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1 **Abstract**

2 **Objective:** To assess the feasibility of implementing and evaluating a 10-week price incentive
3 intervention to promote healthy eating options in workplace canteens.

4 **Design:** Workplace canteens participating in Healthy Living schemes were invited to participate in the
5 study. The intervention design was informed by qualitative work with catering staff and canteen
6 patrons. Assessments included canteen measures of intervention uptake and individual level measures
7 of food habits using online pre- and post-intervention questionnaires. Qualitative measures were used
8 to ascertain consumer acceptability and caterers perspective of the intervention.

9 **Setting/Subjects:** Three workplace sites in Central Scotland initiated, and two completed, the 10-week
10 intervention study.

11 **Results:** Pre-intervention findings indicated that price, product quality and quick service were
12 fundamental aspects of the intervention design and a soup/sandwich meal combination deal was
13 identified as the intervention focus. The intervention had a nutrient composition consistent with FSA
14 traffic light criteria, was sold at 10-20% reduction of the original price and promoted using on-site
15 marketing. Till data indicated that at all time points there was greater uptake of intervention soup than
16 the price incentivised intervention meal deal. The response rate for both pre and post questionnaires
17 were low. Qualitative findings reported improved value for money and quality however dissatisfaction
18 with limited choice, poor quantities and inadequate marketing were also noted.

19 **Conclusions:** A price incentivised healthy eating intervention designed in collaboration with worksites
20 was feasible to implement in two canteens. However, further work is required to develop a
21 comprehensive intervention package and to improve data collection.

22

23 **Introduction**

24 Rapidly rising levels of overweight and obesity in recent decades have been especially evident in
25 Scotland with an adult prevalence rate for obesity of 27.1%, globally third only to Mexico (30.0%) and
26 the United States (34.5%)⁽¹⁾. Obesity is now well established as a contributory factor to many
27 conditions including diabetes, cardiovascular disease, certain cancers and arthritis. The overall costs of
28 obesity in Scotland are estimated at £175M ⁽²⁾. In a rapid review of potential policy options for obesity
29 prevention and control in Scotland, one of the most promising settings for effective interventions in
30 adults was the workplace environment ⁽³⁾. Similarly, a systematic review by the WCRF highlighted 17
31 primary studies of workplace interventions that reported dietary changes ⁽⁴⁾. The role of workplace
32 canteens has been recognised in numerous countries in the provision of employee’s daily meals ⁽⁵⁾, and
33 thus the catering sector is likely to play a pivotal role in influencing dietary choices in adults of
34 working age, especially main meal selections ⁽⁶⁻⁸⁾.

35 French and colleagues (2003) have highlighted the influence of local pricing strategies in workplace
36 canteens and vending machines as a means of increasing healthier food ⁽⁹⁾. In addition, worksite
37 schemes offering free fruit can result in increased consumption of fruit and decreased consumption of
38 added sugar ⁽¹⁰⁾, and this can also result in positive dietary change for “blue collar” workplaces ⁽¹¹⁾.

39 A review by Hawkes (2009) on financial incentives and disincentives to promote healthier eating has
40 highlighted that financial incentive schemes are “most effective when implemented as part of an
41 integrated package of mutually re-enforcing strategies, such as education/marketing” ⁽¹²⁾. Thus it would
42 be appropriate to view financial incentives such as price promotions as a tool to help stimulate healthy
43 eating as part of a broader package of activities.

44 In Scotland there is a unique opportunity to test the effect of promoting healthier eating in the
45 workplace given that the Healthy Living Award scheme and the Healthy Working Life Programme lay
46 the foundation for increasing access and provide a platform to add financial incentives and marketing
47 approaches. Against this backdrop, the current study aimed to investigate the feasibility of
48 implementing and evaluating a 10 week price incentive intervention to promote healthy eating in
49 workplace settings. This paper will discuss the lessons learnt from this feasibility study and
50 implications for future work.

51

52 **Experimental methods**

53 **Recruitment**

54 Recruitment was undertaken in conjunction with the HLA team. Thirty-seven workplace canteens and
55 18 contract caterers (with varying numbers of workplace canteens) were initially invited to participate
56 in the short term study which offered an incentive of £1000 per site to cover personnel time, training
57 and related costs. Four worksites responded positively but then declined to participate. Further
58 recruitment, involving personal contact and follow-up telephone calls by the HLA team, also failed to
59 identify interested sites. The HWL team then approached 4 possible worksites (one of which had an
60 interested sister site), two of whom completed the study. Figures 1 and 2 provide a summary of the
61 recruitment process.

62 **Intervention development**

63 The intervention design was informed by qualitative research with canteen staff and users. Focus
64 groups and interviews were conducted in each workplace, with topic guides allowing the exploration of
65 plausible interventions. Marketing strategies were also discussed. Qualitative research was digitally
66 recorded and transcribed verbatim, content of which was verified by two researchers independently for
67 accuracy. Data analysis was performed using the principles of the Constant Comparative Method
68 (CCM) and Framework analysis (FA).

69 **Intervention components**

70 The intervention combined price incentives, healthy choices and a marketing strategy (Table 1). Price
71 incentives focused on consumer and caterers preference for “healthy meal deals” at a 10-20% cost
72 reduction. Recipes aimed to achieve a nutrient composition consistent with the FSA traffic light
73 grading low (or maximum of one medium) for fat, saturated fat, sugar and salt ⁽¹³⁾. Due to recently
74 introduced EU Regulation, individual items could not be labelled as “healthy” but were labelled with
75 value for money symbols ⁽¹⁴⁾. Marketing focused on a value strategy by promoting reduced prices,
76 products and key placing of targeted items within the canteen setting.

77 **Intervention support**

78 Workplaces were provided with substantial support during the intervention period:

- 79
- 80 • Promotional materials including stickers, posters, weekly and daily point of sale menus, content
81 for electronic bulletins etc.
 - 82 • Practical catering resources including nutrient analysed recipes, shopping lists and daily/weekly
menu rotations.

- 83 • On-call researcher support (mobile telephone and email details provided to ensure constant
- 84 support and quick clarification of queries).
- 85 • £1000 to compensate for any costs incurred during the intervention period.

86 **Intervention evaluation**

87 Observational measures were taken at three official site visits during the implementation period to
88 ensure fidelity of intervention implementation and promotions. Sales data were provided by worksites.
89 At Site A the till was programmed to record intervention meal deals however no records were kept of
90 individual intervention component sales. Soup uptake was estimated using preparation and wastage
91 calculations. At Site B catering staff manually recorded individual component item sales.

92 A pre- and post-intervention questionnaire was delivered online to all employees at both sites via the
93 intranet and by adopting a “word of mouth” strategy. A prize draw was offered as an incentive for
94 participation at Site A (not permitted at Site B). Questionnaires collected data on socio-demographic
95 details, food habits, key dietary intake indicators, knowledge of five a day messages, canteen
96 perspectives and purchasing behaviour at the canteen. Data was analysed using SPSS (Version 21.0,
97 Chicago, IL, USA).

98 Post-intervention qualitative work (focus group and interviews) collected information on perception,
99 acceptability, marketing and perceived benefits of the intervention with catering staff and user in each
100 site.

101 Ethical approval was obtained from the University of Dundee Research Ethics Committee.

102 **Results**

103 Two worksites participated and completed the study. Site A was a private call centre employing
104 approximately 1600 employees (with a maximum of 800 employees onsite at any time), and Site B was
105 a government call centre with approximately 550 employees. Both sites were involved in the design
106 and delivery of tailored price incentivised interventions (marketed as EatSMART) which comprised of
107 a “meal deal” (e.g. soup, sandwich and fruit combination sale).

108 **Intervention evaluation**

109 Intervention uptake was estimated using till receipt data (Table 2) and varied by week (range 60 to 187
110 items) and by worksite. Throughout the intervention period there was greater uptake of intervention
111 soup (range 44 to 138) compared to the price incentivised meal deal (range 4 to 31). The intervention

112 did not appear to impact on snacks with snack sales remaining buoyant during the intervention period.
113 Notably, analysis of till receipt data was particularly time-consuming and did not enable the
114 identification of individual level consumption data.

115 The response rate from pre- and post-intervention questionnaires was low, with 2.9% (n=46) of the
116 workforce responding pre- and 1.6% (n=28) post in Site A and 15% (n=84) and 9.6% (n=53) of the
117 workforce responding pre- and post-intervention, respectively, in Site B.

118 Site observations reported that the intervention meal deal was available at the agreed price and
119 marketing strategies were visible throughout the intervention period. However, the number of visible
120 quantities of the intervention items on offer appeared limited. Substantial support from the research
121 team (Table 1) was required to recruit, initiate, develop and support the implementation of the
122 intervention.

123 **Catering staff perception of the intervention**

124 Pre- and post-intervention qualitative work with catering staff indicated that barriers to implementing
125 the intervention included; access to healthy ingredients, restrictions in catering contracts, limited choice
126 of ingredients, competition from externally sourced vending machines, time to deliver intervention,
127 limited cooking, storage and preparation facilities, difficulty identifying appropriate person to approve
128 intervention delivery, resistance from senior catering managers, additional workload and capacity
129 issues, and (perceived) unwillingness of canteen patrons to “try something new”.

130 **Consumer perception of the intervention**

131 Quantitative analysis of the repeated cross-sectional data at both sites and paired data from Site B
132 (n=20) indicated a more positive perception of all measures of post intervention (Tables 3 – 6a&b). At
133 both sites respondents reported purchasing an EatSMART promotional product (15% to 43%,
134 respectively) and reported having seen the promotional materials (36% and 58% respectively). Post-
135 intervention focus groups highlighted that targeted foods were considered to be “tastier” and “
136 healthier” with reports of more salad on sandwiches and an improvement in overall quality. However
137 respondents didn’t always consider the intervention items to be healthy – “soups can be greasy”. In
138 addition, availability and limited choice of intervention items were reported by consumers.

139 **Discussion**

140 It is recognised that the catering sector can have a pivotal role in influencing dietary intake, with the
141 potential to impact on obesity prevention. In Scotland, the Healthy Living Award is designed to

142 encourage caterers to increase the availability of healthier options. Preparatory work for the current
143 study (at the funding application phase) indicated interest from four catering sites (with the HLA).
144 However all four sites withdrew prior to the intervention commencement and considerable efforts were
145 needed to recruit additional catering establishments. These findings suggest limited interest by worksite
146 caterers in this area. In addition, it highlights the importance of allocating significant time for for
147 recruitment in future intervention research.

148 The extent to which culturally popular food selections (pies, fries, crisps and confectionary), catering
149 promotions (e.g. chocolate promotions during the Olympics) and general concerns about the impact of
150 “healthy eating” options on sale margins contributed to the poor response from caterers warrants
151 further exploration. It is unclear why financial imbursement (£1000 token of appreciation for
152 participating) helped to initiate discussions with some caterers but was insufficient to persuade
153 dialogue with others. Given the limited interest from worksite caterers to participate in healthy eating
154 research study (with substantial support), the current work calls into question the extent to which the
155 voluntary catering measures are likely to result in improvements in dietary intake at a population level.

156 Intervention components were tailored to consumer preferences and catering practicalities and although
157 operationalized as planned, consumer feedback suggested limited availability of certain meal deal
158 items, possibly reflecting caution in preparation exerted by caterers anticipating waste. The catering
159 staff involved in the study invested substantial time and energy contacting suppliers, organising and
160 preparing new menus, accessing ingredients and testing new recipes, highlighting the commitment
161 needed for such interventions which involve prepared foods in contrast to fast, highly processed items.

162 The uptake of price incentivised “meal deals” was modest although the uptake of healthier component
163 parts without the price reduction was very encouraging. Single item intervention components such as
164 soup sold for less than £1 (typically around 56-84p) were often the cheapest items available on the
165 menu. Although meal deals were suggested by consumers as desirable in the pre-intervention work, the
166 potential for more expensive meal deals to be impractical and unfeasible for many low income workers
167 is likely to impact on the limited uptake of “meal deals”. Menu planners and caterers need to consider
168 the nutrient profile of the lowest cost items available on menus to ensure healthy options are the most
169 desirable options. For many low income consumers, lowering the price of (more expensive) healthy
170 options or providing reduced cost meal deals that result in a greater financial outlay than the cheapest
171 available items is unlikely to increase choice in real terms, more likely to contribute to inequalities
172 experienced by this consumer group and unlikely be helpful in initiating change in food habits. If we

173 are to seriously tackle the burden of energy dense foods sold in catering establishments then a range of
174 policy levers may need to be utilized (with consideration given to the role of mandatory and legislative
175 activities).

176 **Future research**

177 The current study has highlighted numerous barriers to delivering price incentivised healthy eating
178 interventions in workplace catering establishments and has provided valuable learning for future
179 research in this area. Future studies should explore utilising technological advances in the catering
180 arena to reduce the data collection burden experienced. For example, using cashless systems to collate
181 sales information and link purchases to individual level data or study surveys warrant further
182 exploration. Smartphone technology (such as apps, multi-media/text messages or instant messaging) to
183 record purchasing behaviour or communicate with consumers may also improve study methodologies.
184 However, it is important not to avoid investigations in smaller and less affluent establishments where
185 these technologies may not be available. In addition, success in the current study was highly dependent
186 upon the working relationship and level of support provided by the research team to the caterer.
187 Researchers designing studies in this area should not underestimate the amount of time, resource and
188 support that is required to enable caterers to engage in research studies. Nurturing, supporting and
189 understanding perceived and actual challenges faced by enthusiastic individuals in the catering industry
190 who want to engage with “healthy eating” options is essential if successful outcomes are to be
191 achieved.

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197 research and assist with the study.

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248 **Figure 1 Summary of recruitment process**

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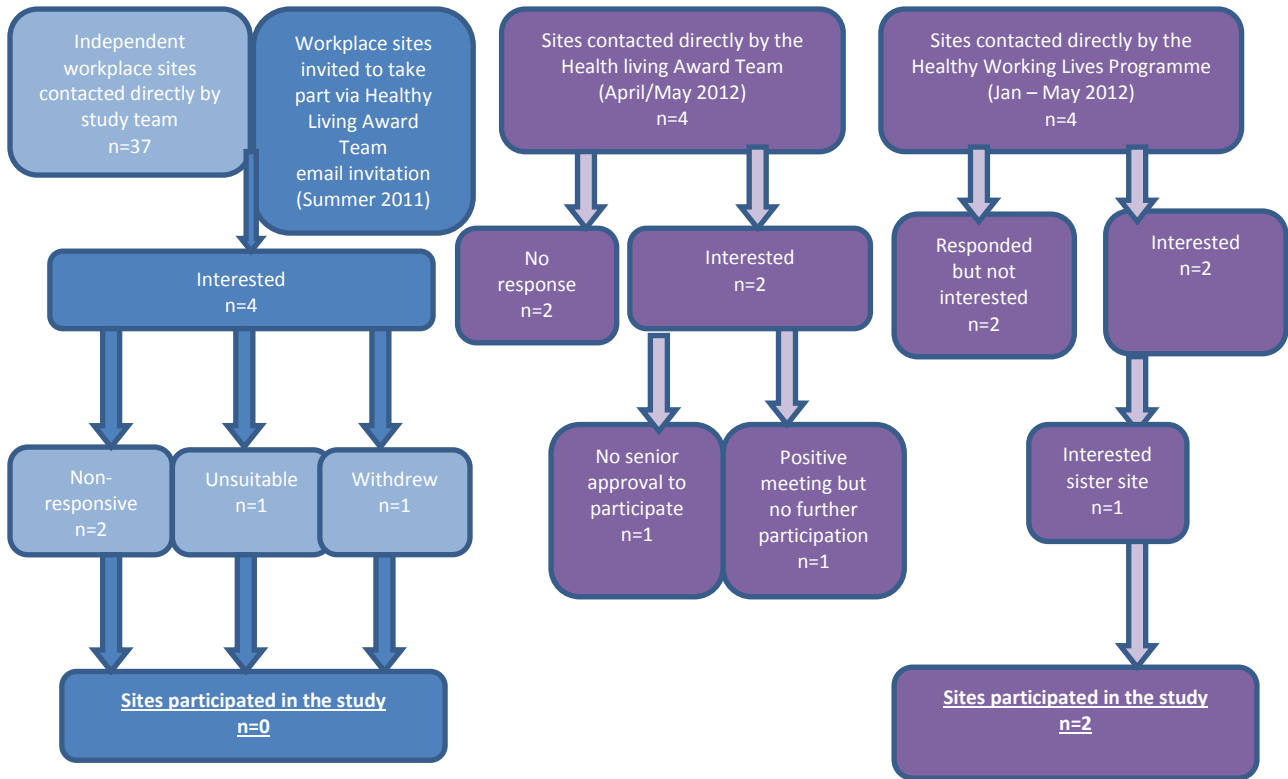
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265 **Figure 2 Site details including recruitment response**

Site Description	Recruitment Strategy	Location	No of contact (approx)			Outcome
			Email/ Mail	Telephone Calls	Person Visits	
Financial Services	Primary (HLA – Summer 2011)	Edinburgh	8	4	1(x1 personnel) 1(x2 personnel)	Unsuitable: Site anticipated 12% increase in sales & limited capacity with staff at Olympics
Oil Refinery	Primary (HLA – Summer 2011)	Grangemouth	6	8	1(x2 personnel)	Un-responsive: Site stopped returning calls
Insurance Company	Primary (HLA – Summer 2011)	Edinburgh	4	1	0	Un-responsive
Local authority	Primary (HLA – Summer 2011)	Cardenden, Fife	13	12	1 (x1 personnel) 2 (x2 personnel)	Withdrawn: Due to uncertain future
Energy company	Secondary (HLA – Spring 2012)	Glasgow	2	2	0	Withdrawn: Caterer unwilling to participate
Call centre (Brewers)	Secondary (HLA – Spring 2012)	Livingston	2	2	0	Un-responsive
Local authority	Secondary (HLA – Spring 2012)	Hamilton	2	3	0	Un-responsive
Contract caterers	Secondary (HLA – Spring 2012)	HQ– Stirling Sites across Scotland	5	4	1(x1 personnel)	Un-responsive
Energy Company customer service centre	Secondary (HWL – Spring 2012)	Cumbernauld	3	2	0	Interested initially but then nothing more following approvals
Call Centre	Secondary (HWL – Spring 2012)	Uddingston	1	0	1	Not interested
Call centre	Secondary (HWL – Spring 2012)	Airdrie	49	9	7(x1personnel) 6(x2 personnel) 1(x3 personnel)	Intervention completed
Call centre	Secondary (Via Teleperformance Airdrie – Spring 2012)	Erskine	9	2	1(x1 personnel)	Un-responsive
Government call centre	Secondary (HWL – Spring 2012)	Motherwell	47	9	3(x1 personnel) 6(x2 personnel) 1(x3 personnel)	Intervention completed
Total number of contacts/visits			151	58	53 person visits	

268 **Table 1 Summary of EatSMART tailored intervention & marketing package**

	Site A	Site B
Intervention	Combination deal	Combination deal
Specifics	Alternate weeks Soup & Sandwich Soup, Salad & Brown roll	Two options: Soup & Sandwich Soup, Sandwich & Fruit
Price	£1.80	£2.50 or £3.00
Marketing Strategy	<p>Product</p> <ul style="list-style-type: none"> • New reduced price combination deal • Combination is healthy and complies with TL nutrient profiling system <p>Price</p> <ul style="list-style-type: none"> • Reduced price for the 10 week intervention period • 10-20% reduction price • Following qualitative research price to be below £2 mark (actual £1.80) <p>Place</p> <ul style="list-style-type: none"> • Site A Canteen <p>Promotion</p> <ul style="list-style-type: none"> • Desk awareness strategy (3B's) • Visualisation Strategy • Catering staff communication strategy 	<p>Product</p> <ul style="list-style-type: none"> • New reduced price combination deal • Combination is healthy and complies with TL nutrient profiling system <p>Price</p> <ul style="list-style-type: none"> • Reduced price for the 10 week intervention period • 10-20% reduction price (actually may be more given current price range of sandwiches) • Following qualitative research price to be (actual £2.50 for soup and sandwich and £3 for soup, sandwich & fruit) <p>Place</p> <ul style="list-style-type: none"> • Site B Canteen <p>Promotion</p> <ul style="list-style-type: none"> • Site B company intranet (new) • Visualisation Strategy in canteen only (paperless site) • Catering staff communication strategy (small team all on board and aware of intervention – all active players)
Nutrient criteria	<p>Comply with green TL nutrient criteria for 3 out of 4 nutrients below:</p> <ul style="list-style-type: none"> • Fat • Saturated Fat • Salt • Sugar 	

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Table 2 Intervention Uptake

Week	Site A n=1600 [#]					Site B n=550					
	Combo	Estimated Intervention Soup ¹	Salads	Sandwiches*	Snacks (crisps, chocolate sweets)	Combo	Soup		Sandwiches		Snacks (crisps, chocolate, sweets)
							Intervention	% total soup sales	Intervention	% total sandwich sales	
Week 1	17	62	16	70	206	27	44	43	8	34	454
Week 2	7	85	20	55	193	23	55	45	1	28	517
Week 3	4	45	29	72	169	31	49	54	0	31	566
Week 4	10	59	13	70	129	27	52	63	0	33	531
Week 5	29	138	20	130	159	21	94	82	0	38	430
Week 6	8	68	2	76	161	8	52	37	0	13	540
Week 7	17	57	13	52	114	7	55	37	0	9	560
Week 8	24	118	17	81	236	22	58	50	0	41	612
Week 9	9	92	18	95	293	9	71	57	1	27	553
Week 10	17	95	18	74	242	12	72	45	1	27	493

Only ~800 employees on the premises at any one time

1 estimated from production and waste

*Included non-intervention items

Table 3 Online questionnaire survey respondent demographics

	Site A		Site B	
	Pre-intervention n=46	Post-intervention n=28	Pre-intervention n=84	Post-intervention n=53
Male (%)	24(52)	19(68)	24(29)	14(27)
Age (years) Mean (range)	36(20 – 64)	31(21 – 41)	43(23 – 72)	42(23 – 65)
SIMD 1-5* (%)	29(74)	15(75)	39(65)	25(63)
Highest educational achievement – school level qualification (%)	14(30)	5(18)	37(46)	24(45)
Highest educational achievement – post school certificates (%)	14(30)	16(57)	28(35)	18(34)
Highest educational achievement – degree (%)	15(33)	6(21)	14(18)	9(17)
Gross annual household income < 15000 (%)	9(27)	7(30)	12(20)	7(20)
Gross annual household income 15000 - 40000 (%)	19(58)	11(49)	30(50)	17(49)
Gross annual household income >40000 (%)	5(15)	5(22)	18(30)	11(31)
Ethnicity – white (%)	43(94)	27(96)	76(95)	51(96)
Smoker (%)	13(30)	7(26)	8(10)	11(21)
Live with other adults (%)	36(86)	15(56)	72(88)	44(86)
Children in household (%)	18(39)	12(44)	34(42)	19(37)
Part-time working (%)	8(17)	5(17)	16(19)	10(20)
Full-time working (%)	38(83)	23(83)	64(81)	40(80)
BMI >30kg/m2	27(61)	11(41)	40(54)	12(27)

All percentages reported are valid percentages

*Scottish Index of Multiple Deprivation deciles 1-5 = most deprived areas

Table 4a Reported food intake in last 24 hour

	Site A		Site B	
	Pre-intervention n=46	Post-intervention n=28	Pre-intervention n=84	Post-intervention n=53
Breakfast cereal – at least 1 portion (%)	25(57)	14(52)	53(67)	30(60)
Fruit (Portions) Mean (range)	3.2 (1 - 9)	3.1 (1 - 10)	2.6 (0 – 12)	2.7 (0 – 10)
Vegetables (portions) Mean (range)	2.3 (0 - 5)	2.0 (0 - 8)	2.3 (0 – 9)	2.2 (0 – 10)
Crisps, chocolate,(portions) Mean (range)	1.6 (0 – 6)	1.5 (0 - 7)	2.1 (0 – 8)	1.7 (0 – 4)
Sugary drinks – at least 1 portion (%)	25(56)	17(68)	32(40)	17(34)
Sugary drinks (portions) Mean (range)	1.3 (0 – 4)	1.4 (0 – 4)	0.7 (0 – 4)	1.5 (1 – 4)
Meat - >2 portions (%)	3(7)	5(19)	9(11)	6(12)
Fish – at least 1 portion (%)	10(23)	8(30)	23(31)	9(19)
Homemade soup – at least 1 portion (%)	16(36)	8(32)	25(32)	14(30)

Table 4b Reported food intake in last 24 hour (paired data)

	Site B		
	Pre-intervention n=20	Post-intervention n=20	p= ¹
Breakfast cereal, at least 1 portion (%)	14(82)	13(69)	1.00
Fruit (Portions) Mean (range)	1.8 (0 – 5)	2.4(0 - 10	0.31
Vegetables (portions) Mean (range)	2.7 (1 – 9)	2.1 (0 – 7)	0.13
Crisps, chocolate (portions) Mean (range)	2.9 (0 – 6)	1.8 (0 – 4)	0.02*
Sugary drinks, at least 1 portion (%)	8(42)	9(50)	1.00
Sugary drinks (portions) Mean (range)	1.6 (1 – 3)	1.7 (1 – 3)	0.77
Meat, >2 portions (%)	3(16)	4(20)	1.00
Fish, at least 1 portion (%)	7(39)	4(24)	0.48
Homemade soup, at least 1 portion (%)	7(37)	2(13)	0.13

¹ Fisher Exact tests (chi squared test for differences in proportions/small samples) or paired student t test for differences in means

Table 5 – Reported lunch time spend

	Site A		Site B	
	Pre-intervention (n=46)	Post-intervention (n=28)	Pre-intervention (n=83)	Post-intervention (n=53)
< £1.50 (%)	4 (8.8)	7(25.9)	7 (8.8)	8(15.4)
£1.51 - £2.50(%)	25 (55.6)	14(51.8)	37 (46.3)	25(48.1)
£2.51 - £3.00(%)	7 (15.6)	2(7.4)	21 (26.3)	9(17.3)
> £3.00(%)	2 (4.4)	0(0)	5 (6.3)	0(0)
No set amount (%)	5 (11.1)	2(7.4)	10 (12.5)	7(13.5)
Not sure (%)	2 (4.4)	2(7.4)	0(0)	3(5.8)

Table 6a Perceptions of canteen

	Site A		Site B	
	Pre-intervention n=46	Post-intervention n=28	Pre-intervention n=84	Post-intervention n=53
Choice of items on sale Mean (range) ¹	2.9 (1 – 5)	3.9 (1-7)	2.8 (1 – 6)	3.3 (1 – 6)
Range of healthy eating choices Mean (range) ¹	2.6 (1 – 6)	3.8 (1 – 6)	2.6 (1 – 6)	3.5 (1 – 6)
Quality of food Mean (range) ¹	3.1 (1 – 5)	3.3 (1 – 6)	2.6 (1 – 5)	3.3 (1 – 6)
Value for money Mean (range) ¹	2.3 (1 – 5)	3.1 (1 – 7)	1.9 (1 – 5)	2.5 (1 – 5)
Marketing materials Mean (range) ¹	2.3 (1 – 5)	2.8 (1 – 6)	3.0 (1 – 6)	3.7 (1 – 6)
Promoted items Mean (range) ¹	2.2 (1 – 6)	3.0 (1 – 6)	3.1 (1 – 6)	3.6 (1 – 7)
Dining experience Mean (range) ¹	2.6 (1 – 5)	3.3 (1 – 6)	2.6 (1 – 6)	3.0 (1 – 6)

¹ Likert scale 1=poor, 7=excellent

Table 6b Perceptions of canteen (paired data)

	Site B		
	Pre-intervention n=20	Post-intervention n=20	p= ²
Choice of items on sale Mean (range) ¹	3.0 (1 – 5)	3.4(1 – 6)	0.008*
Range of healthy eating choices Mean (range) ¹	2.8(1 – 6)	3.6(1 – 6)	0.08
Quality of food Mean (range) ¹	2.9(1 – 5)	3.3(1 – 5)	0.008*
Value for money Mean (range) ¹	2.1 (1 – 5)	2.7(1 – 5)	0.035*
Marketing materials Mean (range) ¹	3.2 (2 – 5)	3.8(1 – 6)	0.008*
Promoted items Mean (range) ¹	3.4 (1 – 6)	3.8(1 – 7)	0.047*
Dining experience Mean (range) ¹	2.9 (1 – 6)	3.1(1 – 5)	0.004*

1 Likert scale 1=poor, 7=excellent

2 Paired Student t test for comparison of means

*Significant p<0.05