Background and Literature
There is growing interest in the interactions between consumers and retailers as obesity and health concerns increase. There is a need to understand the retail environment presented to customers in store as this drives choice decisions. Retail operations and practices e.g. product displays, promotions, sizes and prices, construct the context for consumer in-store choice.

Several systematic reviews of academic studies exist around aspects of this subject. Most studies are short-term and have taken place in North America raising questions of sustained impact and transferability. Fruits and vegetables have been the main product focus, with interventions in the form of increased information and availability, and to a lesser extent price, being assessed. Much of the research has been undertaken seeking to enhance the position of healthy products. There is an argument that even if this is continued to a high level, the overwhelmingly obesogenic food retail environment would ensure that consumers continued to purchase and consume unhealthy products. Consumer ‘desire’ for unhealthy products has been encouraged and manipulated by the in-store retail environment.

Studies suggest that intervention and incentives have had some impact on behaviour change. The evidence base though is underdeveloped, with questions raised about the robustness and rigour of some studies. There is limited direct research on the underlying retail context (choice architecture) where consumer purchasing decisions and choices are made. The evidence suggests that altering the context and the choice architecture could have an impact on diet and health, though combinations of interventions may be needed. There is no one single solution to enabling healthier purchasing by consumers.

The Scottish Diet
The Scottish diet has resolutely refused to improve and the achievement of dietary goals has remained elusive. Most interventions to date have focused on specific products (alcohol and tobacco), enhanced information provision and exhortation and voluntary reduction schemes (salt). The impact, with the exception of tobacco, has been limited. The Sugar Drinks Industry levy (SDIL) and the Healthcare Retail Standard (HRS) in hospitals provide two different but explicit approaches to adjustments of the choice architecture facing consumers in the retail store, though their full impact remains unknown at present.
The In-store Retail Context
The retail store environment is a critical battleground over any improvement of the Scottish diet. There are important questions to be asked about the availability, presentation and purchase of products within retail stores. Whilst there are huge differences across the retail sector in terms of store operations and scale, there are some basic principles and practices that are adopted by all retailers and are therefore potential areas (products, placement, price, promotion) for intervention.

Products: On pack product information must meet certain legal obligations, but otherwise presentation is non-standardised and/or determined by voluntary codes. Portion size and product content is presented in a range of formats, visual images and text, leading to a degree of confusion for consumers. This makes it difficult for consumers to understand, compare products, and control dietary intakes. There are wider questions over the ability of consumers to interpret any information that is provided, if they are inclined even to use such information in the first place.

Placement: Consumers purchase food in stores in different ways; some purchases are routine and regular, others more considered and deliberate, and others based on impulse. Store layout, product placement and display reflect this. Shelf space determines how products are displayed and is a finite commodity, so retailers seek to use it efficiently and effectively to maximise sales. Certain locations (e.g. aisle ends, power aisles, checkouts, at eye level and in juxtaposition with specific brands and categories) constitute ‘hot spots’ that are more visible and valuable than others. Supplier branded fixtures and shelf edge displays and signage draw further attention to specific products and locations. Aisle ends and checkouts have been the focus of attention in terms of unhealthy products, given their visibility, leading to the introduction of sweet-free checkouts by some retailers.

Price: Price provides a perceptual quality/value cue for consumers about both the product itself and the store or retailer involved. Consumers also consider the relative prices of products. This will be by reference to prices they feel they know, have experienced before or otherwise ‘understand’. Other reference points will be the product adjacencies in the surrounding shelves, including prices relative to the category leading brands. A further reference point can be calculated by the unit price. The lack of clarity of the form, visibility and readability of unit prices does not help consumers in their decision-making. Discounts, price promotions and coupons are used in-store to reduce purchase prices and stimulate sales of specific products.

Promotion: Promotional activities operate at various levels and are initiated by different members of the channel. Consumers also react in different ways to the various promotional offers they receive. Within the store, there are a number of locations that can be used for eye-catching displays -aisle ends, large focal displays near the entrance, checkouts or ‘power’ displays. “Dump bins”, retail ready promotional merchandising units and other visual elements also play their part in reinforcing price and other messages and also in focusing attention to drive consumer behaviour. Price promotions at such “hot-spots” in the store are often variants of price competition by discounting. They include Buy One Get One Free (BOGOF), other multi-purchase or multipack discounts, basic discount offers, cross product purchasing including meal deals and other such techniques. In addition to worries about the range of products promoted, concern has also been expressed that such techniques lead to an increase in stockpiling and more food waste at the household level, or in enhanced consumption due to excessive product presence at home.

Using this 4P framework a set of possible interventions or levers on the retail in-store offering can be identified which could impact consumer decision-taking, purchasing and consumption with the aim of generating a healthier diet at the population and the individual level. The underlying rationale and potential impact of these interventions varies, though all are intended to alter the choice that confronts consumers in stores. However, questions remain over the acceptability of
such actions and their impact on the sector, on individual retailers and retail outlets. Four macro concerns over interventions can be identified:

**Individual vs Societal Considerations:** Intervention attracts polarised views from consumers, businesses and consumer advocacy and other groups.

**Retailing vs Other Consumption Sites:** Retailing is not the only provider of unhealthy food.

**Sector vs Company vs Store:** The wide diversity of scale in shop poses a challenge for interventions as they may impact upon competition and question the economic viability of some outlets, locations and businesses.

**‘Real’ vs ‘Virtual’ Retailing:** If store based retailing has to comply with various interventions, then the issue arises over their extension to and applicability for web based and internet based retail sites.

Bearing these issues in mind, a number of potential interventions, considering the possible actions, rationale, impacts and barriers can be conceived of and developed. Those interventions with most potential are those that alter the choice set for consumers, often without them being aware. This suggests a focus on product reformulation and sizing as well as nudging activities. This though needs to be combined with a much sharper focus on information provision and a reduction in the confusion and mystification that abounds. Additionally, the balance of activities that are undertaken for healthy as opposed to unhealthy products needs to be reconsidered, probably through some form of legislation (including potentially through enhanced licensing or registration).

Conclusions and Recommendations
The Scottish diet has stubbornly refused to improve. Consumer behaviour related to the food environment is a major contributor to this. Questions can thus be legitimately raised over the in-store retail food environment in Scotland. Has this exacerbated issues with the Scottish diet and health? There are few studies (mainly from North America and Scandinavia) affecting the choice architecture which confronts consumers in food retail stores though evidence is beginning to emerge. This suggests the need for more radical steps to adjust the in-store context.

The in-store environment is a battleground for manufacturers and retailers to obtain and maintain consumer purchasing generally and specifically for their brands. The context for in-store decision making is thus a constructed landscape of competing pressures and presences. Customers react in different ways to this, depending on their needs, wants, shopping motivations, knowledge and understanding, capabilities and so on. This environment or context sees consumers overtly and subliminally bombarded with subtle and not so subtle cues, promotional activities, information and other stimuli. Most of this reinforces purchasing behaviour focused on unhealthy products, and thus unhealthy diet, placing the onus to combat this on to the individual.

In order to assist consumers to make better choices, it would seem that there needs to be a reduction in this complexity and a rebalancing of the stimuli. Simply enhancing healthy product stimuli and relying on the individual is not likely to work. For effects to be substantial, rapid and sustained, there needs to be more control on the whole range of stimuli and a more level playing field between healthy and unhealthy products. This will undoubtedly face opposition from retailers and manufacturers, as well as some consumer advocacy groups.

We conclude that the current context for consumer choice in-store is affecting the health and diet of consumers in Scotland. Voluntary and self-regulatory approaches or relying on consumers to make “good” decisions are not having sufficient impact. It will thus be necessary to regulate to make the changes have real impact. This needs to be done in terms of product reformulation and sizing as well as stronger legally enforceable alterations to information provision. Such changes will alter the choice set for consumers in store. Beyond this, there needs to be action to rebalance the provision and promotion of products in-store and consideration given to steps to alter the differential pricing between healthy and unhealthy products. Such interventions are more problematic for retailers as they interfere in core retail activities. Quantifying the impact of these interventions is very difficult due to the breadth and variability of the retail landscape.

This report has focused on the in-store setting of the retail environment; we have thus not fully considered sector level interactions or interventions that could alter the situation more widely and dramatically. In terms of operationalising some of the interventions, current registration practices could be explored to scope out the potential to add conditions, though there would be costs
of compliance to consider. This mechanism might restrict impact to only certain stores and could have possible unintended consequences on some. Nonetheless as a mechanism to allow tighter conditions on behaviours of retailers it needs to be considered. Alternatively some of the interventions could be associated with the introduction of a formal and more regulated licensing scheme for all food retail outlets, going beyond the current requirement to locally register food stores for environmental health reasons. Licensing (or an extension of the approval scheme for food handling) or registration (as with tobacco and alcohol) could be a way of ensuring compliance with some of the retail level levers. Such an altered scheme would begin to open up the potential for sector wide, locationally specific or otherwise targeted restrictions on the proportionate presence and promotion of unhealthy products.

There are a number of recommendations as ways forward:

- The lessons of the proposed Soft Drinks Industry Levy (SDIL) should be applied more widely, with the aim of encouraging product reformulation and associated product sizing;

- Information provision needs to be enhanced, regularised, standardised and made more visible and legally enforceable, with the aim of aiding consumer decision-making, increasing awareness of health risks and reducing confusion via imagery and promotional messages;

- Attempts should be made to engage a major and/or smaller retailer in developing trial stores to test out the alternatives, cumulative nudging, positive, regulatory and restrictive ideas contained in this report, combined with associated multi-disciplinary academic evaluations;

- Consideration should be given to the introduction of a Food Retail Standard (along the lines of the Healthcare Retail Standard) to rebalance promotional and provisioning activities between healthy and unhealthy products. This will require considerable thought over the detail and applicability across stores in the sector, its applicability to the internet and its costs of compliance, and may involve enhanced registration and licensing procedures;

- The retail sector should not be regulated on in isolation and all interventions need to consider impacts and relationships both within and across sectors.

The issues raised in this report imply a new approach by retailers to some of their basic operating models. This is a very difficult “ask”, especially at a time of sector pressure and considerable turbulence, together with “leaky” systems seeing consumer spending transference to the internet, internationally and to alternative sectors e.g. food and beverage and out of home consumption. Interventions which cut across sector boundaries are thus more likely to find favour and to have an impact overall. It needs to be reiterated that the retail shop is not the only place of food purchase and consumption. If activity occurs to change the choice architecture within retail stores, then these other consumption sites should also be required to be subject to similar or equivalent interventions over the products they sell, the information they provide and the promotions they offer. Retailing is only a part of the problem, as well as only part of the potential solution.

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