

Impact case study (REF3)

Institution: Ulster University		
Unit of Assessment: Business and Management Studies (17)		
Title of case study: ICS 2: Food affordability and accessibility - informing the strategic direction of NGOs, public sector bodies and retailers		
Period when the underpinning research was undertaken: 2001 - 2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Dr Sinéad Furey	Lecturer in Consumer Management	2014 – present
Dr Lynsey Hollywood	Lecturer in Consumer Studies	2012 – present
Professor Heather Farley	Professor in Management Education	1992 – present
Professor Mark Durkin	Professor in Marketing	1996 – present
Period when the claimed impact occurred: 2016 - 2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact		
<p>As described by the UN Rapporteur on the Right to Food, good food is a prerequisite for a strong market. When healthy food is not affordable or accessible to consumers, their welfare may be jeopardised, and the likelihood of poverty within society may increase. Food affordability is a key factor determining access to food, dependent not only on food cost but also on the disposable income that can be spent on food. Ulster University Business School's (UUBS) research has been used to inform and support the strategic direction of non-governmental organisations (NGOs), public sector bodies and retailers to promote the affordability and accessibility of food to consumers, thereby tackling the wider societal challenges of reducing food insecurity and an obesogenic environment. Our research has:</p> <p>I1: Informed the strategic direction of NGOs working on the global challenge of food insecurity.</p> <p>I2: Stimulated policy debate on food insecurity and influenced public health messaging as priority areas requiring government action.</p> <p>I3: Initiated a collaborative stakeholder approach to inform public debate on the healthiness of food retail promotions.</p> <p>I4: Changed retailers' strategies around the prominence of healthier food products to make the healthier choice the more affordable and accessible choice for consumers.</p>		
2. Underpinning research		
<p>Food is a basic human right. When this right is breached it can result in food insecurity: a lack of physical and economic access to food. The role of the retailer and policy-maker as 'significant gatekeepers' of our food supply must be considered to achieve a food system that is equitable for all. Maintaining the nutritional quality, value (e.g., volume- and price-based promotions) and choice (e.g., shoppers' decision-making) of the foods consumers access, at a price they can afford, is a growing concern within the UK and globally.</p> <p>Furey and Farley [R1] explored in 2001-2002 the issue of financial access to food and concluded that across 109 food stores, supermarket multiples were more affordable than small local convenience stores, which were typically 39% more expensive and offered reduced food choice. This study initiated a programme of research exploring inequitable food accessibility and affordability contributing to food insecurity. R2 (Furey) found in 2017 that an emergency food parcel (consumer cost GBP17.66) does not contain all the minimum essential food items for a healthy diet, according to MacMahon and Weld (2016), which would cost GBP57.05, a threefold price difference. Results from 2016-2019 research [R3] (Furey and Hollywood) provided a justification, evidenced by the literature, for recommending the measurement of food insecurity</p>		

within the UK by adopting the use of the US Household Food Security Severity Module as a suitable metric.

In 2015, competitive grant funding obtained from the Food Standards Agency (FSA) focused on retailer promotional offers. The results of **R4** (Hollywood and Furey) highlighted significant differences in the mean prices for promotional offers (as opposed to a full basket shop) across retailers. Using 2016-17 data convenience store retailers offered lower average promotional prices per item (£0.54) and more products classified as healthy (55.9%), compared to supermarkets/discounters (£0.66 and 50.7% respectively). This study developed a bespoke 'traffic light' scoring system based on the FSA Front-of-Pack colour-coded labelling system (categories: red, amber and green signifying foods of low, medium and high nutritional quality respectively) for assessing the healthiness of the promotional offers available in-store. Results identified a similar number of products categorised as 'red' (47.5%) (e.g., High Fat, Salt and Sugar, HFSS) as categorised as 'amber' or 'green' (52.5%) and revealed the need for retailers to consider the prominence of healthy promotions within their store design [**R4** Hollywood and Furey].

The results of **R5** (Hollywood and Durkin) highlighted how a deep knowledge of the consumer can assist the food and drink industry in predicting future consumer purchasing behaviour. Subsequently in 2016, a grant was secured from The Food Safety Promotion Board (**safe**food) to conduct a comparable study on the consumer component (e.g., survey and accompanied shops) to afford better understanding of the drivers impacting on consumer choice. This study not only extended the research into a different jurisdiction, but resulted in new guidance being publicised. For example, the concept of an inverted food promotional pyramid was developed. Contrary to current healthy eating advice, where the bottom of the Food Pyramid represents proportionately more healthy food and the top of the pyramid proportionately less unhealthy food, our results found that 35% of the 69,620 food products audited were categorised at the top (i.e., unhealthy foods), increasing to 56% in convenience stores – see Images 1 and 2 [**R6** Furey and Hollywood]. Using this model supports retailers and consumers alike to understand the influence of promotional offers on healthy food choices.

Image 1

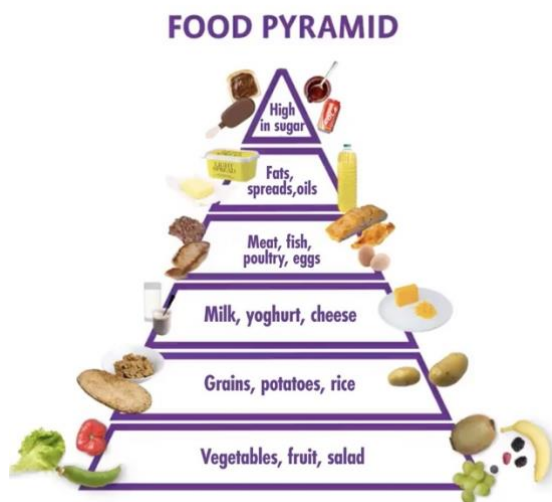


Image 2



3. References to the research Outputs can be provided by Ulster University on request.

R1) Furey, S., Farley, H. and Strugnell, C. (2002). An investigation into the availability and economic accessibility of food items in rural and urban areas of Northern Ireland, *International Journal of Consumer Studies*, 26(4), 313-321.

R2) Caraher, M. and Furey, S. (2018). *The economics of emergency food aid provision: a financial, social and cultural perspective*, London: Palgrave Macmillan eBook ISBN: 978-3-319-78506-6; Hardcover ISBN: 978-3-319-78505-9.

R3) Beacom, E., Furey, S., Hollywood, L. & Humphreys, P. (2020). Investigating food insecurity measurement globally to inform practice locally: a rapid evidence review, *Critical Reviews in Food Science and Nutrition*.

R4) Hollywood, L., Furey, S., Burns, A., McMahon-Beattie, U., Price, R., Duffy, M., Dowler, E., Livingstone, B., Humphreys, P., Moore, C. and McCullagh, F. (2015). A three-stage investigation into the balance of healthy versus less healthy food promotions among Northern Ireland food retailers – final report to Food Standards Agency in Northern Ireland.

R5) Hollywood, L., Armstrong, G.A. and Durkin, M. (2007). Using behavioural and motivational thinking in food segmentation, *International Journal of Retail & Distribution Management*, 35 (9), 691-702.

R6) Furey, S., McLaughlin, C., Hollywood, L., Burns, A., McMahon-Beattie, U., Price, R., Humphreys, P., McCarthy, M., Collins, A., Raats, M., Tatlow-Golden, M., Dean, M. and Murrin, C. (2019). What's on offer: The types of food and drink on price promotion in retail outlets in the Republic of Ireland, Cork: **safe**food. [ISBN: 978-1-905767-86-1].

The journal papers and funder reports have been subjected to blind peer review by independent experts and internationally based editorial boards.

Funding for **R4** was awarded to Dr Hollywood (PI) A three-stage investigation into the balance of healthy versus less healthy food promotions among NI food retailers (Food Standards Agency, June 2014 – July 2017, GBP98,850) and funding for **R6** was awarded to Dr Furey (PI)

Investigation into the balance of healthy versus less healthy food promotions among ROI food retailers (**safe**food, December 2015 – May 2017, GBP209,043).

4. Details of the impact

Ulster University Business School's (UUBS) research on food policy and consumer choice continues to inform the strategic direction of NGOs, public sector bodies and retailers on the affordability and accessibility of food to the wider public. Our ground-breaking research is the first of its kind in the UK and has been used as the independent evidence base by these stakeholders, resulting in four key impacts.

I1: *Informed the strategic direction of NGOs working on the global challenge of food insecurity*
Our research [**R2**] was used by a coalition of NGOs (e.g., Independent Food Aid Network (IFAN), Children in Northern Ireland (CinNI) and Food Foundation) to continuously improve their collective knowledge surrounding food insecurity. First-hand knowledge of the scale and nature of food insecurity in NI was deemed critical to policy partners given that there is a lack of UK-wide data. Our work has particularly impacted on IFAN's campaign work regarding food insecurity measurement. We compared three existing food insecurity indicators: *EU-Survey on Income and Living Conditions*, *Food Insecurity Experience Survey* and *Household Food Security Scale Module (HFSSM)*, and confirmed agreement between the indicators, concluding the HFSSM to be the scale most comprehensible to consumers. IFAN and coalition members referred directly to our research in a key meeting on food insecurity measurement, Better Data on Food Insecurity, held by the UK's Office for National Statistics (ONS) in 2019. As indicated by IFAN's Coordinator [**C1**], "As a result of this research, the UK Government introduced a national index of food insecurity requiring its standardised measurement across all four UK nations. For the first time, via the Department for Work and Pensions' (DWP), a UK-wide annual Family Resources Survey was established that monitors household incomes and living standards. In the absence of the recent and relevant data on household food insecurity... [Dr Furey's] work has provided unique detail on the scale of hunger in the UK and my colleagues and I have been able to use this data to support our call for UK-wide food insecurity measurement".

Additionally, CinNI adopted our research (**R2**) to inform its work as the lead organisation in NI for the Children's Future Food Inquiry (CFFI) which has the support of a cross-party group of 14 parliamentarians, two all-party Parliamentary Groups, and the Children's Commissioners in all four UK nations. Our evidence submission and presentation were used in the development of the final report [**C2**]. According to CinNI's Policy Officer, "The result has been continuous

*improvement in our knowledge surrounding food insecurity [and] ensured that academic research is incorporated into policy consultations and calls for policy change ... The independence of the research has also been important. The rigour and professionalism has meant people do take heed of the findings and don't dismiss as they would otherwise have done" [C2]. Our findings proved an "invaluable contribution" and played "a direct role in shaping the Children's Future Food Inquiry's next steps, including the report" that delivered the project's final recommendations for tackling the problem (Communications Manager, Food Foundation). This culminated in a UK-wide *Children's Right 2 Food Charter* which has formed the foundation of ongoing calls to action around the provision of nutritious school meals/direct cash transfers during school holidays [C2].*

I2: *Stimulated policy debate on food insecurity and influenced public health messaging as priority areas requiring government action*

Our UUBS research [R2 - R3] has ensured that food insecurity has attained policy attention with citations in the House of Lords Select Committee on Food, Poverty, Health and the Environment report [C3]. Further confirmation of our thought-leadership status in this area was an invited contribution to *The Lancet Neurology* [C10] which stated that food insecurity is a "new epidemic and mental health emergency" and a publication in *The Lancet* [C10]. R2 and R3 have ensured the inclusion of food access in the cross-Departmental NI Future Food Policy as a compulsory consideration for any future policymaking in the agri-food agenda connecting health, education, environment and economic aspects into a longer-term, collective vision. This benefits Northern Ireland consumers by ensuring that physical and economic access to food are not barriers to healthy food. Our findings in the area of food access and food poverty in Northern Ireland have been adopted by the Department of Agriculture, Environment and Rural Affairs (DAERA) confirming UUBS as the go-to researchers in this very important policy area. As indicated by the Director of Future Food Policy, DAERA [C4], "UUBS research in the food poverty and policy arena has helped to inform thinking in this area of the agri-food agenda and will continue to do so as we move forward in this inter-departmental policy development process to further strengthen the evidence base where necessary".

Our research [R6] has made a substantial contribution influencing a multi-media national health campaign by **saferfood** across the Republic of Ireland. The research was used as "the evidence base for the 'Transform your Trolley' campaign" (**saferfood** Scientific Officer, C5), to raise public awareness of unhealthy food promotions, as part of a wider public health campaign to educate shoppers on how to achieve a healthy shop. The 'Transform Your Trolley' campaign provided shoppers with 12 tips to achieve a healthy shop with Tip #3 "Beware of special offers" stating our findings that "A third of foods on special offer aren't that good for you so unless they are on your list, walk by" [C5]. Our data [R6] were also used to visually categorise foods on promotion against the government-endorsed healthy eating guidelines using an infographic (images 1 and 2 in Section 2) to teach consumers how much of what they eat overall should come from each area (e.g., vegetables, salad and fruit) to achieve a healthy, balanced diet. This infographic, available on the **saferfood** website, which gained significant social media attention, is used as a guide for making more informed decisions about the foods they purchase (for consumers) and place on promotional offer (for retailers) [C5]. Finally, our research [R6] informed the basis of a **saferfood** press release [C5] that alerted media and consumers of how out-of-sync retailers' promotional food offers were, when compared to the Food Pyramid. This resulted in our research being promoted across main stream media outlets in the UK and Ireland, featuring in the *Irish Independent*, *The Irish Times*, *The Irish Sun*, *Daily Mirror*, *Evening Echo*, *Daily Mail*, *Journal.ie*, *Evoke.ie* and the *UK Times*.

I3: *Initiated a collaborative stakeholder approach to inform public debate on the healthiness of food retail promotions*

Our report [R4] highlighted the need for greater engagement between public bodies (e.g., Food Standards Agency [FSA]) and grocery retailers to tackle wider societal problems such as food affordability in a more collaborative way, leading to the inception of a bi-annual retailer forum. This consortium, chaired by the FSA, represents UK multiples (Tesco, Marks and Spencer, Asda), discounters (e.g., Lidl) and distributors to SME retailers (Henderson's [Spar/Eurospar]

and Musgrave [Centra]), highlighting the reach of our research in dealing with the issue of food affordability. Since inception in 2017, the consortium has met five times to examine mutually challenging policy issues impacting on current retail practice (e.g., possible mandatory legislation on the healthiness of promotional offers). The Director for Research and Policy at the NI Retail Consortium (part of the British Retail Consortium, a trade body representing 70% of UK retailers) affirmed that our work *“led to the inception of the retailer forum with the FSA and the Department of Health which has been incomparably useful in initiating dialogue [and] creating better relationships between retailers and government agencies”*. He also highlighted how our research *“made a tangible difference to our thinking and engagement with Northern Ireland ... in how any ongoing nutritional surveillance would be actioned, and our desire to continue to be involved in this public health conversation”*, and that it has since *“re-visited the recommendations in light of this research to consider in our strategies and policies on nutrition, obesity, promotions and engagement with Government agencies”* [C6].

I4: Changed retailers’ strategies around the prominence of healthier food products to make the healthier choice the more affordable, accessible and available choice for consumers

Several testimonials from retailers [C7 – C9] and a trade body representative [C6] discussed how our research [R4; R6] has changed the strategies used in retail practice in the following ways:

(1) The prominent placement of healthier items in-store, for example the Supply Chain Executive from Lidl stated, *“Ulster’s research [R4] has complemented our ‘Fresh Approach’ retailing strategy. We have improved access to healthy food by introducing ‘healthy tills’ (e.g., the replacement of sweets) and the increased prominence of fresh food on promotion, whereby fruit and vegetables have been relocated to the front of store”* [C7].

(2) Increased the quantity and nutritional quality of foods within their offering, for example, Commercial Sales Manager for Henderson Group stated that *“Ulster’s research [R4] has emphasised to us the value ... of ensuring that high value product categories which can offer health benefits to consumers are the easy and affordable choice for consumers at the point of choice ... EuroSpar has increased the quantity and nutritional quality of foods they choose to locate in prominent sites across its stores, and notably at store fronts where customer footfall is greatest, with healthy fresh produce and snacks more visibly and conveniently located at the front of stores, in standalone displays, and at checkout points”* [C8].

(3) Reduced reliance on the use of volume-based promotions, for example, the NI Retail Consortium stated that on behalf of the industry, *“(We) have re-visited the recommendations [R4] in light of this research ... [which] reinforces our general direction of travel including our shift away from multibuys to straight discounts”* [C6].

(4) Investment in healthier options through product reformulation, for example the Head of Food Innovation for Marks & Spencer stated that our research [R4] *“influences our current thinking on how we approach marketing of HFSS and how we balance every day eating occasions with special occasions and treats. Reformulation is key to this”* [C9].

In summary, our research has been used by organisations with the authority to make impactful changes which benefit consumers and allow them to access healthy, more affordable food.

5. Sources to corroborate the impact

[C1] Coordinator, Independent Food Aid Network testimonial.

[C2] Children’s Future Food Inquiry report, Policy Officer, CinNI testimonial, Communications Manager, Food Foundation testimonial.

[C3] Citation in House of Lords pp. 43, 84.

[C4] Director of Future Food Policy, DAERA testimonial.

[C5] Scientific Officer, safefood testimonial, **safefood** 12 tips, **safefood** infographic & social media extracts/images, **safefood** press release.

[C6] Director, NIRC testimonial.

[C7] Supply Chain Executive, Lidl testimonial.

[C8] Commercial Sales Manager for Henderson Group testimonial.

[C9] Head of Innovation, Marks & Spencer testimonial.

[C10] Lancet Neurology (2019, p.1), Lancet [2019, p. 41].