Please see Appendix 6 for the justifications used for the removal of these outliers
- 2. The sample sizes vary depending on the exclusion or inclusion of individuals who did not incur costs.