Additional file 2: Supplementary tables

Table S1 Time spent on the supermarket platform and number of items browsed and bought.

	Mean (SD)				Mean Difference (95% Confidence interval)					
	Control (n=276)	Swaps (n=279)	Altering order (n=261)	Combined (n=273)	Swaps vs Control	Altering order vs Control	Combined vs Control	Altering order vs Swaps	Combined vs Swaps	Combined vs Altering order
Time (min) spent on the supermarket	14.2 (6.8)	16.4 (8.4)	17.2 (7.9)	17.5 (7.8)	2.2 (0.5 to 3.9)	3.0 (1.3 to 4.7)	3.3 (1.6 to 5.0)	0.8 (-0.9 to 2.5)	1.1 (-0.6 to 2.8)	0.3 (-1.5 to 2.0)
N shelf and product pages browsed	25.48 (12.77)	28.08 (15.13)	30.93 (14.96)	30.18 (15.58)	2.6 (-0.6 to 5.8)	5.45 (2.19 to 8.71)	4.7 (1.48 to 7.92)	2.85 (-0.39 to 6.1)	2.1 (-1.11 to 5.31)	-0.76 (-4.02 to 2.51)
N product pages browsed[1]	0 (0)	0 (0.5)	0 (1)	0 (0)	-0.02 (-0.54 to 0.49)	0.21 (-0.32 to 0.73)	-0.04 (-0.56 to 0.48)	0.23 (-0.29 to 0.76)	-0.02 (-0.54 to 0.5)	-0.25 (-0.78 to 0.28)
N products bought	11.41 (4.16)	12.37 (6.67)	11.26 (3.94)	11.62 (5.75)	0.95 (-0.2 to 2.11)	-0.15 (-1.33 to 1.02)	0.21 (-0.95 to 1.37)	-1.11 (-2.28 to 0.06)	-0.74 (-1.9 to 0.41)	0.37 (-0.81 to 1.54)

[1]These data are presented as median (interquartile range) with median differences between groups.

Table S2 Main effects and test for interaction

	Swaps	No Swaps	Altering order	No Altering order	Swaps: Yes vs No	Altering: Yes vs No	P Interaction
	(n=552)	(n=536)	(n=534)	(n=554)			
Primary outcome							
SFA (% kcal)	22 (6.47)	23.25 (6.46)	20.48 (6.37)	24.67 (5.92)	-1.25 (-2.02 to -0.48)	-4.2 (-4.93 to -3.47)	0.04
Secondary outcomes							
% of products with <1.5% SFA	28.35 (15.37)	25.5 (15.23)	31.65 (16.05)	22.41 (13.18)	2.85 (1.03 to 4.67)	9.25 (7.5 to 10.99)	0.17
Cost (£/100g)	0.37 (0.11)	0.36 (0.11)	0.36 (0.11)	0.36 (0.12)	0.01 (-0.01 to 0.02)	0 (-0.02 to 0.01)	0.77
Total energy (kcal)	13541 (7793)	13484 (6578)	12562 (6799)	14430 (7490)	57 (-802 to 916)	-1868 (-2720 to -1016)	0.73
Energy density (kcal/g)	201.05 (46.37)	207.2 (48.28)	192.7 (45.15)	215.05 (46.97)	-6.14 (-11.77 to -0.51)	-22.35 (-27.83 to -16.86)	0.48
Sugar (% energy)	16.59 (5.53)	16.51 (5.86)	17.74 (6.16)	15.41 (4.95)	0.08 (-0.6 to 0.76)	2.33 (1.67 to 3)	0.77
Salt (g/100g)	0.15 (0.07)	0.15 (0.1)	0.14 (0.06)	0.15 (0.11)	-0.01 (-0.02 to 0.01)	-0.01 (-0.02 to 0)	0.46

The first four columns include mean (SD), the next 2 columns show mean difference and 95% CIs.

Table S3 Change in % energy from saturated fat of the basket by number of swaps accepted (Table based on Figure 3)

	Swaps alone		Combined		Median difference (95% CI)
	Median (IQR)	n	Median (IQR)	n	
SFA (% kcal) per accepted swap					
Accepted 0 swap					
Before	24.3 (20.9 - 27.6)	103	18.1 (13.6 - 22.57)	164	6.24 (4.63 to 7.67)
After	24.3 (20.9 - 27.6)	103	18.1 (13.6 - 22.57)	164	6.24 (4.66 to 7.72)
Difference	0.0 (0 - 0)	103	0.0 (0 - 0)	164	0.00 (0 to 0)
Accepted 1 swap					
Before	23.5 (20.2 - 26.44)	71	19.6 (16.7 - 22.8)	77	3.95 (1.86 to 5.38)
After	23.1 (19.1 - 25.63)	71	18.8 (15.3 - 21.95)	77	4.30 (1.82 to 5.27)
Difference	0.8 (0.4 - 1.38)	71	0.7 (0.3 - 1.36)	77	0.04 (-0.17 to 0.31)
Accepted 2+ swaps					
Before	24.4 (21 - 26.79)	105	19.5 (16.4 - 24.18)	32	4.85 (1.57 to 5.81)
After	21.6 (19.1 - 24.6)	105	18.7 (13.7 - 22.45)	32	2.92 (1.11 to 5.4)
Difference	1.8 (1.1 - 2.98)	105	1.8 (1.1 - 2.63)	32	-0.01 (-0.42 to 0.69)

In the combination group, only 148 were offered at least 1 swap out of the 164 that accepted 0 swaps (i.e. 16 people were not offered any swap).

Table S4 Subgroup analysis between intervention groups

	Between group mean difference (95% confidence intervals)		
	Swaps vs Control	**Altering order vs Control**	**Combined vs Control**
Sex			
Female	-1.28 (-2.92 to 0.35)	-4.32 (-5.97 to -2.68)	-4.47 (-6.12 to -2.81)
Male	-3.27 (-5.56 to -0.99)	-6.22 (-8.62 to -3.82)	-7.09 (-9.37 to -4.81)
Age			
Median and above	-2.84 (-4.77 to -0.91)	-4.21 (-6.17 to -2.24)	-4.71 (-6.69 to -2.74)
Below median	-1.05 (-2.88 to 0.79)	-5.77 (-7.63 to -3.92)	-6.02 (-7.83 to -4.22)
Ethnic group			
White	-1.89 (-3.3 to -0.48)	-4.85 (-6.28 to -3.42)	-5.44 (-6.87 to -4.02)
Non-White	-2.8 (-7.38 to 1.78)	-6.3 (-11.1 to -1.5)	-5.09 (-9.36 to -0.82)
BMI			
<30	-2.14 (-3.72 to -0.56)	-5.75 (-7.39 to -4.12)	-5.22 (-6.79 to -3.65)
>30	-1.83 (-4.33 to 0.68)	-3.32 (-5.81 to -0.84)	-6.05 (-8.67 to -3.43)
Education			
None/Secondary	-1.57 (-4.09 to 0.95)	-5.03 (-7.57 to -2.49)	-5.2 (-7.86 to -2.53)
Higher	-2.06 (-3.67 to -0.46)	-4.76 (-6.4 to -3.12)	-5.45 (-7.01 to -3.88)
Household income			
Low-middle (£25-39k)	-2.21 (-3.82 to -0.59)	-5.06 (-6.69 to -3.43)	-5.61 (-7.25 to -3.97)
Higher (£40k+)	-1.34 (-3.8 to 1.13)	-4.53 (-7.11 to -1.96)	-4.6 (-7.05 to -2.15)

Table S5 Post-task survey on the most important factors affecting choice of purchase of foods or drinks by trial arm (n, %).

When making a choice of foods or drinks to buy, what are the top 3 things that affect your decision?

N %	Control		Swaps		Altering order		Both		Total	
Price	216	70	252	81	207	67	232	75	907	73
Taste[1]	209	67	233	75	217	70	214	69	873	70
Healthiness	70	23	99	32	84	27	93	30	346	28
Special offers	86	28	84	27	54	17	101	33	325	26
Habits	87	28	61	20	82	26	59	19	289	23
Convenience	86	28	52	17	72	23	63	20	273	22
Appearance	54	17	37	12	43	14	39	13	173	14
Organic	8	3	4	1	7	2	7	2	26	2
Special diet[1]	1	0	5	2	4	1	1	0	11	1
Other[2]	13	4	8	3	12	4	16	5	49	4

[1] Theirs or their families', [2] e.g. animal welfare, locally produced, packaging.

Table S6 Post-task survey on the frequency of checking the nutrition labelling while at usual grocery shopping

How often do you look at the nutrition labels for the following, when doing your usual grocery shop?

N (%)	Never	Rarely	Sometimes	Often	Always	Missing
Calories	142 (13.1)	219 (20.1)	356 (32.7)	271 (24.9)	91 (8.4)	9 (0.8)
Fat	135 (12.4)	258 (23.7)	382 (35.1)	240 (22.1)	64 (5.9)	9 (0.8)
Saturated fat	180 (16.5)	303 (27.8)	333 (30.6)	202 (18.6)	61 (5.6)	9 (0.8)
Sugar	120 (11)	212 (19.5)	342 (31.4)	302 (27.8)	103 (9.5)	9 (0.8)
Salt	180 (16.5)	365 (33.5)	292 (26.8)	183 (16.8)	59 (5.4)	9 (0.8)