

FINAL REPORT

A THREE-STAGE INVESTIGATION INTO THE BALANCE OF HEALTHY VERSUS LESS HEALTHY FOOD PROMOTIONS AMONG NORTHERN IRELAND FOOD RETAILERS

FS305021

08/03/16

ULSTER UNIVERSITY BUSINESS SCHOOL,

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Foreword and Acknowledgements

Ulster University would like to thank all those who contributed to this research project and the production of this report:

- Ruth Balmer, Sharon Gilmore and Joanne Casey (Food Standards Agency in Northern Ireland)
- Philippa McKeown-Brown and Paulino Garcia (Consumer Council for Northern Ireland)
- Gerard McFall (Subject Librarian, Ulster University)
- Food industry representatives and other key stakeholders who took part in the investigation

Prepared by:

Dr. Lynsey Hollywood (Ulster University Business School (UUBS), Department of Hospitality and Tourism Management (HTM))

Dr. Sinéad Furey (UUBS, HTM)

Dr. Amy Burns (UUBS, HTM)

Professor Una McMahon-Beattie (UUBS, HTM)

Dr. Ruth Price (Ulster University, School of Biomedical Sciences, NICHE)

Dr. Maresa Duffy (UUBS, HTM)

Professor Elizabeth Dowler (University of Warwick, Faculty of Social Sciences, Department of Sociology)

Professor Barbara Livingstone (Ulster University, School of Biomedical Sciences, NICHE)

Professor Paul Humphreys (UUBS, HTM)

Mrs Clare Moore and Miss Fiona McCullagh (Millward Brown Ulster, Belfast)

This research was commissioned and funded by the Food Standards Agency in Northern Ireland and the Consumer Council Northern Ireland. The views expressed reflect the research findings and the authors' interpretation; they do not necessarily reflect the funders' policy or opinions.

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Executive Summary

The Food Standards Agency in Northern Ireland (FSA in NI) in conjunction with the Consumer Council Northern Ireland (CCNI) commissioned Ulster University Business School to conduct research investigating the balance of *healthy* versus *less healthy* food promotions among Northern Ireland (NI) food retailers. This report provides an overview of the main findings of the three-stage investigation and identifies a series of recommendations for change.

Stage 1: Rapid evidence assessment of relevant food retail promotions literature

Results identified no UK/NI-specific studies focused on the healthy balance of food retail promotions. While the international nature of the findings may not be fully applicable to the NI context it may be possible to elicit key learnings and policy recommendations based on international evidence.

Stage 2a and 2b: In-store and online audits of food retail promotions

Results reported that in-store and online food retail promotions in NI were balanced in terms of their *healthy* versus *less healthy* nutritional quality.

- The healthiness (*nutritional status*) of each product was assessed using a scoring system according to the FSA front of pack (FOP*) nutrient labelling methodology (FSA, 2013)^[1].
- In line with this, each product item was assigned an **individual nutrient score** from 1 to 3¹ for each FOP nutrient: energy (kcal), sugar (g), fat (g), saturated fat (g) and salt (g).
- The **individual nutrient score** were used to create an overall **FOP mean composite score** for each product item ranged from 5 to 15.
- The **FOP mean composite score was assigned to the appropriate FOP category** as follows: Red = < 8; Amber = 9 to 12 and; Green = 13 – 15, meaning the higher the score the healthier the product item.
- For example Heinz Baked Beans would score 3 (energy (329kJ)) + 3 (fat (0.2g)) + 3 (saturated fat (0.0g)) + 3 (sugar (4.7g)) + 2 (salt (0.6g)) = overall score of 14, falling into the green category.

In using the FOP scoring system the FSA in NI encourage consumers to select products in both amber and green categories and reduce the number of products in the red category consumed as part of a healthy diet. The outcome of the in-store audit identified a positive balance in the healthiness of food retail promotions (52.5% categorised as amber/green and 47.5% of products categorised as red). The outcome of the online audit also identified a positive balance in the healthiness of food retail promotions (53% categorised as amber/green and 47% of products categorised as red).

Stage 3: Interviews and case studies

Results revealed retailers' commitment to achieving this balance. Retailers and membership organisations all expressed the desire to collaborate with the goal of investing in current and future customers' health.

¹ i.e. high (red) =1, moderate (amber) =2 and low (green) =3

Conclusion

This report concludes that NI retailers are currently achieving a balance in the healthiness of food retail promotions (red versus amber/green FOP categories); however, all parties agree that this should continue in the interest of achieving the identified overarching theme of making the healthier choice the affordable and easy choice. As a result of this investigation, seven evidence informed recommendations have been developed as calls to action for government, consumer bodies and NI food retailers.

** Front of Pack labelling is the colour coding of the key public health nutrients: fat, saturated fat, sugar and salt (and energy) on a per portion/per 100g basis*

1.0 Chapter One: Setting the scene

Across the United Kingdom and, more specifically NI, concern about the perceived cost of achieving a healthy diet for consumers has risen^[2]. The British Retail Consortium^[3] identified that the main barrier mentioned by just over one-fifth (21%) of shoppers to eating a more healthy diet is price. Consumers' views included that healthy foods are too expensive, unhealthy foods are promoted and healthy foods are not promoted. Recent CCNI^[4] research found that nine out of ten consumers are worried about the rising cost in food. These findings are reflected across age and income brackets: 82% had changed the way they shop, cook and eat.

Compounding this is the fact that in NI, food prices have risen by 26% between June 2007 and June 2011^[5] (equating to a 12% rise in real terms, taking inflation into account), while wages have not kept pace with inflation thus exacerbating the problem. In NI the direct and indirect costs of overweight and obesity in 2009 were estimated to be £369,799,820^[6]; the equivalent of more than £1 million per day highlighting that a great deal of attention in public spending is focused on public health.

In recognition of this, a cross-departmental policy imperative, the obesity prevention strategy for NI – *A Fitter Future for All: Framework for Preventing and Addressing Overweight and Obesity in Northern Ireland 2012-2022* – has recognised the importance of retail food promotions in consumers' food purchasing behaviour and has committed to encouraging and enabling food retailers to “*consider reducing point of sale placement of foods which are high in fat, salt, sugar and increasing exposure to promotion of healthier foods*” (p.73)^[7].

Subsequently, the FSA in NI (in partnership with CCNI) have been given the responsibility to deliver against this target. To date limited NI-specific evidence exists on determining the healthiness of food retail promotions, therefore the FSA in NI and CCNI commissioned Ulster University to undertake the research required to inform and support the delivery of this call to action.

1.1 Research aim & objectives

The overarching aim of this research was to investigate the balance of *healthy* versus *less healthy* food promotions among NI food retailers. The specific objectives of this research were to:

- *Review the literature on promotional offers, health and buying behaviour;*
- *Determine whether grocery shopping behaviour is affected by promotional activity;*
- *Develop an audit tool for assessing the type/nutritional quality of promotional offers;*
- *Assess the nutritional quality of promotional offers amongst food retailers in NI;*
- *Understand the perceptions of key stakeholders relating to promotional offers within the context of the NI food retail environment;*
- *Investigate the factors influencing the retailers' commitment to promoting certain foods using price offers; and*
- *Formulate recommendations on creating a healthy shopping environment for consumers***

** Please note that this three-stage investigation did not include primary consumer research

1.2 The NI retail context

Retailing has undergone a revolution in terms of the arrival of the UK major supermarket chains (Tesco, Sainsbury's and Asda) into NI and, more recently, the changing nature of the format and frequency of household shopping habits^[12] as well as an associated increasing reliance on convenience retailers^[13] leading to greater intensity of competition in the channel. In response, retailers are employing a range of different promotional tactics to attract consumers into the store, seeking to compete in terms of price and to increase overall sales.

In recent years, the consumer has been impacted by the recession in terms of rising food, fuel and housing costs alongside downward pressure on wages and Welfare Reform^[14]. Indeed, a Department of the Environment, Food and Rural Affairs report^[15] on consumers' reactions to rising food prices showed people noting and responding quite dramatically even before the introduction of austerity measures. Other important concerns relate to: public health; food waste; and the potential for price promotions to mislead today's consumers. Evidence suggests the traditional weekly shop has been replaced by smaller, more frequent shopping trips. This has led to more impulsive purchases leading to reliance on food retail promotions^[8, 12, 16].

In considering this retail context alongside the macroeconomic situation in NI it is clear that price and the affordability of food are key determinants in deciding where to shop and that promotions are important in managing the household shopping budgets^[8].

1.3 Definitions

There is no clear definition of retail food promotions. However, some promotional tactics identified included brand matching, loyalty discounts, coupons/vouchers and competitions^[8, 9, 10]. For the purposes of this investigation, our focus on retail food promotions will be defined as, “*forms of promotion which are primarily associated with a temporary reduction in price*”^[11]. To further explain this definition Table 1 identifies and defines each type of promotion included within this investigation.

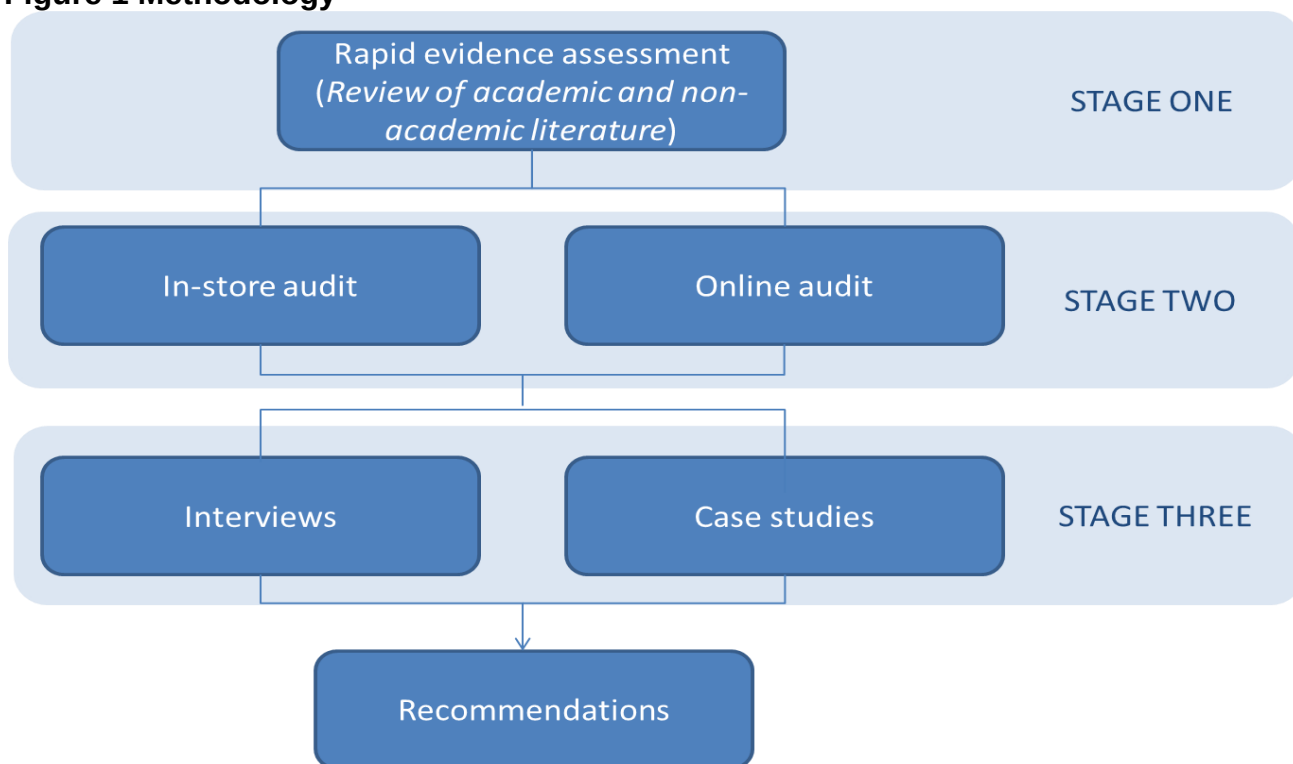
Table 1 Definition of promotions

Type	Definition	Example
Bulk Discount	Product available as part of deal for buying more than one of the SAME product	e.g. Buy one get one free, buy one get one half price, buy two get a third one free, buy one get one half price
Price Reduction	The pre-promotional price is shown alongside the price reduction = £xx savings shown	e.g. Save 50% was £2 now £1
Standalone offer	No information on pre-promotional price is provided and no price saving is shown	e.g. Only £1, Only £3
Multibuys	The SAME product for a special price (but may have flavour variations)	e.g. Any 2 for £3, Any 3 for £5
Mix and Match	This is a choice combination of DIFFERENT products - for a set price	e.g. any 3 fruit items for £3, Any 2 frozen items for £5, 3 for 2 - cheapest free
Certain % extra free	No price or cost saving is shown however the pack size is offering a certain % extra free	e.g. 33% extra free, 150ml extra free
Meal Deals WITH CHOICE	Product combinations FROM A NUMBER OF CHOICES which make a lunch/dinner at a specified price.	e.g. main, sides and dessert

1.4 Methodology

To meet the aims and objectives of the investigation a three-stage research methodology was implemented as illustrated in Figure 1.

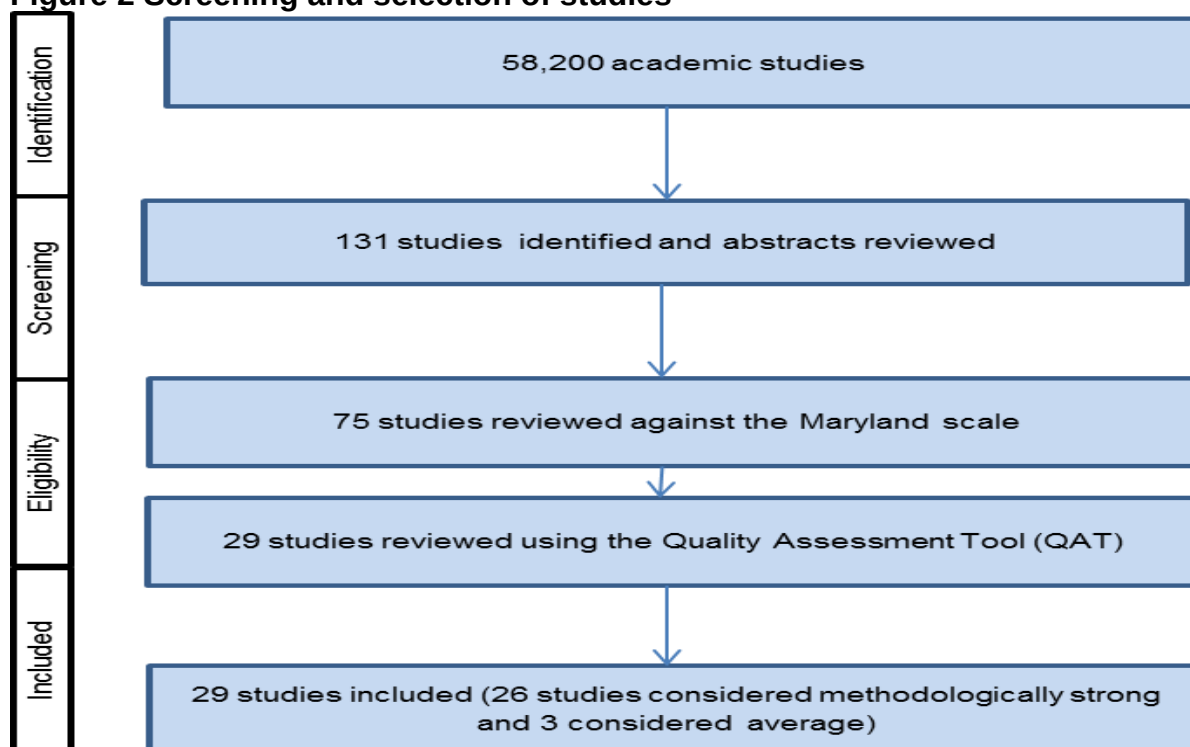
Figure 1 Methodology



2.0 Chapter 2: Rapid evidence assessment (REA)

As part of the first stage of this investigation a literature review was undertaken to identify and evaluate the current body of evidence on food retail promotions. As per Figure 2, twenty-nine studies were identified as *methodologically robust* enough to be included in the investigation sample.

Figure 2 Screening and selection of studies



Results from the first stage of this investigation (Rapid Evidence Assessment (REA)) indicated that there remains a lack of robust intervention research on food retail promotions. The REA also provided some additional insights on the effect of food retail promotions on buying behaviour and their influence on dietary behaviour. See Table 2.

Table 2 Key insights

The effect of promotions on buying behaviour
- Promotional offers can drive sales, stimulate quicker responses and can increase the number of purchases made within a specified timeframe^[17; 18; 19; 20; 21; 22] - Consumers are becoming fatigued with price discounting^[3;24;25] - Consumers benefit from food retail promotions in terms of brand, product and category switching and stock piling capabilities^[20; 21; 22;26] - Retailers can use promotions to attract customers, compete and increase sales and revenue by creating differentiation, building brand loyalty and allowing customers to trial new product developments^[27; 28] - Price-based promotions linked to price reductions (price discounting, coupons, discount-linked point-of-purchase or end-of-aisle displays, combination and volume offers) are the most effective type of promotional offer^[15; 16; 26] - Willingness to purchase bundled food products is greater when the discount

information for each food product is shown than when the price discount information is presented as a whole^[29]

- Volume promotions are preferred to a price discount when the product item is deemed healthier^[29; 30; 31]
- Promotional offers on national brands are perceived more positively than deals on generic or private brands^[26]
- Shoppers who sample the product in-store are significantly more likely than non-samplers to purchase the product thereby increasing category and store sales on the day of the promotion^[32]
- Using the word 'sale' beside a price (without actually varying the price) can increase demand by more than 50%^[33; 34]
- Promotions not only influence how much and when consumers buy but also influence brand perceptions and the reference price of individual products^[30]
- Promotional cues (price discounts/savings coupons and vouchers) with expiration dates cause shoppers to add more items to their shopping baskets, including un-promoted food products, subsequently increasing the volume of their shop^[35; 36]
- End of aisle displays significantly increase purchases of carbonated drinks by 52% after controlling for price, price promotion and the number of display locations for each product^[37]
- Non-carbonated drinks, fruit and cereal bars, and soda are most likely to have some type of promotional techniques across all stores (corner, convenience and grocery)^[38]
- When compared to convenience stores the grocery stores were significantly more likely to have promotions for impulse and top-up purchases, for example, breads and pastries, breakfast cereals, cookies and crackers, dairy, and ice cream^[38]
- Strategies such as increasing shelf space, in-store advertising, and locating foods in prime areas have all been demonstrated to increase sales for the promoted items^[39;40]
- Education was found to no independent effect on sales^[41]

The effectiveness of promotional offers on health

- Grocery stores are viewed as prime locations for shaping consumers' food choices and to promote healthy dietary behaviours^[42;43]
- Much of the existing literature on promoting healthier purchases in supermarkets has been conducted in middle-class areas among educated consumers^[44;45;46]
- Price is the primary influencing factor for lower-income consumers when buying food while general consumer response believe food must meet quality expectations before price is considered^[15; 16; 26; 27; 28; 33]
- There is a strong consensus within the literature that price promotions have a significant impact on short term sales, but do not shift dietary patterns^[20; 21; 22]
- The sources of a sales 'bump' have been identified as brand switching, product switching, category switching, and temporal switching (stockpiling)^[20; 21; 22]
- Sales promotions impact on our short-term shopping behaviour and have the potential to influence consumers to buy and eat more^[20; 33; 47]
- Consumers with less inhibitory control and who were overweight bought more calories from snacks on sales promotions^[20]
- Price discounts on healthy foods have the potential to increase the number of healthy purchases and promote healthy eating^[33; 43;48; 49]
- When applying different levels of price discount (50%, 25% and 10%) a 50% price discount showed a greater increase in the number of healthy food purchased^[33]
- Increasing the visibility and accessibility of healthy products is more effective than

increasing the number of locations of healthy products in store^[37; 39; 50; 51; 52]

- One in-store intervention developed to increase the number of healthy offerings in-store showed an increase in the number of healthy purchases sold^[39]
- Price reduction strategies show considerable promise as effective approaches to promoting healthy eating (meanwhile, price elevation of less healthy food products has been found to have an associated beneficial effect on their healthier counterparts), but there is a need for further research on the effectiveness of such strategies in the broader community, such as through supermarkets^[53; 54]
- A price discount on a less healthy food can be justified because it acts as a guilt-mitigating mechanism^[30]
- One study showed that USA supermarket flyers did not allocate the promotional space to healthy foods proportionate to national dietary guidelines^[55]
- There was no difference in the proportionality of shelf space for healthy and less healthy food items in both high and low socio-economic areas^[56]
- Promotional offers in the UK are not, on average, less healthy than non-offers (except for sugar levels) and as a general trend, straight discounts are, on average, more skewed towards less healthy items, while multi-buys are more skewed towards healthier items^[57]
- Promoting products via simple placement (stacking products vertically rather than horizontally and positioning at prime placement at eye level) and product availability (increasing the number of healthier variants while simultaneously decreasing the number of less healthy options in a product category) strategies were able to significantly influence the purchase of healthier items in the milk categories^[52]
- There is mixed evidence to suggest that promoting healthier items at the point of purchase using posters, shelf-tags and flyers could encourage the sales of these items^[44; 48; 58]
- Pricing strategies focusing on encouraging healthy eating were considered to be more constructive than pricing strategies that focused on discouraging unhealthy eating^[59]
- Consumers respond different depending on the retail format of the store^[60; 61; 62; 63; 64]
- Larger stores promoted proportionally more unhealthy products in prominent locations^[26; 39; 65; 51]

2.1 Conclusion

It is recognised that since none of the studies reviewed were undertaken within a UK/NI context, the applicability of the learning to NI needs to be considered within Stages 2 and 3 of this investigation. This is particularly relevant when considering the socio-demographic factors that affect the NI retail environment. Additionally, limited evidence exists on how individual types of promotion may mediate increased food category consumption^[66]. It is anticipated that Stages 2 and 3 of the investigation will identify and investigate with retailers the pragmatism of retail promotional strategies identified throughout this research. Such a collaborative approach with retailers is important “to facilitate scalability and sustainability”^[26] (p.1367). However, the literature identifies propositions for further encouraging healthy retail food promotions effectively. Another notable deficit was the limited number of consumer-centric research studies highlighting the need for further investigative effort in this area.

3.0 Chapter 3 Food retail promotions (in-store audit)

As part of the second stage of this investigation a retail food audit was conducted to assess promotional types, in-store promotional positions and the 'healthiness' of promotions across food retail chains in NI.

3.1 Development of the audit tool

A survey was designed to record and assess information on food promotions among food retail chains in NI. The survey was designed to collect information on: the retailer (name, store format); food promotions (promotional prominence, promotional type); product information (brand name, pack size and any other relevant additional information); and the following nutrition information if available: Front of Pack labelling (FOP) (energy in kJ, energy in kcal, carbohydrate in grams, sugar in grams, fat in grams, saturated fat in grams, salt in grams, sodium in grams, protein in grams, and fibre in grams).

3.2 Sample

Eight food retail chains currently operating in NI agreed to participate in the survey. The final sample comprised an agreed total of 48 stores (24 of which were supermarkets and 24 were convenience stores). From this baseline, stores were selected proportionate to the number of stores within each retail chain in NI, the type of store format within each retail chain and their geographic location. The total sample included hypermarkets, supermarkets, discounters, convenience stores and garage forecourts. Therefore, for comparative analysis, all retail stores were further classified into two categories: (1) supermarkets/discounters and (2) convenience stores to identify any statistical differences between categories.

3.3 Data collection

Data collection was carried out over two phase periods:

- Phase 1 - pre-Christmas, October/November 2014
- Phase 2 - post-Christmas, February 2015

Within Phase 1 and Phase 2, 3201 and 3580 products were assessed respectively from the following promotional sites: promotional buckets; promotional aisles; ends of aisles; promotional stands/standalone displays; promotional fridges; promotional freezers; and at the checkout stands. No alcoholic drinks were included within this investigation.

3.4 Measurements

To assess the promotions in terms of their 'healthiness' a Front of Pack (FOP) nutrient labelling system was used. This scoring system focuses on the 'risk' nutrients and energy density values displayed FOP which are directly associated with health. This system was chosen after evaluation of a number of scoring tools because: (i) it is a fit-for-purpose tool suitable for non-specialists to implement and may therefore be useful to retailers; (ii) it utilises the FOP information faced by consumers when making their food choice decision and; (iii) it allows nutrient level comparisons enabling recommendations for reformulation opportunities.

Each product item was assigned an **individual nutrient score** (energy, sugar, fat, saturated fat and salt) from 1 to 3 [i.e. high (red) =1, moderate (amber) =2 and low (green) =3] according to the FSA front of pack (FOP) nutrient labelling

methodology^[1]. The **individual nutrient score** (energy, sugar, fat, saturated fat and salt) was calculated to create an overall **FOP mean composite score** (i.e. 1 = red, 2 = amber or 3 = green) for each product item.

Energy values (kcal) were initially categorised based on the classifications by Bell et al. (1998)^[67] low, <3.5 kJ g⁻¹; moderate, 3.5–4.3 kJ g⁻¹; high 4.4–5.6 kJ g⁻¹; very high, >5.6 kJ g⁻¹ and then further adapted by collapsing the low, moderate and high groups into the following categories:

- **Per 100g:** High (red = 1) >560kJ; moderate (amber = 2) >440 to ≤ 560kJ; and low (green =3) ≤440 kJ
- **Per 100mls:** High (red = 1) >280kJ; moderate (amber = 2) >220 to ≤ 280kJ; and low (green= 3) ≤220 kJ

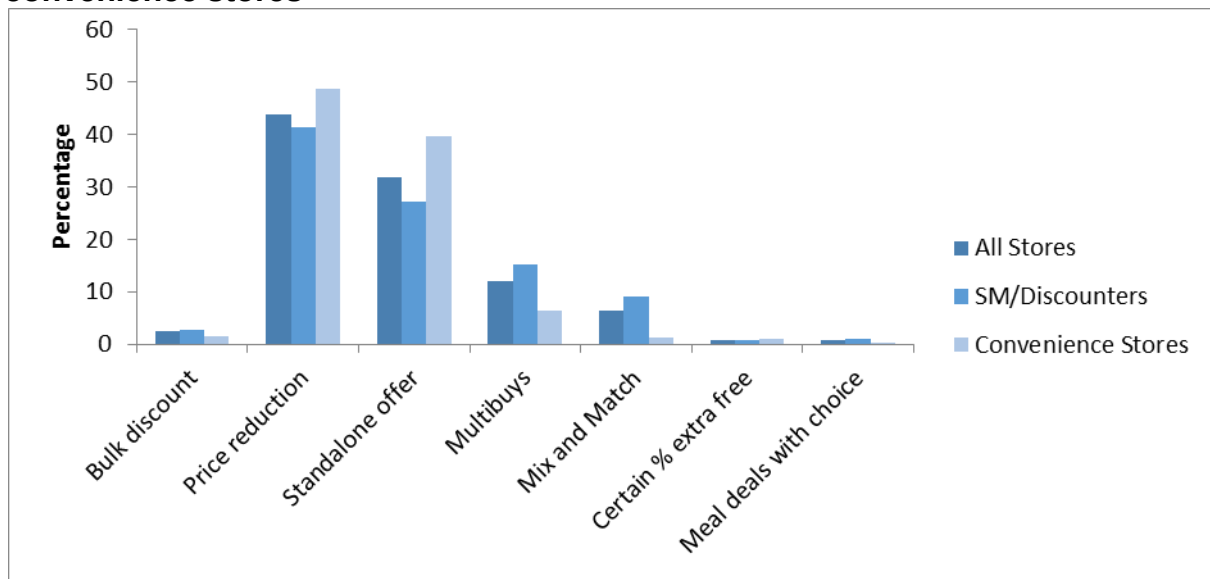
The **FOP mean composite score** per product score ranged from 5 to 15. These scores were then assigned to the appropriate FOP category [i.e. high (red) =1, moderate (amber) =2 and low (green) =3]. A tertile split was used to assign the cut of values for the **FOP mean composite score** as follows: Red = < 8; Amber = 9 to 12 and; Green = 13 – 15. For example Heinz Baked Beans would score 3 (energy (329kJ)) + 3 (fat (0.2g)) + 3 (saturated fat (0.0g)) + 3 (sugar (4.7g)) + 2 (salt (0.6g)) = overall score of 14, falling into the green category.

3.5 Results

3.5.1 Types of promotional offers available in-store for the total investigation period

The main types of promotional offers within all stores combined for the total investigation period were 'price reductions', 'standalone offers' and 'multibuy'. Collectively these amounted to 88% of all offers recorded. Notably, there were few 'meal deals with choice' offered for all retailers. Across store type there were significant differences between the frequency of promotional types. Notably, the supermarkets offered a greater number of 'multibuy' and 'mix and match' promotions compared to the convenience stores. However, the convenience stores offered a greater number of 'standalone' offers (Figure 3).

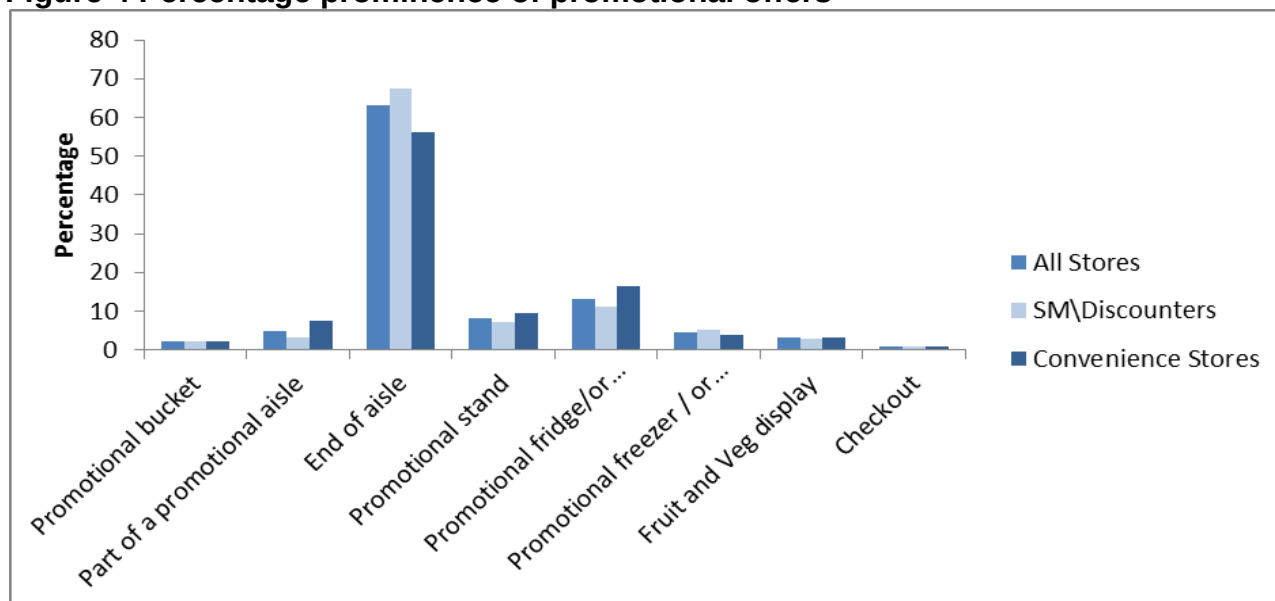
Figure 3 Promotional types for all stores, supermarkets (SM)/discounters & convenience stores



3.5.2 The ‘prominence’ of promotional offers in specific promotional sites in-store for the total investigation period.

For all stores combined, the most significant site offering in-store promotions was the ‘end of aisle’. Others areas that had a relatively high number of promotions included the ‘promotional fridges/promotional section’ and the ‘promotional stand’. The areas with the least amount of promotions were the ‘checkouts’, ‘promotional buckets’ and the ‘fruit and vegetable promotional display’ (Figure 4). The supermarkets/discounters offered significantly more items at the ‘end of aisle’ and in the ‘promotional freezers/promotional section’ than the convenience stores.

Figure 4 Percentage prominence of promotional offers



3.5.3 The individual nutrient score of in-store food retail promotions for the total investigation period using FSA FOP categories (red, amber and green)

Using the FSA FOP labelling categories: red, amber and green products for all stores combined there was a greater percentage of products classified as green for the nutrients sugar and salt and a higher percentage of products classified as red for energy, fat and saturated fat as displayed in Table 3.

Table 3 Individual nutritional content of in-store food retail promotions

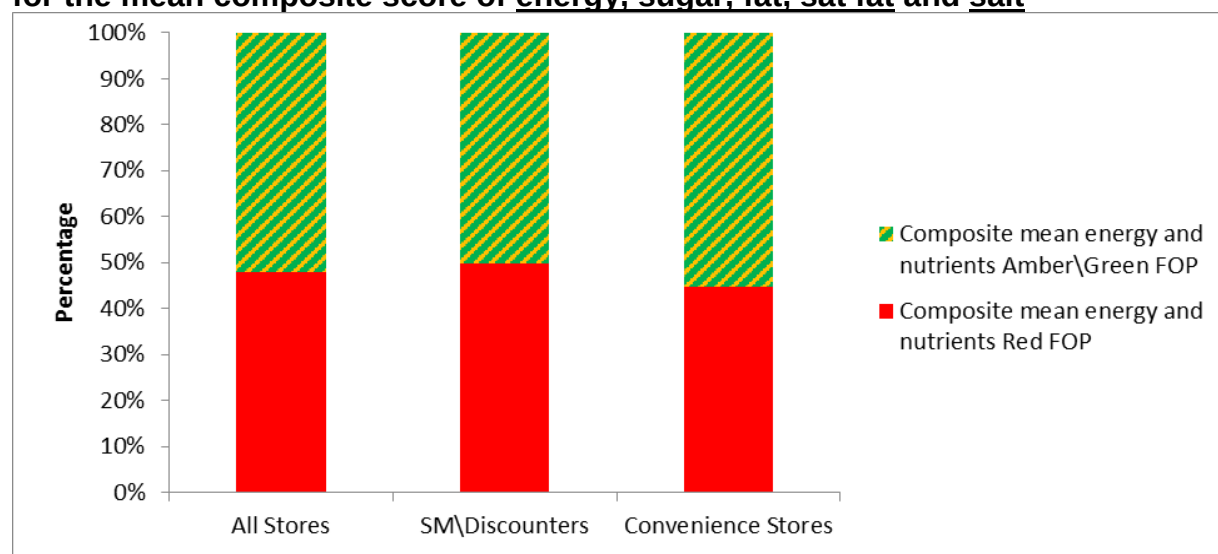
Nutrient	Red (%)	Amber (%)	Green (%)
Energy	78.4	2.9	18.7
Sugar	34.3	27.5	38.2
Fat	47.4	21.5	31.1
Sat fat	43.6	18.5	37.9
Salt	35.6	17.3	47.1

3.5.4 The FOP mean composite score of promotional offers in-store for the total investigation period using FSA FOP categories (red, amber and green) and (red and amber/green)

The FOP mean composite score for energy, sugar, fat, saturated fat and salt using the FOP labelling categories identified 47.5% of products as red, 32.5% as amber and 20% as green. As amber products are classified as medium and can be eaten most of the time, both amber and green categories were combined resulting in a final percentage of 52.5% categorised as amber/green and 47.5% of products categorised as red. Similar findings were obtained for the individual nutrients: sugar (65.7%); vs 34.3% fat (52.6% vs 47.4%) saturated fat (56.4%vs. 43.6%) and; salt (64.4% vs.35.6%).

Across retailers a significant difference was found between the retailer type and the 'healthiness' of promotional products. Within the convenience stores a smaller percentage of their promotions fell into the red category compared to the supermarkets'/discounters' promotions (Figure 5). Furthermore, there were significantly more promotions in the green category for the convenience stores compared to the supermarkets/discounters. The percentage of products categorised as amber were similar for both the supermarkets/discounters and the convenience stores.

Figure 5 Percentage of promotional products in the FOP red and amber/green for the mean composite score of energy, sugar, fat, sat fat and salt



Notable differences between the retailer types and on the promotional types, prominence of promotion types and 'healthiness' of promotional products (phase 1 and 2) were identified in Table 4.

Table 4 Key points from the in-store audit

- The main types of promotional offers across all stores were: 'price reductions'; 'standalone offers'; and 'multibuys' accounting for 88% of all promotions.
- Differences in the prominence of promotional offers at the various promotional sites were noted. The greatest numbers of promotional offers were found at the 'end of aisles' and on 'promotional stands'. The 'checkouts' and the 'fruit and vegetable promotional displays' offered the least amount of promotional offers.
- In recognition of the fact that retailers and consumers already widely understand and use FOP labels, the primary analysis of the healthiness of food retail promotions relied on the composite mean nutrient scoring mechanism. The FOP labelling (categories: red, amber and green) identified a similar number of products categorised as 'red' and as 'amber' or 'green'. Similar findings were obtained for individual nutrients scored (sugar, fat, saturated fat and salt).
- Convenience stores were more likely to offer 'standalone' promotions, while supermarket/discounters were more likely to offer 'multibuys' and 'mix & match' promotions. Aligned to the central research question, convenience stores promoted more foods classified as 'green', and less foods classified as 'red'.

3.5.5 Conclusion

The in-store audit is conclusive in its finding that a balance (52.5% amber/green vs. 47.5% red) in favour of health exists among food retail promotions in NI.

4.0 Chapter 4 Food retail promotions (online audit)

The second stage of this investigation was an audit conducted to assess the promotional types and the 'healthiness' of promotions within the online environment.

4.1 Sample

A total of four supermarkets chains and one convenience store chain were included within the sample.

4.2 Data collection

Data were collected every three weeks (Wednesday) from the 'top offer' section of each retailer website over a one-year period (9th April 2014 – 1st April 2015; 18 data collection time points). Information on a total of 1,868 food items was collected.

4.3 Measurements and data analysis

Front of pack (FOP) nutrient labelling system

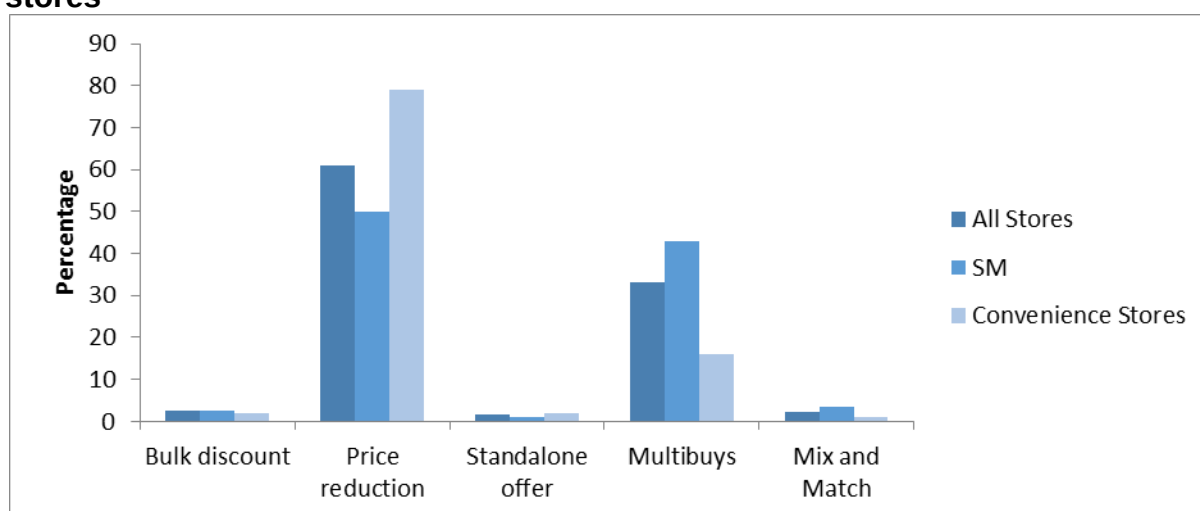
All products collected were scored for healthiness using FSA FOP nutrient labelling system outlined in Chapter 3. All data were analysed as outlined in Chapter 3.

4.4 Results

4.4.1 Types of promotional offers available online

The main type of promotional offers available online were 'price reductions' and 'multibuy'. There were few 'bulk discounts', 'mix and match' and 'standalone' promotions, and there were no 'certain percentage free' or 'meal deals with choice' promotions offered. Comparisons between store type showed that convenience stores offered a higher percentage of 'price reduction' and a lower percentage of 'multibuy' promotions compared to the supermarkets over the total investigation period (Figure 6).

Figure 6 Promotional types for all stores, supermarkets (SM) and convenience stores



4.4.2 The individual nutritional content of promotional offers online for the total investigation period using FSA FOP categories (red, amber and green)

Using the FSA FOP labelling categories: red, amber and green products for all stores combined there was a greater percentage of products classified as green for the nutrients sugar and salt and a higher percentage of products classified as red for energy, fat and saturated fat. See Table 5.

Table 5 Individual nutritional content of online food retail promotions

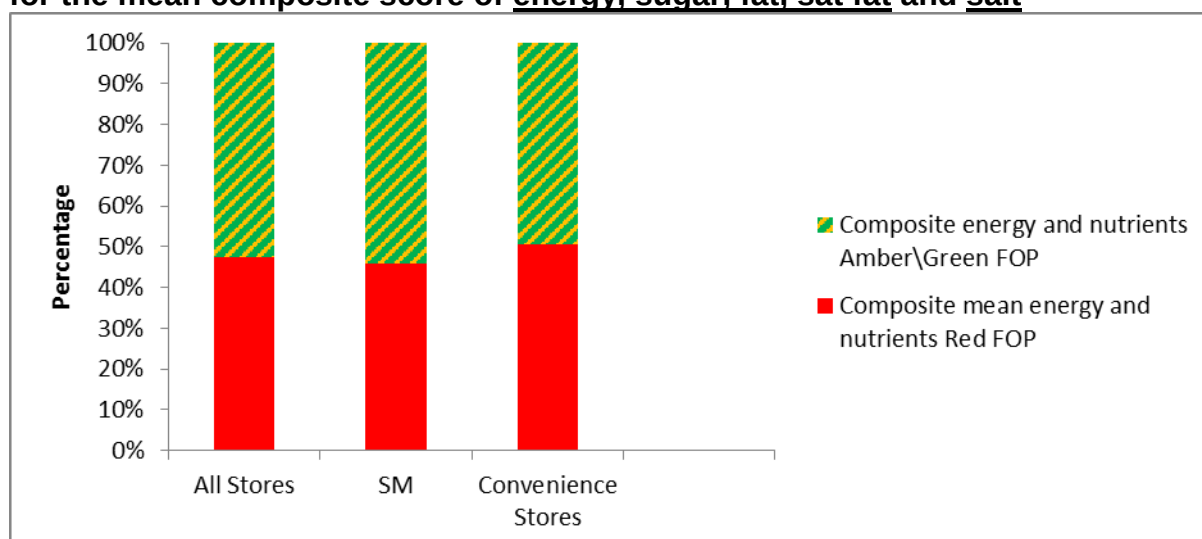
Nutrient	Red (%)	Amber (%)	Green (%)
Energy	76	3	21
Sugar	28	32	41
Fat	45	25	31
Sat fat	43	18	39
Salt	35	17	45

4.4.3 The FOP mean composite score of promotional offers online for the total investigation period using FSA FOP categories (red, amber and green) and (red and amber/green)

The FOP mean composite score for energy, sugar, fat, saturated fat and salt using the FOP labelling categories identified 47% of products as red, 26% as amber and 27% as green. As amber products are classified as medium and can be eaten most of the time, both amber and green categories were combined resulting in a final percentage of 53% categorised as amber/green and 47% of products categorised as red. Findings obtained for the individual nutrients were as follows: sugar (72.5% vs. 25.5%), fat (55% vs. 45%), saturated fat (57% vs. 43%) and salt (64% vs. 36%).

Across retailers a significant difference was found between the retailer type and the 'healthiness' of promotional products. Within the convenience stores a higher percentage of their promotions fell into the red category compared to the supermarkets promotions. Furthermore, there were significantly more promotions in the green category for the convenience stores compared to the supermarkets. The percentage of products categorised as amber was higher for the supermarkets compared to the convenience stores. See Figure 7

Figure 7 Percentage of promotional products in the FOP red and amber/green for the mean composite score of energy, sugar, fat, sat fat and salt



Key points arising from the online audit are presented in Table 6.

Table 6 Key points from online audit

- The main types of promotional offers across all stores were: 'price reductions' and 'multi-buys' accounting for 94% of all promotions.
- The FOP labelling (categories: red, amber and green) identified a similar number of products categorised as 'red' as categorised as 'amber' or 'green'.
- For individual risk nutrients, sugar was more likely to score in the green category and fat and saturated fat were more likely to fall in the red category.
- Convenience stores were more likely to offer 'price reduction' promotions, while supermarkets were more likely to offer 'multibuys' promotions online. Both retail types obtained very similar composite mean scores (for energy, sugar, fat, sat fat and salt) using FSA FOP categories (for supermarkets and convenience stores respectively).

4.5 Conclusion

The online audit found that when applying the FOP mean composite score over half of all online food retail promotions were categorised as amber/green while the remaining were categorised as red. In addition, both price-based (e.g. price reductions) and volume-based promotions (e.g. multibuys) were popular across the retailers. Finally, when comparing Stage 2a and 2b results revealed close similarities in relation to 'healthiness' of promotions, with both retail environments obtaining similar distribution of mean composite scores for FOP categories.

5.0 Chapter 5 Interviews and case studies on food retail promotions

As part of this stage of the investigation semi-structured interviews with key individuals and stakeholders were conducted to investigate the use of food retail promotions. Interviews were conducted with retailers and key stakeholders to explore policies impacting on the health of shoppers, the decision-making factors surrounding promotional activity and any of the interviewee's perceptions relating to the healthiness of food retail promotions across retailers in NI.

5.1 Data collection and sample

Data were collected using either face-to-face interviews or telephone interviews at the convenience of the participant. Interviews were conducted by two members of the research team. A convenience sample consisting of a total of 32 participants contained three sets of participants identified in Table 7.

Table 7 Participant sample

Sample	Purpose	Representatives	Sample size
Membership organisations	To explore perceptions of retailers' commitment to the health of the nation and the influence of promotions on dietary behaviour.	Northern Ireland Independent Retailers' Association, Northern Ireland Retail Consortium, Northern Ireland Food and Drink Association, Institute of Public Health and Department of Health Social Services and Public Safety	5
Retailers	To explore the decision-making factors surrounding the food retail promotions.	Tesco, Asda, M&S, The Cooperative, Hendersons, Lidl and Sainsbury's <i>[Retailer-nominated representatives from consumer insight teams, nutritionists and corporate affairs]</i>	7
Store Managers	To discuss the practical implications of food retail promotions at store level.	Asda, M&S, The Cooperative, Hendersons, Lidl, Nisa, Musgrave <i>[Store managers selected from the original audit sample]</i>	20

5.2 Interview procedures

Results from Stages one and two informed the development of the interview protocols to explore policy implications, promotional activity and perspectives on the balance of food retail promotions among retailers in NI (see Appendix). All participants were ensured of the anonymity of the data prior to the commencement of the interview. Prior to the interviews for each retailer at corporate level a snapshot report displaying the overall results of Stage 2 and their individual performance was emailed to the participant *[however individual retailer performance is not reported in this document to the funders due to client confidentiality]*. During the interviews with membership organisations only the top-line results of overall retailer performance was revealed and discussed. During the store manager interviews no results from

Stage 2 of the investigation were discussed. A copy of all the protocols is available in the full report.

5.3 Results

The results have been summarised under four core themes: (1) Policy levers; (2) Promotional activity; (3) Promotional effectiveness; and (4) Perceptions on performance.

5.3.1 Theme 1: Policy levers

This theme relates to the current policies, voluntary codes and practices retailers and stakeholders currently recognise and/or are implementing to deliver a healthy grocery environment to the consumer. Key findings are presented in Table 8.

Table 8 Key findings about policy levers

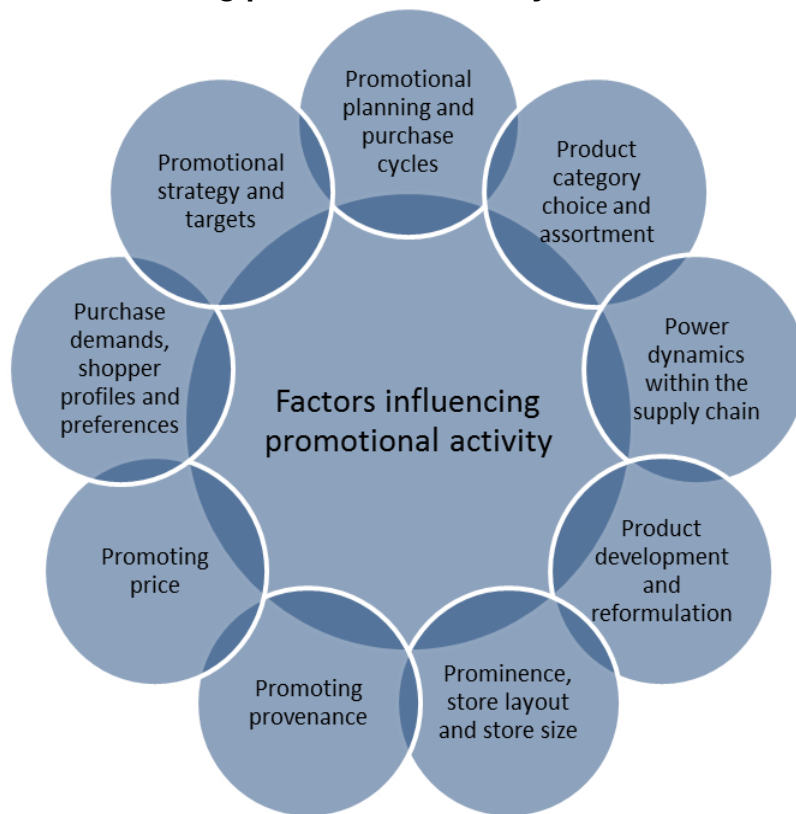
- Retailers expressed commitment to public health agenda.
- Retailers signed up to responsibility deal targets and have made progress in this area (e.g. UK Department of Health's *Public Health Responsibility Deal* pledges) ^[68].
- FOP labelling is a priority as contained within the Food Information (Northern Ireland) Regulations, 2014 ^[69].
- A number of retailers provided evidence of using either choice-editing or nudging to promote healthy choices and discussed their investment in the reformulation of own-label products (e.g. salt reduction, sugar reduction etc.).
- Acknowledgement of need for a collaborative approach to contribute to this shared responsibility for the betterment of public health.
- Barriers towards the promotion of a healthy retailing environment included: the impact of the recession; communication between departments within an organisation (e.g. promotions team and health team); inconsistent nutrition messaging within the media; and changing consumer demands.
- No retailer advocated complacency in their ongoing commitment to promoting public health. They expressed a desire to continue to commit to regulatory and voluntary codes of practice relating to health.

"Health is a big driver for our food team, and an area for development and actually from our business point of view as well" (SMKT, #5, CL)

5.3.2 Theme 2: Promotional activity

Within this theme nine factors influencing promotional activity were identified and are illustrated in Figure 8. Overall, results indicated that all retailers used food retail promotions throughout their stores to assist in the delivery of their organisations' retailing strategy. Furthermore, food retail promotions were also used as a technique to attract customers to the store and support customers to make healthier choices, in addition to offering low prices. Each factor is fully discussed within the main report.

Figure 8 Factors influencing promotional activity



5.3.3 Theme 3: Perceived effectiveness of promotional offers

Retailers and store managers were asked for their opinion on effectiveness of different types of promotion. Sales data were not considered. Subsequently, results are based on participants' perceived value of each type of promotion rather than their actual value. Results on each type of promotion are displayed in Table 9. Key findings are outlined as follows:

- Price reductions and standalone offers were perceived as the most effective type of offer.
- Volume-based promotions (e.g. BOGOFs) were noted as least effective, especially for convenience retailers and retailers targeting one-person households.

Table 9 Retailers' opinions on the effectiveness of promotional offers

Type	Key features
Bulk discounts	• Use has declined due to concerns over food/packaging waste • Useful for short-life products (e.g. milk) and popular branded items • Ineffective on new products (e.g. risk that consumer may not like product) • More effective when linked to an event or seasonal promotion • Useful tactic for upselling (e.g. consumers already planning to purchase the product on offer) • Off putting in a convenience setting as consumers do not want to buy a lot
Price reductions	• Most frequently used and effective type of promotion • Preferred by consumers as they like to see a reduced price point • Price reductions are easily understood by the consumer • Effective way to attract the customer to the store • Useful for impulse items and confectionery
Standalone offers	• Retailers have dedicated sections to £1 offer • Work well for the following product categories such as breads, cakes and branded goods
Multibuy	• Tends to have a slower customer response • This is good for the weekly shopper seeking variety (e.g. two fruit variations in one offer) • They are of limited benefit to consumers living in a one-person household.
Mix and match	• Useful for fresh produce lines e.g. meat, fish, ready-meals and vegetables • Not as effective for a convenience retailer as it is asking for a higher customer spend per visit • May be difficult to stock due to store space limitations • Can work well if the mixes of products complement each other towards a meal solution • Ineffective when customers buy all the same variety of a product instead of varying it causing possible issues with stock ordering
Certain % extra free	• Least effective among convenience retailers but effective among supermarket retailers

	• Effective if the price is also enticing as well as the volume on offer • Typically only stocked on more popular product ranges/brands • Can cause consumer confusion in working out the cost saving (e.g. additional volume per pack compared to the unit price) • They do not increase sales but improve customer satisfaction towards brand and retailer • Effective for supermarket retailers when used as part of a weekly shop • Useful on products which consumers buy on a regular basis e.g. crisps, meat and bakery goods
Meal deals	• Less reliance on meal deals among convenience retailers • The mechanics and planning required around the types of promotions are difficult e.g. aligning suppliers and logistics • Difficulty in linking customer preferences to the deal • Clarification of the meal deal components need to be made clearer to consumers • Useful for key occasions throughout the year (e.g. Christmas, Halloween)

5.3.4 Theme 4: Perceptions on performance

This theme addresses stakeholders' and retailers' perceptions of the investigation in general and the overall findings from the retail audit. Both positive and negative perceptions are summarised in Table 10.

Table 10 Perceptions of the study and of Stage 2 retail audit results

Positive perceptions
• Widespread support for the independent nature of the research, the timeliness of the investigation, its usefulness in supporting retailers in determining what a healthy balance looks like, and its NI-specificity • There was general agreement that the audit reported a positive result which merited constant reinforcement across the private and statutory sectors, and indeed broadcast media • Indicated that the data supported their health efforts and were aligned with the direction of travel of their corporate strategy and signposted areas and/or product categories on which to focus future efforts in seeking to achieve the right balance in healthy food retail promotions • Retailers liked the two phase approach to the audit and argued that their below the line product reformulation efforts may well be in evidence over the duration of this research • Retailers perceived the audit results as vindication of their efforts in this arena and interpreted the findings as corroboration that they were doing the right thing for their customers in terms of strategies and choices made on their behalf • The results of the audit had important benefits for improved understanding and communication between internal and external departments to better inform decision and policymaking • Early engagement with retailers from the outset of the investigation is a useful model on which to base future research approaches relating to the public health agenda • There was hope among the retailers that this research would disperse any call for the regulation of food retail promotions • Stakeholders and retailers pointed to the need for any such evaluation of progress to be measured on a longitudinal basis and highlighted the merits of re-visiting the independent audit as their focus is on delivering a balance of promotions across the calendar year
Negative perceptions
• Not perfect symmetry between the research design and food retail promotional practice. For example, it was necessary to select a set number of promotional locations to audit across the store while some promotional activity was discounted from investigation (e.g. loyalty card rewards, price matching and couponing) • Differences exist between convenience and supermarket/discounters with respect to space restrictions • Differences in the number of brands available within and between categories (e.g. a limited variety of brands exist in categories such as fresh fruit, vegetables, dairy and meat) are evident when compared to other value-added categories (e.g. biscuits, soft drinks, ready meals and crisps). Subsequently, due to the inherent imbalance of weightings across the proportion of brands available within each product category, and by virtue of the fact that the results of this

investigation are aggregated to reflect product categories bilaterally (i.e. *healthy* and *less healthy*), caution should be applied when interpreting the results

- Application of the FOP scoring system focuses on the 'risk' nutrients rather than providing an overall assessment of the nutritional profile of the product

5.4 Conclusion

This chapter sought to identify the current policy levers and factors influencing retailers' promotional activity. In addition, results pertaining to the perceived promotional effectiveness were also considered, informed by insight from retailers and store managers. Every retailer confirmed the value in participating in this independent research, providing as it did the opportunity to be both outward and inward looking on the subject of the healthiness, or otherwise, of their food retail promotions. Results indicated that positive perceptions of the investigation were expressed across all retailers however it must be noted that limitations and concerns about the design and implications of the investigation were raised. While this highlighted the good work which some retailers have undertaken to improve the healthiness of their shoppers' choices the need for continual idea generation, evaluation, development and collaboration in this area remain.

"If you want retailers to move on something you're better to get them to move together and having them involved" (MO, #3)

6.0 Chapter 6 Conclusion and recommendations

The purpose of this research was to determine the healthiness, or otherwise, of food retail promotions among NI food retailers. The research is deemed appropriately timed and relevant to addressing some of the following concerns: rising obesity levels; rising food prices; the competition among retailers in recessionary times; the primacy of retail grocery stores' promotional activity in shaping consumers' food choices and encouraging healthy dietary behaviours. Thus the three-stage investigation represents a valuable public/private partnership opportunity to work collaboratively with the retailers upon which consumers rely to provision their households.

6.1 Analytical reflections

6.1.1 Stage 1: Rapid Evidence Assessment

The REA is conclusive in its finding that food retail promotions are effective when they are consumer-centric, meaningful and consider all players along the food chain for the pragmatism of the promotional activity in the retail setting.

6.1.2 Stage 2a: Independent in-store retail audit

The in-store audit is conclusive in its finding that a balance (52.5% amber/green vs. 47.5% red) in favour of health exists among food retail promotions in NI. In addition, price-based promotions as opposed to volume-based promotions were utilised more often across the retailers. Finally, a relationship between the healthiness of a food retail promotion and its prominence was identified.

6.1.3 Stage 2b: Independent online retail audit

The outcome of the online audit also identified a positive balance in the healthiness of food retail promotions (53% categorised as amber/green and 47% of products categorised as red). In addition, both price-based (e.g. price reductions) and volume-based promotions (e.g. multibuy) were popular across the retailers.

6.1.4 Stage 3: Interviews

The retailer interviews were conclusive in confirming that to date retailers have made good progress in maintaining and further investing in above and below the line initiatives (e.g. product reformulation, nutritional labelling, recipe cards, smart couponing etc.) to promote healthy choices to consumers. Despite a number of barriers challenging continued progress in the area of health, retailers and membership organisations all expressed the desire to collaborate with the goal of investing in current and future customers' health.

6.2 Recommendations

This composite report identified several recommendations arising from the three stages of the investigation. The recommendations are fully explained below and summarised in Table 11.

6.2.1 Recommendation 1: Maintain momentum

Retailers and national brand manufacturers should continue their reformulation programmes to deliver below the line benefits at the population level and make the healthy choice the easy choice. Coupled with this, retailers should encourage the promotion of healthy food product categories with an associated reduced reliance on

less healthy food promotions. A positive momentum to continue to skew the balance of food retail promotions towards healthy food product categories is merited. Stakeholder and shareholders should encourage and support manufacturers'/retailers' reformulation efforts and food retail promotion strategies to be as cognisant of the public health agenda as they are of profit and food waste.

6.2.2 Recommendation 2: Make it meaningful

Retailers should consider the meaningfulness of food retail promotions informed by consumer insight. Retailers and policy makers should undertake consumer research to arrive at an evidence base to support promotional planning that meets consumers' expectations, preferences and requirements. Targeted promotions should render food retail offers appropriate for a diversity of consumer groupings including: single person households requiring smaller portion sizes; householders shopping for a large family; cash-poor households, time-poor shoppers; consumers with limited confidence in respect of food and cooking skills etc.

6.2.3 Recommendation 3: Play on prominence

Retailers should increase the prominence of healthy food promotions to increase the visibility, availability, accessibility and affordability of healthy foods to arrive at a shopping environment conducive to health. Greater prominence should be afforded to clear message framing and promotions around fruit and vegetables that incentivise consumer buying behaviour in this product category.

6.2.4 Recommendation 4: Explore early engagement

Greater engagement regarding the public health agenda is required between statutory authorities, public health bodies and the private retail sector. Government agencies, membership organisations and retailers should engage meaningfully on food retail promotions. Where retailers are consulted from the outset on decisions that ultimately impact upon them, there is greater potential for buy-in when implementing any arising policy recommendations. Thereafter, good practice should be disseminated among all key players.

6.2.5 Recommendation 5: Pursue promotional parity

Retailers and manufacturers should consider promoting own labels and national brands on a comparable footing so that consumers can access both favoured national brands and keenly priced, product reformulations equally.

6.2.6 Recommendation 6: Promote a consumer and food skills strategy

Relevant government departments should co-ordinate interested parties' consumer education programmes and awareness-raising campaigns to develop consumer understanding to identify the healthier choice.

6.2.7 Recommendation 7: Streamlining shared intelligence

This three-stage investigation has independently audited retail food promotions and retailers' strategies for implementing these. Results indicated that there remains a gap in understanding how consumers choose from the range of promotions available to them and how they are used thereafter in meal planning. Further research is therefore recommended to explore what and why consumers select from the food retail promotional offer and reconcile this information against FSA in NI's food purchasing (on promotion) data (Kantar WorldPanel)^[70]. Such an approach could

support FSA in NI's nutritional surveillance responsibilities by understanding consumer purchasing behaviour around food retail promotions and their contribution to available consumption data (National Diet and Nutrition Survey).

Table 11 Recommendations

Overarching theme	Responsible party	Recommendation	Suggested actions	Indicators of success
Making the healthier choice the affordable and easy choice	Retailers	Maintain momentum	Continue with product reformulation programme both nationally and locally	Continue to aspire to product reformulation saturation
			Continue to skew the balance in favour of amber and green colour coded promotions	Amber and green colour coded categories further outweigh red colour-coded promotions
			Continue to consider public health outcomes alongside profit	Meaningful engagement through a biannual retail forum, led by FSA in NI, in conjunction with the CCNI, to discuss issues of joint interest and shared intelligence²
		Make it meaningful	Continue to gather and use consumer insight to meet the needs of diverse consumer groupings when planning promotions	A suite of targeted promotions that meets the expectations, preferences and requirements of different types of households
			Build responsiveness to consumer behaviour and preferences through dynamic promotional planning	Promotions are responsive to changing consumer demands, ensuring amber and green colour coded categories further outweigh red colour coded promotions
		Play on prominence	Increase prominence of amber and green colour coded categories of food retail promotions	A shopping environment with easily visible healthier promotions.
	Multi-Agency collaboration	Explore early engagement	Continuous engagement regarding the <i>Fitter Future for All</i> strategy between statutory authorities, public health bodies, consumer bodies and the	Meaningful engagement through a biannual retail forum, led by FSA in NI, in conjunction with CCNI, to discuss issues of joint interest and shared

² The Food Retailer Forum, led by FSA in conjunction with CCNI will be made up of food retailers, food retail and industry representatives and may, at times, invite other parties to discuss areas of special interest

			food retail sector	intelligence ¹
		Pursue promotional parity	FSA in NI, in collaboration with the Department of Health, should continue a public health conversation at a national level between manufacturers, retailers and national brands to discuss the feasibility of the promotion and accessibility of food/drinks products	Increased promotion of reformulated own label products
		Promote a consumer and food skills strategy	Relevant government departments/agencies and consumer bodies should ensure the implementation of the consumer and food skills element of <i>A Fitter Future for All</i> strategy, targeted at all age groups, delivered in partnership with food retailers, community and voluntary based consumer organisations	Empowering consumers to identify and chose the healthier choice among retail promotions
		Streamlining shared intelligence	Scrutinise the shelf-life of food retail promotions through further analysis into the durability of food bought on promotion alongside consumer purchasing behaviour	Informed retailers' strategies for equitable and meaningful promotion of fresh/perishable food product categories alongside other amber and green product categories
			Engage in ongoing research to explore food retail promotions in relation to consumer perspective and purchasing behaviour	Reconciliation of in-store promotional availability data, Kantar WorldPanel food purchasing on promotion data and National Diet and Nutrition Survey consumption data to provide a holistic perspective on the impact of promotional activity on dietary behaviour

			• Repeat the independent audit element of this research to review progress within three years	• Effective and timely measurement of the balance of red, amber and green colour code product categories in food retail promotions for the benefit of the consumer
			• Policy makers should consider the food promotional strategies in other food related businesses (e.g. catering and/or foodservice industry and non-food specialist discount retailers)	• Achievement of a baseline equivalent from other significant contributing sources to understand their food promotional activities.

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