

Appendix 2: Impact of Total LA Spending on Food Purchasing (£ per year). The coefficients represent the change in purchasing in pounds and pence with a 10% decrease in LA service spending (95% Confidence Intervals in brackets).

	Fruit and Vegetables	HFSS Foods	Takeaways
Unadjusted model			
Full Sample	-0.271 (-0.531, -0.095) p=0.042	-1.995 (-2.758, -1.232) p<0.001	0.060 (-0.127, 0.247) p=0.529
Adjusted Model¹			
Full Sample	-0.278 (-0.540, -0.017) p=0.037	-1.958 (-2.724, -1.192) p<0.001	0.016 (-0.169, 0.007) p=0.866
Adjusted Model stratified by IMD²			
1 (most deprived)	-0.310 (-0.752, 0.131) p=0.165	-1.502 (-2.864, -0.140) p=0.031	0.191 (-0.264, 0.646) p=0.405
2	-0.595 (-1.269, 0.079) p=0.082	-2.586 (-4.529, -0.642) p=0.010	0.024 (0.388, 0.436) p=0.908
3	-0.457 (-1.129, 0.216) p=0.180	-1.497 (-3.253, 0.259) p=0.093	-0.244 (-0.597, 0.109) p=0.172
4	-0.526 (-1.104, 0.051) p=0.073	-2.235 (-4.104, 0.367) p=0.020	-0.074 (-0.428, 0.280) p=0.678
5 (least deprived)	-0.305 (-0.935, 0.325) p=0.337	-1.522 (-3.079, 0.034) p=0.055	0.197 (-0.160, 0.553) p=0.275
Adjusted Model stratified by rural/urban area			
Predominantly Urban	-0.246 (-0.588, 0.096) p=0.158	-1.498 (-2.458, -0.538) p=0.002	0.213 (-0.030, 0.455) p=0.085
Urban with Significant Rural	-0.220 (-0.770, 0.331) p=0.427	-0.847 (-2.435, 0.740) p=0.289	-0.072 (-0.417, 0.273) p=0.677
Predominantly Rural	-0.159 (-0.579, 0.261) p=0.453	-1.352 (-2.495, -0.209) p=0.021	-0.242 (-0.523, 0.039) p=0.091
Adjusted Model stratified by level of reductions in working age benefits³			
Lowest quartile (<£321.5)	-0.564 (-1.133, 0.006) p=0.052	-2.167 (-3.790, 0.545) p=0.010	-0.050 (-0.434, 0.336) p=0.797
Second quartile (£321.5 - £403)	-0.359 (-0.915, 0.197) p=0.202	-1.504 (-3.010, 0.002) p=0.050	0.012 (-0.264, 0.287) p=0.934
Third quartile (£403 - £479)	-0.685 (-1.305, -0.065) p=0.031	-2.259 (-3.901, 0.616) p=0.008	0.031 (-0.317, 0.379) p=0.860
Highest quartile (>£479)	-0.123 (-0.531, 0.285) p=0.549	-1.448 (-2.871, 0.025) p=0.046	0.286 (-0.076, 0.648) p=0.120

¹ Model adjusted for GDHI and unemployment rate

² IMD represents relative deprivation of LAs, categorised into quintiles.

³ We stratified by quartiles of reductions in working age benefit by LA, using a dataset estimating the cumulative decreases in benefits for working age people due to welfare reforms between 2010-2015 for each LA.