



UNIVERSITY OF
STIRLING

Is the emperor naked?

***Rethinking approaches to responsible
food marketing policy and research***

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Acknowledgments

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Abstract

The thesis aims to present a case for a rethinking of the paradigmatic frames underpinning food marketing control policy and research. In support of its contention, it reports on the methodological strategies, evidence outcomes and knowledge translation contributions of a series of research projects. The projects were commissioned by national and international policy makers during the period 2009-2015 in support of responsible food marketing policy development. They were conceptualised, developed and interpreted through participatory and iterative research planning processes. The research drew on theories and constructs from multiple disciplines. Public health, marketing and policy science contributed most, but information economics and management theories also informed research design as well as the analysis and interpretation of findings.

Its key generalizable findings can be summarised as follows:

- The identification of a fragmented but convergent pool of evidence indicating contemporary food and beverage marketing is an interactive, dynamic phenomenon.
- The identification of a fragmented but convergent pool of evidence demonstrating it significantly impacts sociocultural determinants of food behaviours.
- The generation of evidence demonstrating a gap between the strategic aims of responsible marketing policy regimes and the inherent capacity of implemented interventions to constrain marketing's food environment impacts.
- The generation of evidence demonstrating that critical re-appraisal of food marketing policy research assumptions and preconceptions is a strategy supportive of policy innovation.
- The generation of evidence that research intended to support real world multi-stakeholder policy development processes requires additional skills to those established and recognised as central to high quality research. These include the ability to engage with dynamic and politicised policy processes and their public communications challenges.

- The generation of evidence that can inform future independent benchmark standard for responsible marketing development initiatives.
- The generation of evidence that can inform future research on designing and developing policy that is 'future proof' and targets marketing's sociocultural food environment impacts.

Its most significant knowledge translation contributions have been:

- Support for the WHO Set of Recommendations on the Marketing of Foods and Non-alcoholic Beverages to Children (subsequently endorsed at the 2010 World Health Assembly and the 2011 United Nations General Assembly).
- Participatory research contributions to the Scottish Government's responsible marketing standard development initiative (PAS2500).
- Supporting the planning and development of the Scottish Government's Supporting Healthy Choices Policy initiative.
- Knowledge exchange with policy makers and stakeholders engaged in a scoping and prioritisation initiative commissioned by the United Kingdom's Department of Health (An analysis of the regulatory and voluntary landscape concerning the marketing and promotion of food and drink to children).
- Supporting responsible marketing policy agendas targeted to the engagement of a broad mix of stakeholders in innovative policy development processes.
- Supporting policy makers' efforts to increase popular support for stronger, more effective responsible marketing policy controls.

The thesis therefore aims to present evidence that the programme of research presented here has made useful and original contributions to evidence and knowledge on contemporary food marketing and its impacts on food behaviours and the food environment. It aims to build on this by demonstrating how this evidence informed and supported policy development. Through this the thesis aims to support its case that a

rethinking of food marketing policy research assumptions and conceptions can expand and enrich the evidence base as well as real world policy innovation.

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Chapter 1

Introduction to the case for rethinking responsible marketing policy and research approaches

'The fact that non- communicable diseases have overtaken infectious diseases as the world's leading cause of morbidity and mortality has profound consequences. This is a seismic shift that calls for sweeping changes in the very mind set of public health' (Chan, 2011)

(Opening remarks of Dr Margaret Chan, Director-General of the World Health Organisation at the United Nations 2011 General Assembly High-level Meeting on the prevention and control of non-communicable diseases).

Content

This chapter is an introduction to thesis contents. It provides an overview of the knowledge and evidence context that guided and shaped the aims and rationale for the research presented in the thesis.

1.1 Thesis aims and objectives

This thesis aims to make a useful and original contribution to the global responsible food and drink marketing policy (hereinafter responsible marketing policy) evidence base. It also aims to demonstrate the knowledge translation contributions of its research outcomes to real world policy development processes.

The primary purpose of all the research presented in this thesis has been to support the development of more effective responsible marketing policy. It has been guided by calls for greater recognition in public health policy and research that *'both thinking and facts are changeable, if only because changes in thinking manifest themselves in changed facts. Conversely new facts can be discovered only through new thinking'* (Krieger, 2001, citing Fleck, 1935). It has also been guided by an awareness that *'policy makers and others working in the public interest want to learn about the art of the possible and the risk of the unthinkable, not just the trend line of the probable'* (Steinberg 2007, p. 185).

Within the context of these broad strategic goals, the specific aim of this thesis is to present evidence on how the call by World Health Organization's Director-General for a *'shift in the mind set of public health'* can be translated into the development of innovative and more effective responsible marketing policy. It aims to do through the following research objectives:

1. Exploring how and why rethinking can contribute to the responsible marketing policy evidence base.
2. Exploring research approach options
3. Exploring how and why rethinking can support policy innovation.

1.2 Rationale for research aims and objectives

The thesis title is a reference to Hans Christian Anderson's short story, the Emperor's New Clothes. The tale tells of an emperor and his tailors who make claims about the fine quality of the emperor's apparel. The claims however are a misrepresentation; the emperor is not wearing any clothes. Anderson describes how because everyone behaves as if they believe the emperor is wearing a very fine outfit, no one is willing to publicly question the false claims regarding the emperor's state of (un)dress: *'In short no one would allow that he could not see these much-admired clothes; because in so doing, he would have declared himself either a simpleton or unfit for his office...'* (Anderson, 1837). However, during a parade organised for the emperor to show off his new clothes, a little boy in the crowd calls out that the emperor is actually naked. The articulation of his observation leads to universal, public recognition that the emperor is wearing nothing. The emperor and his subjects' behaviours and dialogues are no longer constrained by a misleading but to date dominant paradigm.

The term paradigm is used here to describe a simplified representations of a real world phenomena that is widely accepted as an accurate and acceptable by its stakeholder community. It is based on Kuhn's definition and elaboration of the construct. Kuhn suggests that simplification is helpful to knowledge generation. However, he also highlights how it can result in arbitrarily bounded research frames. He suggests widespread acceptance of a misleadingly simplified paradigm can prevent stakeholder communities from considering alternate explanations for/descriptions of a phenomenon. For examples, resulting in stakeholders relying on frames that favour evidence in support of the paradigm and discourage them from recognising new and/or emerging alternate evidence or hypotheses.

This thesis and the research it presents aims to play a similar role to that of the little boy in Anderson's tale. It aims to do this by exploring if the prevailing preconceptions and assumptions amongst the responsible marketing policy stakeholder community about food marketing are based on a misleadingly simplified paradigm. In Anderson's tale, the phenomenon of shared public interest is the nature of the emperor's clothing, the

stakeholder community is the emperor and his subjects, and the prevailing paradigm influencing their thinking is the emperor's state of (un)dress. In this thesis, the phenomenon of shared public interest is the nature of food marketing, the stakeholder community is all those with a responsibility and/or vested interest in food marketing policy development, and the paradigm it aims to explore is the nature of food marketing impacts on the food environment.

The results from a national population wide survey included as Appendix A provides unequivocal evidence of the nature of current food marketing practices and its impact on the food environment. The survey of 2,285 youth aged 11-18 years found nearly two thirds (63.5%) of respondents reported an observation of promotion for a food or drink in the seven day period preceding the survey. Seventy four percent of observation were for a food or drink that was high in fat, salt or sugar. Nearly half of respondents reported making a purchase in the time period surveyed and sixty eight percent of these were for HFSS food and drinks. The Appendix also report an analysis of its findings against current national dietary public health policy goals. These results demonstrate a significant gap between the current contributions of marketing to the food environment and the stated goals of food marketing control policy community.

In Anderson's tale, the story ends with public recognition that the paradigm is a significant misrepresentation of the phenomenon's true nature. However, this thesis aims to build on its exploration of policy and research conceptualisations' of food marketing's impacts. The potentially restrictive impacts of paradigmatic models on policy communities' capacity to recognise more effective intervention options are extensively discussed in the literature (Forester, 1984; Galey & Youngs, 2014). Their constraining impacts on research agendas and the interpretation of evidence are also widely recognised (see for example, Klaes & Sent, 2005; Krieger, 2001; Putnam & Galea, 2008). Furthermore, as Krieger notes: *once we recognise that the state of the art is a social product, we are free to look critically at the agenda of our science, its conceptual framework, and accepted methodologies, and to make conscious research choices'* in support of public health policy development (Levins & Lewontin, 1987, cited in Krieger, 2001). The thesis therefore, not only aims to explore the paradigms underpinning food

marketing policy and research and implications. It also aims to explore the potential for their critical re-appraisal to advance policy and research development and innovation goals and close the gap between the evidence-based goals of marketing control policies and their current capacity to constrain its negative contributions to the food environment

1.3 Thesis structure and content

This chapter, *Chapter 1: Introduction to the case for rethinking responsible marketing policy and research approaches* is intended to set out the context for Chapters 2-8. It has outlined the aims and objectives, structure and content as well as the underpinning rationale for its specific research focus. The next section of this chapter presents background notes on the research activities reported in Chapters 2-8 and Appendix #1. This is followed by a brief overview of the current status of responsible food marketing policy and research. It then presents a focused overview of evidence and constructs from the disciplines of public health, marketing and policy studies. This is included because as a consequence of its normative, policy oriented objectives, the programme of research drew on multiple disciplines, but especially these three. The focused overview is not intended to provide a comprehensive status report on public health, marketing and policy studies evidence. Rather, it is intended to highlight how these three disciplines contributed to research design, conduct and interpretation of findings. The Chapter concludes with a schematic outline of Chapters 2-8.

1.3.1 Background notes to thesis structure and content

Evidence presented in the thesis has been generated from a series of applied research projects. They were commissioned by the World Health Organisation (WHO), the Scottish Government (SG) and the United Kingdom's Department of Health (UK DoH) to support responsible marketing policy development initiatives. They were conducted and/or led during the period 2009-2015 by the author of this thesis. The results of research were initially published as technical reports. Full references for the reports are included as part of the supplementary information in Chapters 2-8. The results of the commissioned research projects were also published or are in preparation for publication in peer review

journals. The author of this thesis is the principal author for all of these. The role of the principal author and all co-authors, as well as the five year impact factor (IF) of the peer review journals is also provided in Chapters' 2-8 supplementary information.

As described above and outlined in Table 1: Schematic outline of thesis structure and content, the purpose of the peer reviewed papers and Appendix #1 is to present the generalizable evidence contributions of the programme of research. The thesis also aims to demonstrate the contribution of its research to real world policy development processes. Illustrative evidence of its knowledge translation contributions is presented in the form of supplementary content in Chapters 5, 6, and 8 and Appendices # 2 and #3.

1.4 Responsible marketing policy and evidence: an overview of current status

Food and drink marketing is a highly salient feature of the food environment. Currently, it primarily promotes products that are energy dense and high in fat, salt and sugar (hereinafter foods HFSS). Its current contributions to the food environment are considered to be unsupportive of dietary public health policy aiming to reduce dietary risk factors for non-communicable diseases (NCDs). Hence in the last two decades and across all parts of the world '*responsible marketing*' policy initiatives have been implemented.

There is no universally recognised definition of what constitute responsible marketing or responsible marketing policy. However, The WHO's 'Set of Recommendations on the Marketing of Foods and Non-alcoholic Beverages to Children recommend a key aim is to give children and young people '*the opportunity to grow and develop in an enabling food environment – one that fosters and encourages healthy dietary choices and promotes the maintenance of healthy weight*' (WHO, 2010, p.4). A core aim of responsible marketing policy therefore is to stimulate health supportive change in the contributions of food marketing to the food environment.

Currently policy makers favour responsible marketing policy regimes based on voluntary participation (Galbraith-Emami & Lobstein, 2013; Bryden et al, 2013). As a consequence, the status of the majority of prevailing responsible marketing control policies are non-mandatory. The voluntary good practice codes/frameworks/policy targets they have given rise to are self-regulated and self-sanctioning (ibid.). Independent evaluations find the impact of self-regulatory regimes on the health supportive nature of food environment has been negligible. The impact of regimes based on legislation and/or mandatory compliance to date has however also been disappointing (Galbraith-Emami & Lobstein, 2013). Evidence on how more effective interventions – whether voluntary or mandatory - can be developed is limited (Bryden et al, 2013). In addition to this, because of the growth in digitally facilitated and globalised food and drink marketing, tracking and controlling food marketing impacts is deemed to be increasingly challenging (Galbraith-Emami & Lobstein, 2013; Cairns et al, 2013; Bryden et al, 2013).

The current responsible marketing control policy evidence base is largely based on conceptualisations of food marketing as a managed, predictable phenomenon. Extant responsible marketing policies also conceptualise food marketing as micro level phenomenon. They therefore focus on its direct, sales promoting/transactional exchange effects. To date, there has been little exploration of how this conceptualisation might be reconfigured. For example, the implications of this conceptualisation for responsible marketing policy's food environment goals.

The scholarly global marketing literature indicates this may be a highly significant evidence gap for responsible (food and drink) marketing policy. An important and influential body of marketing scholars argue that conceptualisations of marketing as a facilitator of managed and manageable micro level exchange are incomplete and therefore misleading over- simplifications (see for example, Hill & Martin, 2014; Tadjewski, 2014; Hunt, 2014). They advocate for a re-conceptualisation of marketing. They argue greater recognition of marketing's interactions with and impacts on its environment is an overdue and much needed paradigm shift for all marketing policy stakeholders. This includes practitioners, scholars as well as those directly involved in policy making (Hill & Martin, 2014; Polonsky, 2003; Kavanagh, 2014).

A recurring challenge for responsible marketing policy has been how to address the inevitable time lags between the development of novel marketing practices and policy controls and research responses. In recognition that marketing practices and strategies will continue to evolve and shift, there is a strong interest in identifying how policy can be designed to be robust and comprehensive but also flexibly adaptive (McCarthy et al, 2011; McKinnon et al, 2009).

There is also strong interest in how the development of novel research approaches and agendas can help in the identification of innovative evidence and policy outcomes (Moodie et al, 2013; McCarthy et al, 2011; Butland et al, 2007; Sassi, 2010). One of the strategies identified as promising is to develop research approaches that can identify and evaluate evidence from novel and/or under-utilised sources. Sources identified as promising include the social sciences, business/management disciplines, evidence from other policy domains, practice-generated evidence and the experiential knowledge and insights of the responsible marketing policy stakeholder community (University of Copenhagen, 2013; Fitzpatrick et al, 2010; Block et al 2011; Cutler et al, 2003; Butland et al, 2007).

In short, there is clear evidence that contemporary food marketing contributions to the food environment are unsupportive of public health policy. There is a growing interest in how rethinking approaches to responsible food marketing policy and research might support the development of more effective policy. In addition to strengthening prevailing policy regimes, a key objective of rethinking approaches is support for policy innovation. An under-explored opportunity to rethink approaches and progress innovative policy development may be re-conceptualising food marketing as a dynamically interactive macro level phenomenon as well as a facilitator of micro level exchange. Research targeted to strengthening policy impact, needs to take account of policy makers prevailing preference for non-mandatory policy regimes. It also needs to take account of the increasing challenges posed by the rise of digitally facilitated and/or globalised food marketing.

1.5 Prevailing responsible marketing policy evidence challenges, opportunities and priorities

1.5.1 Dietary public health perspectives

1.5.1.2 Risk reduction is a globally urgent, policy priority

Globally, non-communicable diseases (NCDs) are now the leading cause of morbidity and premature mortality (Ng et al, 2014; WHO, 2014). Foods HFSS have been identified as a contributory factor in the rising global prevalence of a range chronic degenerative NCDs (WHO, 2004; Popkin & Gordon-Larsen, 2004). Unbalanced diets are a particularly significant risk factor for cardiovascular disease, type 2 diabetes, osteoporosis, dental diseases, obesity/overweight, and some common cancers, for example breast and colorectal cancers (WHO, 2004, WHO, 2014).

Excess body weight often exists as a co-morbidity; it is both a health risks in its own right as well as increasing the risk of onset of diet-related NCDs and the severity of their effects on health, wellbeing and premature mortality (WHO, 2004, Haslam & James 2005).

Obesity and overweight prevalence are therefore useful indicators of shifting dietary patterns as well as the population level consequences of these changes. Since 2000 the number of adults overweight or obese in the world, has exceeded the number defined as being of healthy weight (Caballero 2007, World Bank 2006). Currently, 36.9 percent of men and 38 percent of women are overweight or obese. Prevalence rates amongst boys and girls (i.e. individuals aged 18 years or younger) respectively stand at 12.9 percent and 13.4 percent in developing countries and 23.8 percent and 22.6 percent in developed countries (Ng et al, 2014). The onset of overweight/obesity in childhood increases the period of exposure to risk over the life course. Overweight/obese children are also at increased risk of overweight and obesity in adulthood (Wright et al, 2001). For these reasons and because of their more vulnerable status the prevention and control of childhood obesity and overweight is an especially high level priority for policy (Ward et al, 1977; WHO, 2004; Ng et al, 2013).

In addition to their adverse effects on physical health and wellbeing, obesity and other NCDs contribute to a range of undesirable psychosocial outcomes. These include lower personal income, social stigma and lower self-esteem (Haslam & James, 2005; Mavromaras, 2008). The World Bank for example has estimated the global costs of overweight and obesity are equivalent to 2-3 percent of aggregate Gross Domestic Product. This is a consequence of increased health care needs and reduced labour force productivity (World Bank, 2006, Philipson 2001).

It is unsurprising therefore, that there is now widespread agreement. The continuing rise in prevalence of NCDs and the associated social, economic and health consequences is an international health crisis. The severity of the public health challenge has led to strong consensus within policy and research communities that proactive measures must proceed with urgency (World Bank, 2006; UN, 2011; Beaglehole et al, 2011).

There is also a clear expectation that practice-generated evidence and evidence from other policy domains and academic disciplines are likely to be key sources of insight and evidence in future policy development (Butland et al, 2007; WHO, 2014; Gortmaker et al, 2011; Sassi, 2010).

1.5.1.3 There is widespread support for responsible marketing policy strategy to be strengthened, but limited consensus on how

The WHO's Global Strategy on Diet, Physical Activity and Health (WHO, 2004) identifies marketing as one of many determinants of 'food choices' and 'dietary habits' (WHO, 2004, p.7). WHO advocates for the private sector to 'practise responsible marketing that supports the [2004] strategy, particularly with regard to the promotion and marketing of foods high in saturated fat, trans-fatty acids, free sugars, or salt especially to children' (WHO, 2014, p.14). The WHO strategy also urges governments to 'work with consumer groups and the private sector to develop appropriate multi-sectoral approaches to deal with the marketing of foods to children and to deal with such issues as sponsorship, promotion and advertising' (WHO, 2004, p.7). The strategy also recommends that the

‘marketing of food products that contribute to a healthy diet and are consistent with national or international dietary recommendations’ (WHO, 2004, p.8). This emphasis captures the currently prevailing preference amongst policy makers to progress development through multi-stakeholder participation (Emami & Lobstein, 2013; Bryden et al, 2013).

The views of other policy stakeholders are mixed. (Matthews, 2007; Millstone & Lobstein, 2007). For example, Sassi (2010) and Acs & Lyles (2007) along with representatives for the private sector (see for example, ICC, 2012) advocate strongly for development to be progressed incrementally and through voluntary mechanisms. The public health advocacy community articulate equally strong views that control policies need to be radically strengthened through statutory measures (Millstone & Lobstein, 2007; Stuckler & Nestle, 2012). Published evidence on the preferences of the most populous food marketing policy stakeholder group, that is, consumers is sparse. However, the evidence available indicates consumers are in favour of stronger controls and would prefer broad scope restrictions on marketing promotions, rather than highly targeted, statutory measures such as the taxation of energy dense products (Simon et al, 2014; Mello et al, 2006; Morain & Mello, 2013; Goren et al, 2010; Millstone & Lobstein, 2007; Stuckler & Nestle 2012).

1.5.1.4 Reconfiguring responsible marketing policy to target macro level variables and processes is congruent with current trends and priorities in public health policy

Ecological models of public health indicate that for policy planning purposes, macro level impacts should be considered for all social, cultural and economic factors contributing to public health outcomes (Dahlgreen & Whitehead, 1991; Story et al, 2008; Kreiger, 2001). Some public health scholars argue that public health research and policy that does not include macro level perspectives is doomed to fail (Krieger, 2001; Putnam & Galea, 2008; Bernier & Clavier, 2011).

Network analysis has demonstrated that economic and social systems facilitate the dynamic and widespread diffusion of factors contributing to health outcomes. Individual

risk levels for NCDs and obesity/overweight onset are significantly and independently moderated by the health status of their proximate and distal social contacts. Explanatory theories for this significant finding are still being developed and tested. However, the macro level spread of health moderating values, norms and behaviours through social networks has been identified as one contributory causal pathway for obesity and NCDs (Christakis & Fowler, 2013; Centola, 2010). There is a growing interest in building on this evidence to develop more effective and cost-efficient policy interventions.

1.5.2 Marketing perspectives

1.5.2.1 Marketing is a dynamic phenomenon responsible for macro as well as micro level impacts

As noted in section 1.4: *Responsible marketing policy and evidence: an overview of current status*, there is significant support in the global scholarly marketing literature for research, policy and practice to increase its explicit recognition of marketing's macro level interactions and impacts. Macromarketing is the domain of marketing most explicitly concerned with conceptualising, monitoring and evaluating marketing's macro level characteristics (Tadajewski, 2014; Hunt, 2014). Ethical marketing theories and models however also strongly emphasise the critical importance of recognising marketing as more than a merely a facilitator of planned, micro level transactions. Laczniak & Murphy (2006) for example argue that that every marketing exchange has social as well as economic impacts. They describe why and how these impacts have profound implications for corporate sustainability as well as the public good. They, along with other marketing scholars and commentators (see for example Smith & Murphy, 2013) also argue that it is incumbent on ethically responsible marketers and scholars to be proactive in their efforts to minimise marketing's negative societal impacts. This includes unanticipated, and/or unplanned effects as well as intended effects (Laczniak & Murphy 2006; Smith & Murphy, 2013; Hill & Martin, 2014).

In macromarketing, marketing's impacts are conceptualised as effects mediated via a marketing system. The system is conceptualised as a network of variables and causal pathways connected via weak and strong relational ties. Conceptualising marketing as a system level phenomenon not only facilitates analysis of its macro level capacities. It facilitates the monitoring and evaluation of dynamic and adaptive shifts in marketing practice. It also provides a lens through which unintended (i.e. spillover/second order/ripple effects) outcomes can be captured. This is because dynamic, incremental adaptation leading to changes that cannot be precisely forecasted in advance are

conceptualised as inherent qualities and attributes of system level phenomena (Boulding, 1956).

1.5.2.2 Marketing impacts on its sociocultural environment are dynamic and significant

There is a significant body of marketing scholarship that has explored marketing's universal capacity to moderate and be moderated by the cultural environment in which it operates. Consumer culture theory (CCT) for example conceptualises marketing as a phenomenon that is closely and deeply connected to its sociocultural context. CCT conceptualises these interactions as a network of '*dynamic relationships between consumer actions, the marketplace, and historically shaped cultural meanings*' (Arnould & Thompson, 2005, p. 868; see also McCracken, 1986; Joy & Li, 2012). CCT emphasises that this interactive system level capacity is critical to marketing's effectiveness.

A core construct underpinning conceptions of marketing as a moderator of consumer culture is its capacity to foster socially constructed values, norms and assumptions about routine/habitual practices. Deighton and Grayson (1995) for example, argue that target consumers can carry sociocultural elements generated as a consequence of their exposure to marketing to their (non-target) social contacts via social networks. The social contacts of target consumers may thus be impacted by marketing generated outputs even if they are not actively engaged with the marketing system. Marketing also aims to gain from cultural flows in the reverse direction. For example, by gaining insights on emerging sociocultural shifts from social networks connected to marketing systems. The detection by marketers of such social trends can inform the development and adjustment of current and future marketing activities and strategies.

Co-creational marketing similarly, recognises the value of consumers as interpreters and carriers of cultural meaning and insights. A key objective of co-creational marketing is to use marketing exchange relationships as a two way source of such intelligence. Service dominant logic is the paradigmatic model most frequently used to explain co-creational marketing's effects mechanisms and impacts. It has been influential in shifting the focus in research and practice planning from marketing's micro to macro level impacts. This

includes some, albeit small recognition of its effects on sociocultural trends. It has also helped shift the focus in research from marketing's planned and managed impacts to much greater recognition of its capacity to be in a state of near constant flux and adaptation (Vargo & Lusch, 2004; Vargo & Lusch 2008; Chandler & Vargo 2011; Lusch, 2007).

1.5.2.3 The potential for universal marketing evidence to strengthen responsible marketing policy and research is a prevailing gap in the research agenda

In short, a broad-based and influential cohort of marketing scholars urge marketing policy stakeholders to adopt broader societal perspectives on marketing's role, impacts and responsibilities. They argue such a paradigmatic shift is fundamental to the future legitimacy and credibility of marketing. Lusch (2007) for example argues that *'if we [i.e. marketers] get everything else "right" [sic.] but fail to develop a coherent and compelling body of thought regarding the aggregate marketing system, we will have failed society and ourselves as a profession'*. They also argue that under-recognition of marketing's system level functionality threaten its future potential to positively contribute to value chains, markets and therefore corporate profitability and/or sustainability (McDonald, 2009; Smith & Murphy, 2013; Lusch, 2007).

As noted above, policy recognition of food marketing's potential macro level impacts is currently very limited. So too, is recognition of the significance of system level or other macro level causal pathways. Furthermore, there has been no exploration of why and how food marketing second order/spillover impacts may undermine policy effectiveness or why and how commercial marketing may be held accountable for these (Polonsky, 2003; Gundlach & Wilkie 2009; Harris et al, 2009; Seiders & Petty, 2007; Hill & Martin, 2014). The possibility that food marketing impacts food culture is recognized in the literature. But to date this line of inquiry has not been developed in any structured or systematic research initiatives for policy development purposes (Seiders & Petty, 2007; Story, 2008; Fitzpatrick et al, 2010). All of these evidence gaps have been identified as a potentially fruitful areas for future research in support of policy development.

The global marketing theories, models and constructs outlined in this section, are a useful start point for a critical re-appraisal of the assumptions and preconceptions underpinning responsible (food) marketing policy and research. They are also a potentially valuable resource for policy and research concerned with (food) marketing's societal level impacts. A macro level conceptualisation of marketing is not incongruent or incompatible with the currently dominant paradigm in food marketing policy research of marketing as a micro level, managed and manageable phenomenon. A revised policy planning and evaluation frame is simply likely to be more effective if it takes account of both micro and macro level constructs and theories. This is because it is likely to indicate a case for the scope of policy to be expanded. For example, by expanding its mandate to address a much broader range of macro level and/or unanticipated impacts on the food environment.

1.5.3 Policy studies perspectives:

1.5.3.1 Strong rationale for pluralistic approaches to policy research

The policy studies literature notes that policy design and development along with the production of supportive evidence are frequently unpredictable, iterative and politicised processes (Bernier & Clavier, 2011; Dooris, 2006, de Leeuw & Skovgaard, 2005). Multiple disciplines contribute evidence, theories and constructs to the policy studies evidence base. For example, political science, public administration and management, economics as well as specific policy areas such as the trade and commerce (Robert & Zeckhauser, 2011; Nowlin, 2011; Sabatier, 2014). As a consequence a wide range of theories and models are available to support policy research. Examples include multiple streams theory, punctuated equilibrium theory, the advocacy coalition framework, Schneider's theory of social construction and policy design and Adam and Kriesi's policy network model. But many other theories, models and frameworks have also been developed to contribute to '*policy knowledge ... in the policy process and on the policy process*' (Nowlin, 2011). One of the consequences of this is that a wide ranging, some might describe as an eclectic mix, of approaches and constructs are applied in policy research (Sabatier, 2014; Schlager & Weible, 2013; Breton & De Leeuw, 2012). There is some consensus that this degree of heterogeneity is both inevitable and appropriate. Reliance

on a single or narrow set of theoretic frames or paradigmatic lenses is unlikely to capture the complexity of most policy issues (Schlager & Weible, 2013; Cairney, 2013; Galey & Young, 2014).

1.5.3.2 Strong rationale for combining context-specific and generalizable evidence research aims

There is a significant consensus in the policy studies literature that research objectives must take account of the unique nature of the public policy issue at the centre of the research activity (Sabatier, 2014). For example, by including the identification and mapping of the unique factors contributing to the problematic impact of a social phenomenon (Burton, 2006). For the same reasons, ensuring proposed policy responses are fully contextualised to the real world environment they are intended to impact is frequently advocated (Steinberg, 2007; Flyvbjerg, 2002, Thuesen, 2011).

Some policy researchers argue that the validity and reliability of evidence for a given public policy issue is determined by the breadth and depth of the inquiry and its interpretation. They argue this is a greater determinant of its utility than its statistical reproducibility (Ruddin, 2006; Reichertz, 2010). It is also argued this reduces the risk of failing to recognise '*false firmness to the structure and reliability of theory*' (Thomas, 2010, p. 577) and overlooking alternate interpretations.

It is also argued that those who are informed by their own long term and/or context-specific experience are best placed to critically evaluate the validity and reliability of evidence for and on policy development (Flyvbjerg, 2001; Ruddin, 2006; Reichertz, 2010). The deep knowledge of policy stakeholders can contribute to the design, conduct and analysis of research initiatives. Some have even argued that the evidence in support of the public interest is most likely to be accurately understood and interpreted by its users, not its producers. Bourdieu used the term '*virtuosos*' to capture a very similar '*attitude to data and knowledge*' (Reichertz, 2010).

Normative research ordinarily takes account of research context and purpose. By explicitly identifying and treating these factors as potential moderators of research outcomes, generalizable evidence outcomes can be identified (Nowlin, 2011; Fischer, 2003; Cairney, 2013). Furthermore, normative research designs can help to distil and streamline empirical evidence research objectives. Steinberg has argued normatively focused research can reduce '*indiscriminate pluralism*' (Steinberg, 2007, p.183). For example, by treating the broad set of causal conditions as a constant and focusing on selective actions, normative research offers a means through which a natural experiment can measure the effect sizes of specific variables of interest (Steinberg, 2007; Robert & Zeckhauser, 2011). An identified benefit of this normative research approach is that it can support the progression of research agendas focused on 'why' and 'what' policy interventions are required to explicitly translational 'how to' research objectives (Steinberg, 2007; Sabatier, 2014; Robert & Zeckhauser, 2011). This can be especially useful for policy challenges that are multi-factorial and there are few 'success stories' for policy development to draw on.

A central goal of research commissioned to support multi-stakeholder policy development is to capture the experiential knowledge and insights of stakeholder participants. For example, identifying stakeholder perceptions is typically a core research objective of social marketing research commissioned to support policy development (Walsh et al, 1993; Andreasen, 1995). A core objective of the social science policy research approach, known as phronesis is to identify and evaluate the significance to policy outcomes of the vested interests and power relations of participants in policy development processes (Flyvbjerg et al, 2012; Ruddin, 2006).

An important qualifier however, is that in the absence of a theoretic base for the design and/or analysis of normative research, there is a risk findings are purely descriptive. If there is no frame through which its results can be critically analysed and interpreted, there is a risk that generalizable evidence outcomes are not apparent and/or testable (Galey & Youngs, 2014).

Notwithstanding this caveat, there are numerous examples in the literature demonstrating that normative research is an important source of generalizable evidence *on* policy development in addition to its instrumental support *in and for* policy development processes. In some instances, combining empirical and normative research goals may strengthen the quality of the evidence outcomes (Bracci, 2002; Nowlin, 2011). For some policy challenges where evidence needs are current and urgent, it may be the only feasible research option (Nowlin, 2011; Flyvbjerg, 2001). The significant time lag between policy implementation and the availability of evaluative evidence on its effectiveness is one example of where normative research may be a more attractive approach than research specifically designed to generate global evidence. (Walt et al, 2008).

1.5.3.3 The potential contribution of universal policy studies evidence in the design and development of responsible marketing policy research is a prevailing evidence gap

The literature notes that research on and for public health policy research has to date largely failed to capture the complexity of policy development processes (Krieger, 2011; Turolto, 2009; Hill & Martin, 2014). This includes food marketing control policies (Block et al, 2011; Seider & Petty, 2004; Hill & Martin, 2014). Hence, there have been multiple calls for the development of research agendas more attuned to the complexity of food marketing policy challenges (Kersh, 2009; Mavromas, 2008; McCarthy et al, 2011; McKinnon et al, 2009). This includes agendas aimed at the generation of evidence on how to design ‘future proof’ policy (that is policy that remains applicable and relevant in the face of rapid changes in commercial marketing practice). Designing control policies that result in a more health supportive food environment. Also designing policy that is internationally applicable and/or enforceable is also now recognised as a high priority: *‘because many companies operate globally, international collaboration is crucial’* (WHO, 2004, p.8). In view of the low impacts of interventions designed and implemented to date, there are an increasing number of calls for research that can support the identification and development of innovative interventions.

Global policy studies evidence can inform policy and research development targeted to these aims. For example, there is a clear recognition in policy studies that no single theory or framework is likely to capture all the variables and mechanisms of effect contributing to a policy development process and its outcome (Galey & Youngs, 2014). Consequently, a pluralistic use of policy theories and constructs is often recommended as a means of supporting innovative policy development (Cairney, 2013; Schlager & Weible, 2013). An example that is relevant to responsible marketing policy development might be applying more than one of theories/models that recognise the impacts of bounded frames on policy development processes. For example a retrospective analysis of the effects of bounded frames (more typically termed in policy studies as 'bounded realities') on a historic policy development process might use punctuated equilibrium theory (Baumgartner et al, 2014). Whereas, for planning purposes, the policy network model might be a more useful frame through which to assess the effects of bounded frames (Kriesi et al, 2006).

In addition to adopting a pluralistic approach in the deployment of constructs, theories and models, policy studies also has a track record of combining theory from disciplines outside policy studies (Cairney, 2013; Schlager & Weible 2013; Sabatier, 2014). This can facilitate the identification of effective interventions from other policy domains. This may be helpful to responsible marketing policy's goal of identifying innovative evidence sources and/or intervention options from other policy domains.

Evidence and theory on multi-stakeholder participation is important for responsible marketing policy research because policy makers continue to demonstrate a preference for multi-stakeholder involvement in policy planning and its delivery (Bryden et al, 2013). The global policy studies evidence base is a potentially rich source of empirical evidence on the benefits and pitfalls of multi-stakeholder participation in policy development processes. There are examples of gains, such as evidence on how the experiential knowledge and insights of policy stakeholders has contributed to innovative policy strategies (Giddens, 1982; Burton, 2006). There are also examples of negative effects such as unequal power relations undermining policy development processes (Giddens, 1982; Flyvbjerg, 2001; Reichertz, 2010). The global evidence base is also a rich source of

theory and hypothesis on how to minimise risks and maximise opportunities arising from multi-stakeholder participation. For example, phronesis (Flyvbjerg et al, 2014) and the advocacy coalition framework (Weible et al, 2011) are just two of a number of research approaches that include the identification of the locus of power and analysis of its impacts as primary research objectives.

The simultaneous pursuit of responsible marketing policy research and the development of more effective interventions has been repeatedly advocated (UN, 2011; McKinnon et al, 2009; Moodie et al, 2013). Health promotion policy research is an area of public health that is considered to have been one of the most progressive in raising awareness and the deployment of research methodologies that aim to simultaneously support policy deployment and the generation of empirical evidence (Dooris, 2006; de Leeuw & Skovgaard, 2005; Bernard & Clavier, 2011). The health promotion literature for example, has extensively described and evaluated the application of iterative and collaborative cycles of '*evidence into practice into evidence*'. The literature indicates this is a strategy that can generate valid and reliable context-specific as well as generalizable evidence outcomes (Dooris, 2006, p. 58). Although its recommendations do not specifically address responsible marketing policies, they are clearly relevant to the goal of progressing responsible food marketing research and policy implementation in tandem.

1.6 In summary

This chapter has set out the context and rationale for the research reported in the thesis. It has also outlined its research objectives and how it aims to address these.

It has outlined the case for exploring food marketing's dynamic and macro level impacts on the food environment. It has also outlined the rationale for including explorations of research approaches in its research objectives. Below, a schematic outline of the evidence in Chapters 2-8, and their Appendices provides an overview of thesis content and structure.

Table 1: Schematic Outline of Thesis Structure and Content

<p><u>Chapter 1: Introduction to the case for rethinking research and policy approaches to responsible food and drink marketing policy development</u></p>
<p>RESEARCH OBJECTIVE #1: EXPLORING HOW AND WHY RETHINKING CAN CONTRIBUTE TO THE RESPONSIBLE MARKETING POLICY EVIDENCE BASE</p>
<p><u>Chapter 2: Current status of responsible food marketing policy and its underpinning research and evidence base</u></p> <p>Source(s) of Content:</p> <ul style="list-style-type: none"> • Cairns G. et al (2013) ‘Systematic reviews of the evidence on the nature, extent and effects of food marketing to children. A retrospective summary’. <i>Appetite</i>, 62, pp. 209-215. • Appendix: Cairns G. (2015) The impact of food and drink marketing on Scotland’s children and young people: a report on the results of questions about exposure and purchase responses included in IPSOS-Mori’s 2014 Young people in Scotland survey. • Appendix: Scottish Government (2015) Food and drink marketing impact on young people: a survey of 11-18 year olds in Scotland Scottish Government Infographic. • Appendix: Burrows D (2015) Junk food dominates marketing landscape in Scotland: survey. <i>Food.navigator.com</i>. <p>Overview of content and rationale for inclusion:</p> <p>The paper provides an overview of the evidence base that currently informs responsible marketing policy and research planning. It reports the results of an updated systematic literature review on the international scale, nature and effects of food promotions to children. It was commissioned by the WHO to support the production of its ‘<i>Set of recommendations on the marketing of foods and non-alcoholic beverages to children</i>’ (WHO, 2010). The WHO recommendations acknowledge the review as a key source of evidence. The paper also retrospectively reviews policy control progress during the preceding decade and implications for future development priorities. It is included because it demonstrates that a lack of translational evidence is a recognised barrier to policy and research innovation.</p>

Appendices:

The survey report (Appendix A) reports primary quantitative evidence on the salience of HFSS food and drinks in the food environment and the purchase responses this elicits. Through evaluation of its findings against policy objectives, the report also demonstrates that contemporary food marketing remains highly unsupportive of dietary public health policy environmental and behaviour change targets. The survey was used to support prevailing policy objectives and to provide a baseline for future monitoring and evaluation.

The infographic (Appendix B) presents main findings from the survey report. The infographic was developed and disseminated to support the Scottish Government's communication objectives. These included raising awareness of the issue, increasing public support for intervention and strengthening the political will for more robust policy.

The news release (Appendix C) is an example of the media interest generated by the infographic and other mass media communications used to publicise the survey's findings.

Chapter 3: Rethinking responsible marketing policy research

Source(s) of Content:

- Cairns G. (original manuscript under peer review at time of viva). The sociocultural impacts of food marketing and implications for responsible food marketing policy: a critical review of evidence.

Overview of content and rationale for inclusion:

The paper reports the findings from a critical review into the indirect effects of food marketing on food purchase and consumption behaviours. Its results indicate that in addition to its direct effects, food marketing also indirectly impacts consumer behaviours through direct effects on cultural norms, values and socially accepted practices. Its findings build on evidence presented in Chapter 2 and is included for two reasons: First, it is currently the only synthesis of evidence on the sociocultural impacts of food marketing and is therefore an original contribution to the evidence base. Secondly, it is an illustrative example of how rethinking the nature of the phenomenon of food marketing can generate novel evidence, insights and interpretations of the available evidence.

Chapter 4: Rethinking responsible marketing policy strategy

Source(s) of Content:

- Cairns G (2013) Evolutions in food marketing, quantifying the impact, and policy implications. *Appetite*, 62, pp.194-197.

Overview of content and rationale for inclusion:

This reports the results of an international policy analysis. It identifies significant gaps between the strategic aims and goals of extant policies and their inherent capacity to achieve them. It is included because it provides evidence that prevailing conceptualisations of food marketing as a micro level, managed and manageable phenomenon limit the scope and effectiveness of policy controls.

**RESEARCH OBJECTIVE # 2:
EXPLORING RESEARCH APPROACH OPTIONS**

Chapter 5: Planning policy-research collaboration

Content Source(s):

- Cairns G & Stead M (2009) 'Nutrition communication, obesity and social marketing: works in progress' *Proceedings of the Nutrition Society*, 68, 1, pp. 11-16.
- Scottish Government (2011) Action 1.16, *Obesity Route Map Action Plan, Updated 2011*, p. 9.

Overview of content and rationale for inclusion:

The paper outlines how and why social marketing is a research approach that can support participatory planning and development of research and policy. It is included because the principles it outlines formed the basis for the real world policy-research collaboration reported in Chapter 6. Item 1.16 from the Obesity Route Map Action Plan is included as illustrative evidence of the policy maker's positive expectations regarding participatory research and policy development strategies.

Chapter 6: Implementing policy-research collaboration

Content Source(s):

- Cairns G (original manuscript under peer review at time of viva). Reporting and reflecting on a programme of pro-nutritionally planned food marketing control policy development and research.
- Scottish Government (2013) *Responsible marketing of food and drink* 24.4.13 News Release.

Overview of content and rationale for inclusion:

The paper reports on the conduct and outcomes from a real world policy and research collaboration. The purpose of the collaboration was to support a multi-stakeholder policy development process. Stakeholders were brought together to identify how a national level

responsible marketing policy regime could be strengthened. It is included here as illustrative evidence of the processes and outputs participatory methodologies can generate.

RESEARCH OBJECTIVE # 3:

EXPLORING HOW AND WHY RETHINKING CAN SUPPORT POLICY INNOVATION

Chapter 7: An example of how rethinking research approaches can support the identification of innovative policy options

Content Source(s):

- Cairns G., De Andrade M. & Landon J. (2016) Responsible food marketing and standardisation: an exploratory study. *British Food Journal*, 118 (7), pp 1641-1664.

Overview of content and rationale for inclusion:

The paper reports the results of a cross policy domain case study. It was commissioned by the United Kingdom's Department of Health as part of a larger investigation into how voluntary food marketing control policy options might be strengthened. Its purpose was to prospectively assess the feasibility of developing an independent benchmark standard for responsible marketing and its potential policy utility. It is included here because it demonstrates how revisions to research approaches can generate innovative evidence and insights and because it is the first research to report on the potential for standardisation to strengthen responsible food marketing policy.

Chapter 8: An example of how rethinking research approaches can support the development of an innovative policy action

Content Source(s):

- Cairns G. & MacDonald L. (2016) Stakeholder insights on the planning and development of an independent benchmark standard for responsible food marketing. *Evaluation and Program Planning*, 56, pp.109-120
- Scott-Thomas (2013) Scotland abandons responsible food marketing standard. *Food.navigator.com* news report 11.12.13.

Overview of content and rationale for inclusion:

The paper reports on primary research into stakeholder responses to policy plans to develop an independent responsible marketing benchmark standard. It reports the conduct of a mixed methods survey commissioned to provide normative support to the stakeholders recruited into a multi-stakeholder development group. It also report the results of a post-hoc analysis of its findings conducted to identify

evidence and implications that may be relevant to future policy development and research. It is included in the thesis because the research outcomes make an original contribution to the global food marketing control policy evidence base. The media report is included as illustrative evidence of the dynamic nature of the setting that contributed to research planning, design, conduct and analysis of findings.

Epilogue

Chapter 2:

Current status of responsible food marketing policy and its underpinning research and evidence base

Content

The chapter comprises the paper Cairns G., Angus K., Hastings G. & Caraher M. (2013). Systematic reviews of the evidence on the nature, extent and effects of food marketing to children: a retrospective summary. *Appetite*, 62, pp. 209-215. Cairns conceived, wrote the first and subsequent drafts of the paper. Angus contributed to the review's literature search screening, and data extraction. All co-authors read and commented on first drafts of the paper and approved final version. Five year impact factor of the journal *Appetite* is 3.323.

Supplementary information is provided as Appendices: Appendix A - Cairns G. (2015) *The impact of food and drink marketing on Scotland's children and young people: a report on the results of questions about exposure and purchase responses included in IPSOS-Mori's 2014 Young people in Scotland survey*; Appendix B - Scottish Government (2015) *Food and drink marketing impact on young people: a survey of 11-18 year olds in Scotland* Scottish Government Infographic; Appendix C - Burrows D (2015) *Junk food dominates marketing landscape in Scotland: survey*. *Food.navigator.com*.

Evidence Contributions

The paper reports the results of Cairns et al (2009) *The extent, nature and effects of food promotion to children: a review of the evidence to December 2008*. Geneva: World Health Organization. It also provides a retrospective analysis of policy progress and examines implications for future development priorities.

The survey report provides quantitative evidence on the salience of HFSS food and drink marketing in the food environment and the purchase response, it elicits. Through an evaluation of its findings against prevailing policy objectives it also provides evidence of the significant gap between prevailing policy goals and current marketing impacts.

Knowledge Translation Contributions

The review was commissioned by the World Health Organization to support the production of the 'Set of Recommendations on the marketing of foods and non-alcoholic beverages to children (WHO, 2010). The Recommendations, which formally acknowledge the review as a key source of evidence, were endorsed by the 2010 World Health Assembly and the 2011 United Nations General Assembly High Level Meeting on the Prevention and Control of Non-communicable Diseases (UN, 2011). Cairns has presented its results by invitation to multiple international policy workshops, reviews and media events.

In addition to providing evidential support for the development of the Scottish Government's 'Supporting Healthy Choices' policy framework (Scottish Government, 2014), as the author of the survey report (Appendix A), Cairns, has also provided support to the Scottish Government's communications strategy. She was involved as an advisor in the design of a set of infographics (see Appendix B for an example) which was commissioned by the Scottish Government to disseminate survey findings. An example of media impact generated by the infographics and Cairns' involvement is presented as Appendix C.

2.1 Systematic Reviews of the evidence on the nature, extent and effects of food marketing to children

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Research Review

Systematic reviews of the evidence on the nature, extent and effects of food marketing to children. A retrospective summary [☆]

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ABSTRACT

A 2009 systematic review of the international evidence on food and beverage marketing to children is the most recent internationally comprehensive review of the evidence base. Its findings are consistent with other independent, rigorous reviews conducted during the period 2003–2012. Food promotions have a direct effect on children's nutrition knowledge, preferences, purchase behaviour, consumption patterns and diet-related health. Current marketing practice predominantly promotes low nutrition foods and beverages. Rebalancing the food marketing landscape' is a recurring policy aim of interventions aimed at constraining food and beverage promotions to children. The collective review evidence on marketing practice indicates little progress towards policy aims has been achieved during the period 2003–2012. There is a gap in the evidence base on how substantive policy implementation can be achieved. We recommend a priority for future policy relevant research is a greater emphasis on translational research. A global framework for co-ordinated intervention to constrain unhealthy food marketing which has received high level support provides valuable insight on some aspects of immediate implementation research priorities.

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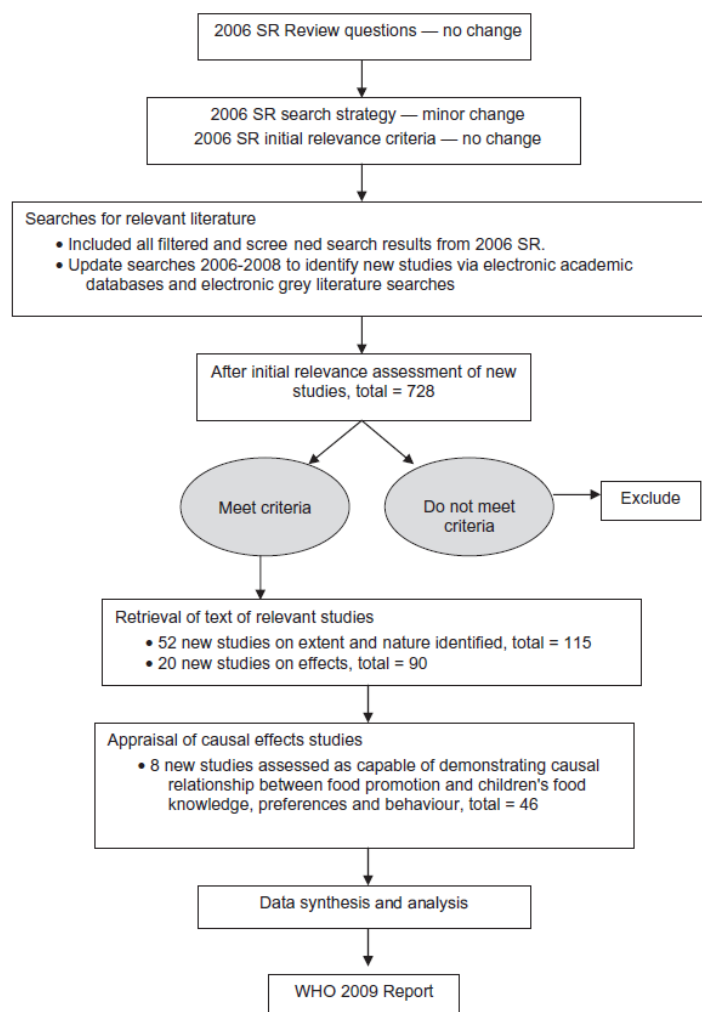


Fig. 1. Flow diagram of 2009 systematic review update search, screening and synthesis.

Data on all forms of food promotion, including but not restricted to broadcast, print and digital advertising; packaging, labelling and point of sale promotions; branding and sponsorship; merchandising and the use of licensed or brand-based characters was eligible for inclusion to answer questions (Qs) on nature and extent of food promotion (Qs 1–4) and descriptive evidence on effects (Q5). The unit of analysis of eligible evidence was any marketing activity reporting on a range of qualitative and quantitative outcomes.

For questions on the effects of marketing (Qs 6–8), the unit of analysis for eligible evidence was children aged 2–15 years. The outcome measures for effects were nutrition knowledge, food and beverage preferences, purchase behaviours, consumption behaviours and diet-related health indicators. An additional eligibility criterion was that the research design had to be capable of

demonstrating marketing as the independent variable acting on one of five pre-specified measures of effects. Study design was assessed using the Bradford-Hill criteria for determining if observed associations between variables may be inferred to be causal or simply correlational (Bradford-Hill, 1965).²

Two reviewers independently screened and filtered raw search results against initial relevance criteria outlined above. Data were sorted according to relevance to specific research questions. All data sources that met eligibility criteria for one or more research

² Bradford-Hill outlined nine guidance criteria for assessing if causality is a likely explanation for observed association between variables. These are the strength, specificity, consistency, temporality, reversibility, and dose-responsiveness of observed relationships, as well as consideration of the coherence and plausibility of proposed causal link and any counter-factual explanations.

question were summarised in Data Extraction Tables, coded and thematically analysed. A flow diagram summarising the results of searching and screening is given in Fig. 1.

Two reviewers applied the causality and quality rating criteria to screen and grade studies eligible for inclusion to answer Qs 6–8. Any discrepancies in assessment were resolved through discussion and/or third party expert opinion. Individual studies assessed as capable of testing for causality using the Bradford-Hill criteria were subsequently quality appraised using a five item, 25 point rating scale. Quality of exposure and effects measures, appropriateness and rigour in application of analysis, completeness of reporting items were each scored on a scale of 1–5, and then summed to give an overall score of low (5–11), medium (12–18) and high (19–25). Individual study scores, the balance of negative, positive and inconclusive effects of the pooled evidence and the size of any reported effects were then reviewed in combination to provide an overall weight of evidence assessment for the pooled evidence for each of Qs 6–8 as weak, modest or strong.

Key findings were synthesised for each question in narrative form. The heterogeneity of measures precluded meta-analysis or systematic testing for selection bias.

Results

Overall results of search and screening

A total of ninety-nine primary studies and 16 review articles met inclusion criteria for questions on nature and extent of food promotion to children in the 2009 SR. Some studies contributed evidence to more than one question. Cross-sectional content analysis was the principal study design (over 75%) followed by reviews and other methods of content analysis. North America was the most common source of evidence (more than 50% by fieldwork and/or authorship provenance) followed by Europe, Australasia, Asia, then studies and reviews with international scope.

Forty data sources provided descriptive evidence for Q5, on the qualitative nature of children's response to food promotion. Forty-six studies on the effects of food promotion on children's diet, dietary determinants and health were assessed as capable of demonstrating causality and were therefore included in the evidence pool for Qs 6–8. This included eight additional studies to those identified in the 2006 SR. Design of studies assessed as capable of answering Qs 6–8 were randomised controlled trials ($n = 20$), non-randomised controlled trials (e.g. naturalistic, quasi-experimental) and experimental ($n = 12$), cross-sectional ($n = 11$) and longitudinal observational surveys ($n = 3$). North America was the main source of evidence, especially for research included in the evidence pools for Qs 6–8 (>80%). The additional eight studies introduced to the existing evidence pools for Qs 6–8 did not result in any change to assessments of the weight of evidence or overall conclusions for any of the five outcomes examined.

No changes in nutritional quality of products promoted, marketing strategies, messages or themes were apparent from comparison of the 2006 and 2009 SRs. A small proportionate shift from TV-based advertising towards electronic/digital media marketing, integrated marketing strategies and brand research is apparent from comparison of the 2006 and 2009 SRs. The change in research focus reflects a real world shift in commercial marketing practices (FTC, 2008; Jones, 2009).

A narrative summary of main findings drawn from the pooled evidence for each research question is described below, with illustrative examples of included studies. A summary of the volume and nature of the pooled evidence for each research question is given in Table 1. Summaries of all studies included in the system-

Table 1
Summary table of the evidence pool for the SR research questions.

Research question	Identified studies n	Nature of evidence	Weight of evidence
Promotional channels	87	Content analyses and reviews	N/A
Foods promoted	84	Content analyses	N/A
Creative marketing strategies	69	Mainly content analyses and qualitative studies	N/A
Marketing strategies in lower income countries	32	Mainly descriptive surveys and qualitative studies	N/A
How children respond	40	Narrative and qualitative studies	N/A
Effects on food knowledge	9	2 × high quality studies 7 × medium quality studies	Modest
Effects on food preferences	18	5 × high quality studies 10 × medium quality studies 3 × low quality studies	Modest
Effects on food purchases	8	4 × high quality studies 3 × medium quality studies	Strong
Effects on food consumption	18	1 × low quality studies 2 × high quality studies 13 × medium quality studies	Modest
Effects on diet-related health	7	3 × low quality studies 1 × high quality studies 5 × medium quality studies	Modest
Extent relative to other influences	8	1 × low quality studies 2 × high quality studies 4 × medium quality studies	Modest
Category and/or brand-level effects	15	2 × low quality studies 5 × high quality studies 9 × medium quality studies 1 × low quality studies	Strong

Quality rating key: low score = 5–11, medium score = 12–18, high score = 19–25.

atic review are provided in the Data Extraction Tables of the full reports.

The nature and extent of food promotion to children

Promotional channels used by food marketers

The evidence base reflects the fact that TV advertising is the most popular promotional channel, although its dominance is waning. Internet-mediated marketing and to a lesser extent direct mail marketing, mobile phone messaging, magazines, comics and other forms of print, point of sale, free samples, gifts and tokens, packaging, loyalty schemes, tie-ins with licensed characters and programmes, sponsorship, in-school marketing, and integrated marketing packages are also deployed to promote food and beverages to children.

What food items are promoted to children?

The most common categories of food products promoted to children are pre-sugared breakfast cereals, soft drinks, savoury snacks, confectionery and fast foods. Estimates of the proportion of food marketing promoting these product categories to children varied from 60% to 90%. A US Federal Trade Commission survey of industry expenditure reported 63% of the marketing spend directed to children was for carbonated beverages, fast food and breakfast cereals. The next most heavily promoted food categories were juice and non-carbonated beverages, snack foods and candy/frozen deserts which accounted for 25% of total

expenditure (FTC, 2008). Food promotion to children is proportionately greater than that directed to adult audiences. For example, Chestnutt and Ashraf (2002) found 63% of advertising during children's programming was for food but only 18% during prime-time programming.

Creative strategies used by food marketers

Entertainment techniques such as the use of animated and other fictional characters are more likely to be used in food advertisements than in non-food advertisements aimed at children. Frequently deployed appeal themes are taste, humour, action-adventure, fantasy and fun. More serious health and nutrition appeals (with the exception of breakfast cereal promotions) and the use of disclaimers (qualifying statements on products' contribution to consumer needs) are rarely deployed. A study illustrating this (Gantz, Schwartz, Angelini, & Rideout, 2007), reported that 34% of TV food advertising targeting children used taste appeals, 18% used fun appeals and only 2% used nutrition or health appeals. There is some evidence that health and nutrition appeals are sometimes misleading, and that the boundary between television programmes and the advertising breaks is sometimes blurred. Purchase incentives such as competitions, give-aways, brand-based discounting, as well as the deployment of innovative digital technology-mediated marketing are increasingly common.

What marketing strategies are used in low- and middle-income countries?

The nature of food promotion in low- and middle-income countries mirrors the strategies, techniques and channels deployed in high-income countries. It is rapidly expanding and is associated with the promotion of foods new to the indigenous food culture, such as fast-food, dairy products in Asia, and carbonated soft drinks (see for example Hawkes, 2002, 2006).

Food marketing in low-income countries aimed at children and families is using TV advertising, sports stars and celebrity endorsement, interactive digital technologies and building of brand loyalty to promote the same types of micro-nutrient poor, energy-dense foods and beverages as in richer countries. Descriptive survey data suggests that the qualitative nature of responses of children living in low and middle income countries to food promotion is very similar to those observed in developed economies (ibid.).

Marketers in low- and middle-income countries are targeting children as independent consumers, as influencers of the purchase decisions of their families, and as influential intermediaries who can introduce both their own and older generations to new consumer experiences such as fast food restaurant dining. For example, Chan (2005) suggests that child-related consumption is responsible for up to one third of overall household consumption in China and McNeal and Yeh (1997) describe how McDonald's and Pizza Hut have relied on children to expand their overseas markets in Pacific Asia and Europe.

Effects of food promotion to children – How do children respond to food promotion?

Descriptive survey data provided insights into the qualitative nature of children's responses. TV advertisements, free gifts and packaging routinely attract children's attention, and stimulate acceptance, liking of, and demand for products. Observational evidence found children self-reported regularly buying foods without parental oversight and that parents self-reported that they frequently accede to children's marketing-influenced purchase requests.

Is there a causal link between food promotion and children's food knowledge, preferences, purchasing and consumption behaviours, and diet-related health?

Nutrition knowledge

Four studies rated as medium or high quality found that exposure to promotions of low nutrition foods and 'diet' foods correlated with poor nutrition knowledge; one study found a positive association between exposures to high nutrition foods advertising and improved knowledge. Four studies using less detailed outcome measures found no association. Overall, the weight of evidence was assessed as modest and on balance indicates that food and beverage promotion can impact children's nutrition knowledge and perceptions of what constitutes a healthy diet.

Food preferences

Nine out of a total of 16 experimental studies and one of two cross-sectional studies reported significant changes in food preference attributable to marketing exposure; one study reported non-significant results in the direction of effect; and five studies found no evidence of effect. Two experimental studies measured preferences but did not report findings. A number of studies found evidence for preference changes towards high fat, salt or sugar foods in response to food advertising (see for example Halford, Boyland, Cooper et al., 2008); promoted branded foods (see for example Halford, Boyland, Hughes et al., 2008) and non-product specific brand loyalty (for example Robinson, Borzekowski, Matheson, & Kraemer, 2007). Overall, the weight of evidence was assessed as modest and on balance indicates that food promotion can influence food preference.

Food purchase and purchase-related behaviour

Seven out of eight studies reported statistically significant marketing-attributable effects and one study reported no association. There was evidence that the nutritional quality of promoted foods correlated with the nutritional quality of product purchases and purchase requests. For example, French et al. (2001) found promotional signs for low fat snacks increased vending machine sales of those products. Overall, the weight of evidence was assessed as strong and indicates that food promotion can directly influence purchasing choice and requests.

Consumption behaviours

Fourteen of the 18 included studies demonstrated positive associations between food promotion and consumption behaviours such as increased snacking, higher energy intake and less healthful food choices. Six of the studies reported significant effects of marketing exposure. The effects included increased frequency of selecting less healthful foods in preference to healthier options (for example, Gom & Goldberg, 1982); increased consumption of calories (for example, Jeffrey, McLellarn, & Fox, 1982) and total increased food intake (for example Halford, Gillespie, Brown, Pontin, & Dovey, 2004); Eight studies reported small non-significant effect sizes and four reported inconclusive results.

The evidence on specificity or universality of effect is mixed. For example an experimental study found similar increases in caloric consumption for both normal weight and overweight children in response to food advertising (Halford, Boyland, Hughes, Oliveira, & Dovey, 2007), whilst a similar study by the same research group found significant differences in caloric intakes positively correlated with body mass index (Halford, Boyland, Hughes et al., 2008). Overall, the weight of evidence was judged as modest and that food promotion can influence food consumption behaviours.

Diet-related health status

All included studies were cross-sectional. All used TV viewing as a proxy for exposure to TV advertising, and one study reported evidence for TV viewing as a valid proxy measure for exposure to food promotion. Four reported positive correlations between food promotion and nutrition diet quality: Bolton (1983) reported a relationship between advertising and snacking frequency as well as lower nutritional diet quality. Coon, Goldberg, Roger, and Tucker, (2001) and found lower quality diet was associated with exposure to television. Two studies reported a positive associations between TV viewing and obesity, and one with blood cholesterol levels (Dietz & Gortmaker, 1985; Matheson, Killen, Wang, Varady, & Robinson, 2004; Wong et al., 1992). None of the studies reported effect size. The weight of evidence was assessed as modest but did indicate that food promotion can influence diet-related health status.

The influence of food promotion relative to other factors

Eight cross-sectional studies explored the relative magnitude of effect sizes of parents, peers, TV viewing behaviours, and food promotion on children's food and health outcomes. Studies including measures of socioeconomic status analysed this as a moderating, not independent variable and the magnitude of its influence could not be inferred from the pooled evidence. Collectively, parental influences, including own dietary behaviours, food provisioning, communication styles, and TV viewing accounted for more variance in child food and health outcomes than any other independent variables explored in the included studies (Bolton, 1983; Kuijzen, Schuurman, & Bomhof, 2008; Norton, Falciglia, & Ricketts, 2000; Ritchey & Olson, 1983). Other reported influencing factors were peers and friends and the sedentary nature of children's TV viewing behaviours (Coon, Goldberg, Roger, & Tucker, 2001; Dietz & Gortmaker, 1985; Gracey, Stanley, Burke, Corti, & Beilin, 1996; Norton et al., 2000; Wong et al., 1992). The weight of evidence was assessed as modest but did indicate that food promotion can act as a significant independent determinant of children's food behaviours and health status.

Food promotion effects on brand and category choice

In total, fifteen studies contributed evidence to answer this question. A study by Robinson et al. (2007) elegantly demonstrated how branded packaging (fast food chain, MacDonal'd's) influenced food preferences of pre-school children for both products sold under the brand name, such as hamburger and foods, such as carrots which at the time the research was conducted were not sold by the fast food chain. Six studies explored brand level effects, and four of these reported evidence of effects. For category level effects, six studies reported unequivocal evidence of effects, three reported inconclusive results and two reported no effect. Overall weight of evidence was assessed as strong and indicated that food promotion does influence food choices at category and brand level.

Discussion

The first systematic review of evidence on the nature, extent and effects of marketing was published in 2003. It examined more than 30 years of evidence on marketing practice and its effects in developed economies (Hastings et al., 2003). Subsequent SRs published in 2006 (Hastings et al., 2006) and 2009 (Cairns et al., 2009) extended the geographic scope of the evidence base to include research conducted in low income countries. A North American systematic review of evidence published in 2006 also concluded that food and beverage promotion to children is extensive, primarily

promotes low nutrition foods and influences children's food behaviours and diet-related health (McGinnis et al., 2006).

The collective evidence of the major reviews published to early 2012 capture nearly 40 years of evidence on the effects of marketing. There are methodological challenges in isolating marketing from other influences on food behaviour in the complex and inter-related pathways determining diet-related health. Nevertheless, there is a convergence of evidence employing a mix of research methods from experimental studies to naturalistic surveys, indicating marketing is modifiable risk factor for children's health.

Recent non-systematic reviews (Kunkel, McKinley, & Wright, 2009; Kraak, Story, Wartella, & Ginter, 2011; Adams, Tyrell, Adamson, & White, 2012) which examined advertising and marketing practice in developed economies collectively provide retrospective insight on marketing trends in the wake of recent policy actions. The reviews indicate marketing practice has altered little and is, to date, remarkably resistant to the change objectives of recently introduced marketing control policies. Food marketing to children continues to primarily promote high fat, salt or sugar foods. Marketing strategies continue to employ multi-faceted and integrated techniques which are highly engaging and attractive to children. Promotions continue to target children as consumers in their own right, and as intermediaries who can influence other consumers especially their parents and peers. The marketing strategies and techniques used in developed economies are similarly deployed in lower income countries. There is little commercial promotion of foods and beverages recommended as core to a healthful diet.

The United Nations political declaration includes a commitment to 'take measures to implement the WHO Set of recommendations to reduce the impact of the marketing of unhealthy foods and non-alcoholic beverages to children, while taking into account existing national legislation and policies' (UN, 2011: 8). The WHO Set of Marketing Recommendations call for more responsible marketing, supportive and enabling policy, comprehensive monitoring and evaluation of policy actions and for a global multi-sector approach.

Successful implementation of the WHO Set of Marketing Recommendations would reduce children's exposure to a significant modifiable risk factor for NCDs, overweight and obesity. The lack of progress in rebalancing the marketing landscape to date hints at the enormity of the policy challenge (Adams et al., 2012; Cairns et al., 2009; Hastings et al., 2006; Kraak et al., 2011; Kunkel et al., 2009). The relationship between research and policy is likely to be most effective if policy informs evidence as well as evidence informing policy. The current evidence base provides limited insight on how policy effectiveness may be strengthened. The gap between basic food and health research and translational research for the effective implementation of policy has recently been noted as a next step research priority for Europe by McCarthy et al. (2011). We suggest researchers, policymakers and marketing practitioners recognise that the question of if global actions are necessary has been answered. The goal for future policy research must be to identify how the necessary changes in food promotion can be achieved.

Conclusions

We recommend future research strategies build on the empirical evidence, summarised in the reviews, that unconstrained food marketing continues to promote low nutrition foods and that marketing influences children's food behaviours and diet-related health. A shift in emphasis from 'if' and 'what' marketing influences children's health to 'by what means' can children's exposure to the promotion for low nutrition, unhealthy foods be substantively reduced requires a reorientation of research. Translational research directly aimed at supporting prevailing international

policy aims and capacity building can make a valuable and original contribution to the policy-relevant evidence base. The WHO Set of Marketing Recommendations can inform future research scope and purpose.

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Chapter 3:

Rethinking responsible marketing policy research

Content

The chapter comprises a paper which at the time of the viva was under peer review.

Evidence Contributions

The paper reports the findings from a critically interpretive review into the indirect effects of food marketing on food purchase and consumption behaviours. Its results indicate that in addition to its direct effects, food marketing also indirectly impacts consumer behaviours through direct effects on cultural norms, values and socially accepted practices. It is the first synthesis of evidence on the sociocultural impacts of food marketing.

Knowledge Translation Contributions

The original research report on which the review is based was commissioned by the Scottish Government (Cairns & MacDonald, 2013). It was commissioned as a supporting resource for its joint initiative with the British Standards Institute to develop a benchmark standard for responsible food and drink marketing (Scottish Government, 2013). It was utilised by the Steering Group convened to provide expert support for the initiative. Cairns was principal investigator for the research and she also provided support to the development process as a member of the Steering Group.

3.1 The sociocultural impacts of food marketing and implications for responsible food marketing policy: a critical review of evidence

Cairns G. (under peer review at time of viva)

ABSTRACT

Objectives: Through critically interpretive review, identify and map evidence on the effects of food and beverage marketing on the sociocultural food environment. Explore implications for future responsible marketing policy and research.

Methods: A rapid evident assessment was used to search and screen for evidence. Results were thematically analysed and synthesised in narrative form. Implications for future responsible marketing policy and research were critically appraised by applying research questions grounded in macromarketing theory to the narrative synthesis.

Results: Critical analysis of the fragmented but convergent pool of evidence indicates contemporary food marketing is contributing to shifts in dietary norms, values and socially prevalent practices. As a consequence of macro level processes, non-target-audiences as well as target consumers are impacted. Because of the dominance of promotions for energy dense, high fat, salt and/or sugar foods, these impacts are unsupportive of the food environment aims of responsible marketing policy.

Conclusion: An expansion of the scope of future policy and research is indicated. The effectiveness of future responsible marketing policy could be strengthened by including food marketing's macro level impacts on the sociocultural food environment as target variables. A systems level approach to future policy design and development is a strategy with the potential to be supportive of reconfigured, macro level approaches to intervention.

Originality: The paper is the first synthesis of evidence on the impacts of food marketing on the sociocultural food environment. It is intended to complement the prevailing evidence base on food marketing micro level effects.

INTRODUCTION

Constraining the impacts of contemporary food marketing is a policy priority

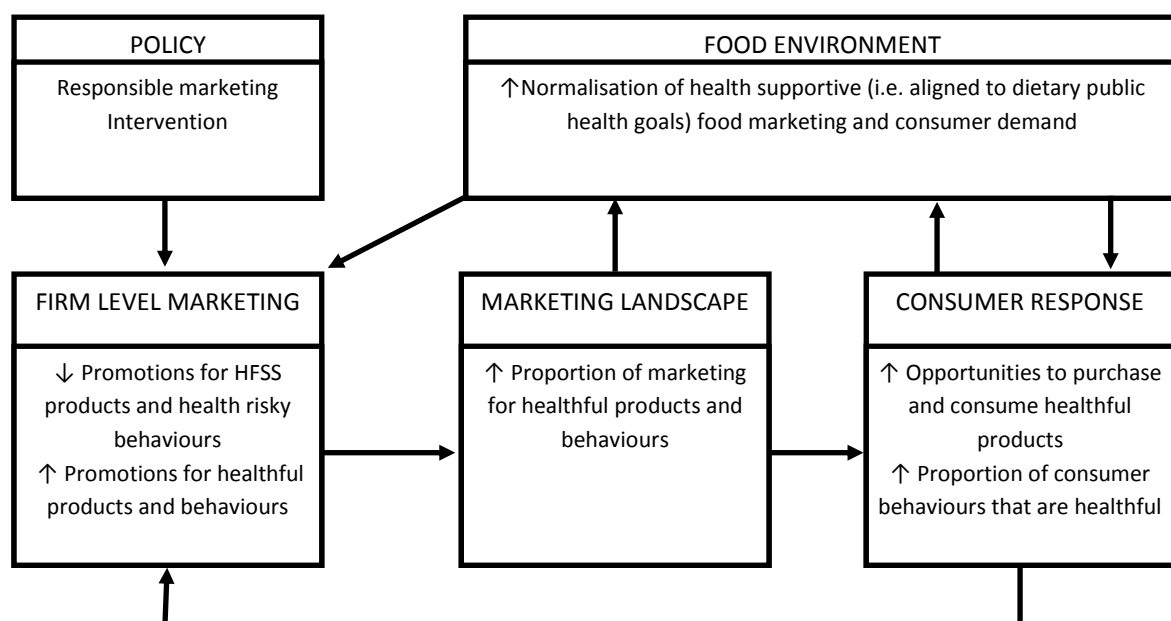
A reduction in the consumption of energy dense, high fat, salt and/or sugar foods and drinks (HFSS foods) is a priority for dietary public health policy aiming to reduce the prevalence of non-communicable diseases (NCDs) (Cairns, Angus & Hastings, 2009; McGinnis, Gootman & Kraak, 2006; WHO, 2010; WHO, 2012). An integral component of NCD prevention and control policy strategies around the world is the constraint of commercial marketing impacts on food behaviours (Hawkes & Lobstein, 2011). This is because currently, food and drink marketing (food marketing) predominantly promotes foods HFSS. A Federal Trade Commission survey of the forty eight largest food and drink companies in the United States of America for example found fast foods, carbonated and non-carbonated sweetened beverages and juices, sweetened breakfast cereals, snacks and sugar-based confectionery collectively accounted for 90% of their total marketing expenditure (FTC, 2012). There is clear evidence this focus is undermining dietary public health policy effectiveness (WHO, 2010; Cairns et al, 2013; Galbraith-Emami & Lobstein, 2013)

The food environment is an important target for dietary public health policy

'Responsible marketing' has emerged as a particularly popular marketing control policy strategy (Harris et al, 2009a; WHO, 2010; Hawkes & Lobstein, 2011). A scan of the literature by the authors of this paper found no universally recognised definition of what constitutes 'responsible food marketing' or the aims of 'responsible (food) marketing policy'. However, the World Health Organisation's (WHO) 'Set of Recommendations on the Marketing of Foods and Non-alcoholic Beverages to Children' (WHO, 2010) typifies the strategic aims of the responsible marketing policies currently in force around the world. The Recommendations advises governments that 'responsible (food) marketing policies' should aim to create conditions where children can *'grow and develop in an enabling food environment – one that fosters and encourages healthy dietary choices and promotes the maintenance of healthy weight'* (WHO, 2010, p.4). Figure 1: Responsible marketing policy theory of change, is a schematic outline of the bundle of strategic goals and theory of change underpinning the approach of WHO and national level responsible marketing policy

regimes. As Figure 1, and the WHO statement clearly illustrate, a strategic aim of responsible marketing policy intervention is modification of the food environment, as well as individual level food behaviours enacted in that environment. Recent policy analyses however, have noted that the defined targets of prevailing responsible marketing policy regimes are confined to marketing’s micro level effects and that they are not designed to constrain food marketing macro level effects (Cairns, 2013; Hoy, Childers, Morrison, 2012).

Figure 1: Responsible marketing policy theory of change



There is a small but growing evidence base on the impacts of food marketing on the physical food environment (Story et al, 2008). To date however, there has been no systematic collation or evaluation of the marketing’s impacts on the sociocultural food environment (Fitzpatrick et al, 2010). There is clear recognition in the dietary public health literature that sociocultural variables in other contexts (such as family and community level norms, values and practices) are highly influential determinants of individual level food behaviours (Atkins & Bowler, 2001; Story et al, 2008 ; Harrison et al, 2011). There is also an extensive pool of evidence in the marketing literature demonstrating commercial marketing is responsible for significant and profound impacts on social norms, values and practices and that these in turn impact individual level behaviours (McCracken, 1986; Arnould & Thompson 2005;

Smith, Drumwright & Gentile, 2010; Wilkie & Moore, 2012). Research into marketing impacts on the macro level sociocultural food environment is currently therefore a gap in the responsible marketing policy research agenda (Hill, 2010; Fitzpatrick et al, 2010; Hill & Martin, 2014).

There is clear recognition in the dietary public health literature that sociocultural variables in other contexts (such as family and community level food and dietary norms, values and practices) are highly influential determinants of individual level food behaviours (Atkins & Bowler, 2001; Story et al, 2008 ; Harrison et al, 2011). There is also an extensive pool of evidence in the marketing literature demonstrating commercial marketing in general is responsible for significant and profound impacts on social norms, values and practices and that these in turn impact individual level behaviours (McCracken, 1986; Arnould & Thompson 2005; Smith, Drumwright & Gentile, 2010; Wilkie & Moore, 2012). Research into food marketing impacts on the macro level sociocultural food environment is currently however a gap in the responsible marketing policy research agenda (Hill, 2010; Fitzpatrick et al, 2010; Hill & Martin, 2014).

This paper aims to be first step in addressing this gap and exploring its policy implications. It reports on the results of a critically interpretive review of evidence on food marketing's ecological, macro level impacts on sociocultural determinants of food purchase and consumption behaviours. The review consciously set out to avoid duplicating the established, existing literature on food marketing's micro level impacts on food behaviours at the individual level (Harris et al, 2009a; Harris, Brownell & Bargh, 2009b; Hoy, Childers & Morrison 2012; Cairns et al, 2013). The evidence on marketing's micro level effects has already made an important contribution to policy development through its collation of a substantive and convincing body of evidence on its negative effects on individual consumer food behaviours (Seiders & Petty, 2004; McGinnis et al, 2006; WHO, 2010). The review reported in this article aimed to build on this by exploring food marketing's dynamic, sociocultural environment impacts. It aimed to identify evidence from multiple disciplinary literatures. The majority of this evidence has received little recognition in the responsible marketing policy literature to date (Seiders & Petty, 2004; Moore, 2007; Hill & Martin, 2014). Its screening criteria were developed to ensure it focused only on macro level,

sociocultural impacts. It aimed to build on its findings by exploring their implications for the policy aim of '*creating an enabling food environment*'.

Study methodologies

Critical review was identified as the most appropriate review methodology for the following reasons. It provides a structure through which prevailing themes, constructs and evidence sourced from a broad range of disciplines can be scoped and thematically mapped. It has the capacity to provide a broad and comprehensive overview of current evidence and evidence gaps. It also provides a structure through which evidence relevant to conceptually novel policy-relevant research questions (in this instance, the impacts of food marketing on sociocultural determinants of food behaviour) can be identified and its policy significance, critically appraised (Grant & Booth, 2009). Its exploratory and qualitatively interpretive capacities indicated it was a more appropriate strategy than scoping review methodologies (Grant & Booth, 2009; Hagen-Zanker & Mallett, 2013). It was also more appropriate than systematic review because the aim was to map a nascent pool of evidence, rather than critically evaluate the reliability and validity of a mature evidence base (Grant & Booth, 2009; Gough, Thomas & Oliver, 2012; Civil Service, 2012; Hagen-Zanker & Mallett, 2013).

The study used a rapid evidence assessment (REA) search and screen strategy. REA was selected because it is capable of searching across a wide and heterogeneous range of disciplinary literatures. It therefore facilitates the building of a conceptually focused, but broadly sourced (in geographic and disciplinary terms) evidence map (Grant & Booth, 2009; Thomas, Newman & Oliver, 2013).

In order to advance the '*conceptual contribution*' of identified '*significant knowledge*' an important component of critical review is '*embody[ing]*' the identified evidence '*in existing or generating new theory*' (Grant & Booth, 2009). In this study the results of the REA-based search and screening of evidence sourced from public health, behavioural social sciences, food studies, as well as the business and marketing literatures were embodied by applying macromarketing theory based questions as the analytic lens. Macromarketing conceptualises marketing as a phenomenon that utilises macro level as well as micro level causal pathways to achieve its impact (Hunt, 1981; Mittelstaedt, Kilbourne & Mittelstaedt, 2006; Peterson, 2010). It therefore provided a structural frame through which macro level impacts could be captured. It also facilitated their critical appraisal for policy implications

alongside the prevailing knowledge and evidence bases grounded in conceptualizations of food marketing as a micro level phenomenon.

Delineating the review's scope

To avoid duplication of existing evidence syntheses and ensure the review was consistent in its identification of evidence across a wide range of disciplines and/or subject areas, a glossary of terms and constructs relevant to the review's aims was compiled. The glossary included terms relevant to food marketing's impacts on sociocultural determinants of purchase and consumption behaviours. The glossary was developed through pilot scanning of the literature in advance of the REA, with further adaptation in the search and screening stages. It was used as a reference frame through the review, to ensure search, screening and critical interpretation decisions were consistent, whilst also being capable of synthesising evidence from disciplines which each drew on their own respective language, constructs and/or paradigms. A copy of the glossary is provided in Box 1: Glossary of Terms for Sociocultural Determinants of Food Behaviours.

METHODS

The search and screening stages of the review were guided by the following research question: *'What is the evidence that food marketing moderates sociocultural determinants of purchase and/or consumption behaviours?'* A summary of the review's protocol is presented in Box 2: Protocol for evidence search, screening and data extraction.

Initial searches aimed to identify evidence reviews concerned with marketing and sociocultural determinants of food behaviours. Searches were conducted on the Web of Science, Business Source Premier and the World Advertising Research Centre databases and search engines in the second quarter of 2013 using the search terms listed in the protocol. Two researchers screened results of the search process by assessing titles and abstracts of the identified reviews. Full text copies of these reviews were obtained. Their contents and bibliographies were then hand searched to identify potentially relevant individual studies.

In a snowballing process, the process was repeated for individual studies identified as potentially relevant by obtaining the full text copies of these papers and hand searching their bibliographies also.

Box 1: Glossary of Terms for Sociocultural Determinants of Food Behaviours

Food culture is an umbrella term for socially accepted values, norms and practices regarding food purchase, provisioning, preparation and consumption. It is also used to describe habitual behaviours and eating patterns. Food cultures are dynamic and increasingly transitional phenomena. They reflect and facilitate functional and symbolic transformational food system change; and a means of expressing world views and belief systems (Fieldhouse, 1996; Germov & Williams, 2004).

Food norms are the observable, socially common practices (descriptive norms) and/or the social rules regarding acceptable and unacceptable behaviors (injunctive norms). They emerge from an iterative process of exposure of population groups to external factors and modification by group members (Rozin, 1996; Jetten et al, 2014).

Food values and social consensus on acceptable and/or desirable food behaviours are the architectural base or 'glue' of socially endorsed practices. Social consensus on food and dietary cultural values reflect, moderate and adapt to social and technological trends. They are spread by social networks and hence play a key role in the adoption and diffusion of innovations (Germov & Williams, 2004; Sunstein, 1996; Madan et al, 2012).

Food practices and habits are population/network wide habitual, routinized and/or ritualised food behaviours. They fulfil symbolic as well as functional roles. They are the product of historic and contemporary cultural, social and economic influences and material characteristics of food systems (Fieldhouse, 1996; Rozin, 1996; Atkins & Bowler, 2001)

Screening was conducted by each of the two researchers independently, guided by the glossary and inclusion criteria specified in the protocol. Discussions between the two researchers conducting independent assessments were held regularly to ensure conceptual clarity and consistency in their decision making. Any review or single study paper, considered ambiguous by the researcher originally assigned to assess, was read by both researchers and a joint decision made following discussion. Consistency checks on the two researchers' assessment decisions were conducted by randomised cross checking of independent screening decisions. The test indicated 100% consistency in researcher's independent assessment decisions.

A critical review and synthesis was conducted on the reviews and single study papers that met all inclusion criteria specified in the protocol and were therefore assessed as relevant to the research question. Their critical interpretation was guided by published guidelines for thematic analysis of qualitative secondary data for policy purposes (Thomas & Harden, 2008; Grant & Booth, 2009; Robson, 2011). First, a descriptive coding frame was drafted by the two researchers. This first draft was based on the glossary terms and other terms (for example, 'glocalisation and 'eating patterns') identified by the researchers in their screening reads of evidence. The coding frame was subsequently developed collaboratively and iteratively reduced into an analytical frame, as the dominant themes and constructs emerged through the processes of data extraction and critical interpretation. Results of the REA were synthesised narratively, structured by the five conceptual themes that emerged from the iterative interpretation and coding process.

Each of the conceptually structured narratives was subsequently appraised for policy implications through the application of the following two macromarketing grounded research questions:

- What are the strategic implications for policy of food marketing effects on sociocultural determinants of food behaviours?
- How can negative macro level effects of food marketing be mitigated?

Box 2: Protocol for evidence search, screening and data extraction

Research question	What is the evidence that food marketing moderates sociocultural determinants of purchase and/or consumption behaviours?
Search terms	(diet OR food) AND (marketing OR advertising OR promotion) AND (systematic review); (food culture OR food norms OR food values OR food practices OR food habits OR dietary consensus OR food ways) AND (marketing OR advertising OR promotion) AND (systematic review); (food buying OR purchase OR consumption) AND (marketing OR advertising OR promotion) AND (systematic review)
Data sources	Web of Science, Business Source Premier, World Advertising Research Centre data bases searched for reviews 21.5.13 Hand search of related systematic literature searches. Retrieval of full text of individual studies identified as relevant from review content and bibliographies. Hand searches of grey literature available in the public domain, including Mintel, KeyNote and Euromonitor reports. Date range 2008-2013
Screening criteria	Any qualitative study or quantitative study reporting on purchase and/or consumption responses and changes to food culture, norms, values, practices, habits and/or social agreement/shared perceptions. All age ranges included. Marketing activities included but not restricted to direct marketing communications (e.g. paid for advertising; product attribute claims such as nutrition, sensory benefits; social media promotions), indirect marketing communications (e.g. sponsorship; branding), price incentives (e.g. direct price discounts; coupons, multipacks and buy one, get one free offers); packaging and point-of-sale promotions (e.g. shelf signage, impulse stands, end of aisle store location); distribution (e.g. visibility, accessibility and density of retail outlets, eating environment), product (e.g. pack size, pack variety, formulation designed to increase appeal).
Data extraction and synthesis	For reviews: Author(s), date of publication, publication type, date range of included studies, review aims and/or research questions, screening and quality criteria. For individual studies: Author(s), date of publication, publication type, study characteristics, participants, setting, marketing stimuli and response outcomes, any theoretical constructs that informed study design or analysis, screening and quality criteria. For reviews and individual studies: All findings that contributed conceptually or empirically to the purpose of our own critical review recorded in narrative form. Convergence and disparities between study and review findings grouped under thematic headings.

RESULTS

Fourteen reviews were identified as sources of evidence on food marketing's impact on one or more elements of food culture. Snowball searches identified thirty seven individual studies reporting on one or more impact of food marketing on food culture. Findings from their thematic analysis, with selective illustrative examples, are reported below. They are grouped around the five dominant constructs that emerged from the recursive coding process. They are food marketing's impacts on (1) normalisation of food and drink category choices (2) dietary behaviour norms, (3) social consensus processes, (4) audiences not intentionally targeted by marketing and (5) the broad (non-food) cultural values that underpin and shape food behaviours. Figure 2: Food Marketing and Sociocultural Impacts presents a schematic overview of the five themes and how they relate to food marketing promotion and research and to one another. The implications of these findings are explored in the Discussion section, structured by the two macromarketing grounded research questions.

Food marketing increases normalisation of food and drink category choices.

Nine reviews (McGinnis et al, 2006; Butland et al, 2007; Harris et al, 2009a; Harris, Brownell & Bargh, 2009b; Cairns et al, 2009; Chandon & Wansink, 2010; Chandon & Wansink, 2012; Glanz, Bader & Iyer, 2012; Boyland & Halford, 2013) and eight individual studies (Ailawadi & Neslin, 1998; Hawkes, 2006; Grier et al, 2007; Zheng & Kaiser, 2008; Neslin & Van Heerde, 2009; Harris et al 2009a; Zheng et al, 2011; Scully et al, 2012) were identified as evidence of food marketing contributing to normative beliefs regarding the purchase and consumption of food and drink product categories:

The identified evidence reported the use of a multifarious mix of marketing activities contributing to these effects. For example, promotional communications and sponsorship are effective in increasing the salience of promoted products. Price promotions are used to convert awareness into purchase and maintain and/or grow market share. Because of market competition within the sector such activities are widespread and have become ubiquitous features of the food environment (McGinnis, et al, 2006; Butland et al, 2007; Cairns, Angus &

Hastings, 2009). Household grocery shoppers respond to this environment. For example, they are found to adopt brand-elastic bulk purchasing strategies. This results in sustained increases in the purchase and therefore household availability of low perishability, heavily promoted product categories such as foods HFSS. Increases of twelve to thirty five percent in overall purchase of these product categories as a consequence are reported in the marketing literature (Ailawadi & Neslin, 1998; Neslin & Van Heerde, 2009). Researchers have observed that the consumption of these product categories becomes normalised and habitual as a result (Ailawadi & Neslin, 1998; Chandon & Wansink, 2002).

A case study of a major marketing drive for global brand processed snack products in Thailand provides an illustrative example of how these impacts are socially diffused. The study describes how through a mix of global and traditional culture based marketing appeals (a marketing strategy commonly referred to as 'glocalisation'), a transnational manufacturer introduced branded snack products to the Thai consumer market. In response to the newly arrived competition, local snack manufacturers also increased their marketing activities. As a consequence of the overall increase in salience-boosting promotional activities and availability, snack sales overall increased by 35% in five years (1999-2004) (Hawkes, 2006).

Other factors such as socio-economic status, the provision of product information and health education moderate. However, it is also observed these moderating factors do not fully reverse the cumulative effects of a food environment saturated by cues to purchase and consume foods HFSS (Chandon & Wansink, 2012; Glanz et al, 2012).

Food marketing impacts dietary behaviour norms

Eight reviews (Astrup et al, 2006; Harris et al 2009a; Harris et al 2009b; Fitzpatrick et al, 2010; Chandon & Wansink, 2010; Chandon & Wansink, 2012; Popkin, Adair & Ng, 2012; Epstein et al, 2012) and twenty one individual studies (Wansink, 1996; Erdogan, 1999; French et al, 2001; Chandon & Wansink 2002; Nielsen & Popkin, 2003; Grier et al, 2007; Witkowski, 2007; Herman & Polivy, 2008; Buijzen, Schuurman & Bomhof, 2008; Sharpe, Staelin & Huber, 2008; Neslin & Van Heerde, 2009; Epstein et al, 2009; Wansink, 2007; Vermeer, Steenhuis & Seidell, 2010; Schneider & Davies, 2010; Dhar & Bayliss, 2011; Wang et al, 2012; Williams et al, 2012; Boyland et al 2013; Haws & Winterich, 2013; Costa, 2013)

were identified as evidence of food marketing contributing to the emergence of new purchase and consumption norms.

There are multiple reports in the marketing literature on how frequent, 'low involvement' purchase decisions (Zaichowsky, 1985) evolve to become routinized/default food behaviours (Chandon & Wansink, 2002; Epstein et al, 2012; Chandon & Wansink, 2010). The combination of a sociocultural environment making repeat HFSS food selection the default, and the innate human tendency to interpret socially salient practices as the behavioural norm (Sunstein, 1996) helps establish social assumptions about cultural food norms (Hartmann et al, 2008; Howland, Hunger & Mann, 2012). The marketing literature indicates high status individuals such as sport and entertainment celebrities are also influential in normalising the purchase of heavily promoted product categories (Erdogan, 1999; Boyland et al, 2013).

A study in China on snacking trends illustrates marketing impacts on shifting sociocultural food norms: In 1991, 9.7% of participants aged 19-44 reported consuming at least one snack during a 3 day period. In 2004, this figure had increased to 16.3% and by 2009, the proportion had increased to 38%. The study found similar increases in snacking patterns for all age groups. The authors attribute the acceleration of the rate of behaviour change from 2004 to marketing impacts on food culture (Wang et al, 2012).

Food marketing impacts social consensus processes

Two reviews (Montgomery & Chester, 2009; Montgomery & Chester, 2011) and eleven individual studies (Peñaloza & Gilly, 1999; Peñaloza, 2001; Barthel, 1989; Nielsen&Popkin, 2003; Hawkes, 2006; Grier et al, 2007; Isaacs et al, 2010; Costa, 2013; Schneider & Davies, 2010; Wansink, 2010; Williams et al, 2012) were identified as evidence of food contributing to social consensus development processes.

For example, a mediation analysis of parents' exposure to fast food advertising and their children's consumption of fast foods found the statistically significant correlation between exposure to advertising and positive social norms about fast food consumption accounted for children's total intake of fast foods. No correlation was found between parent's

personal, individual level, attitudes to fast foods and their children's consumption of fast foods. The results indicate that parents' increasing propensity to feed their children with fast foods was mediated primarily through their perceptions of what behaviours their social network deemed acceptable. The direct effects of marketing on their decision marketing played only a negligible/secondary role (Grier et al, 2007).

Through its objective of aligning and engaging with prevailing food cultures, food marketing also creates platforms from which it can actively engage in the evolution of social consensus on emerging food-related norms and values (Seiders & Petty, 2004; Thompson & Coksuner-Balli, 2007; Sorensen, 2009). An elegant example of this was the use of consumer research to identify and understand the acculturation aspirations of newly arrived immigrants in the USA. The intelligence was used to promote the purchase and consumption of red meat by framing it as an internal and external behavioural signal of authentic 'American' identity (Peñaoza, 2001).

Food marketing impacts audiences not intentionally targeted by marketing

Three reviews (Montgomery & Chester, 2009; Montgomery & Chester, 2011; Popkin, Adair & Ng, 2012) and seven individual studies (Peñaloza & Gilly, 1999; Peñaloza, 2001; Zheng & Kaiser, 2008; Moore & Rideout, 2007; Isaacs et al, 2010; Banwell et al 2013, Williams et al, 2012) were identified as evidence of food marketing impacting non-target audiences in addition to target consumers.

One of the mechanisms through which marketing does this is by adapting its appeals and strategies to its cultural context. This in turn leads to shifts in social norms and cultural practices and their underpinning values of their target audiences. Target consumers, may in turn spread these shifts via relational ties with their own social contacts. Co-creational marketing is an example of a marketing strategy that is designed to facilitate the two way flows and shift in values and their sociocultural expression (Prahalad & Ramaswamy, 2000; Lusch, Vargo & O'Brien, 2007; Akaka, Vargo & Lusch, 2012). The spread of co-creational marketing has been accelerated by digital technologies, such as social media forums and

platforms (Clarke & Svanaes, 2012; Hughes, 2012; Tutt, 2013). Through their joint membership of co-creational marketing networks and social networks, target consumers act as carriers of norms, values and practices generated by commercial initiatives marketing to social contacts not directly connected or engaged with those initiatives (McCracken, 1986; McFerran et al, 2010). A case study of an integrated soft drinks marketing campaign is a good example of how these impacts are mediated. The campaign included free music, entertainment, games, news, and branded product rewards. As a consequence, a third of its 15 million registered members recommended membership to an average of 3.7 personal contacts. The campaign's communication impacts were therefore increased by approximately 18.5 million (i.e. more than double the number of directly targeted impacts). Even though some impacts would have been duplicates, it is clear that the reach of the campaign was extended from its direct target audience to a social community connected by their shared non-commercial interests (in this case, music and games) (Montgomery & Chester, 2011).

Individuals have low awareness of their roles as carriers of marketing-led values and norms. This is especially the case if the boundaries between commercial and social networks are blurred (Hartmann et al, 2008; McFerran et al, 2010; Hughes, 2012). For example, peer-to-peer marketing is perceived as more trustworthy and credible than business to consumer marketing. However, in extended communication chains this trust may be misplaced. It may be the results of an inability to detect that the original source of the communication was in fact a business to consumer marketing promotion (Montgomery & Chester, 2012). In these circumstances, the protective effects of advertising literacy, health motivations and cognitive defences against promotional food marketing techniques are undermined (Goldberg & Gunasti, 2007; Epstein et al, 2012; Haws & Winterich, 2013; Carter et al, 2012).

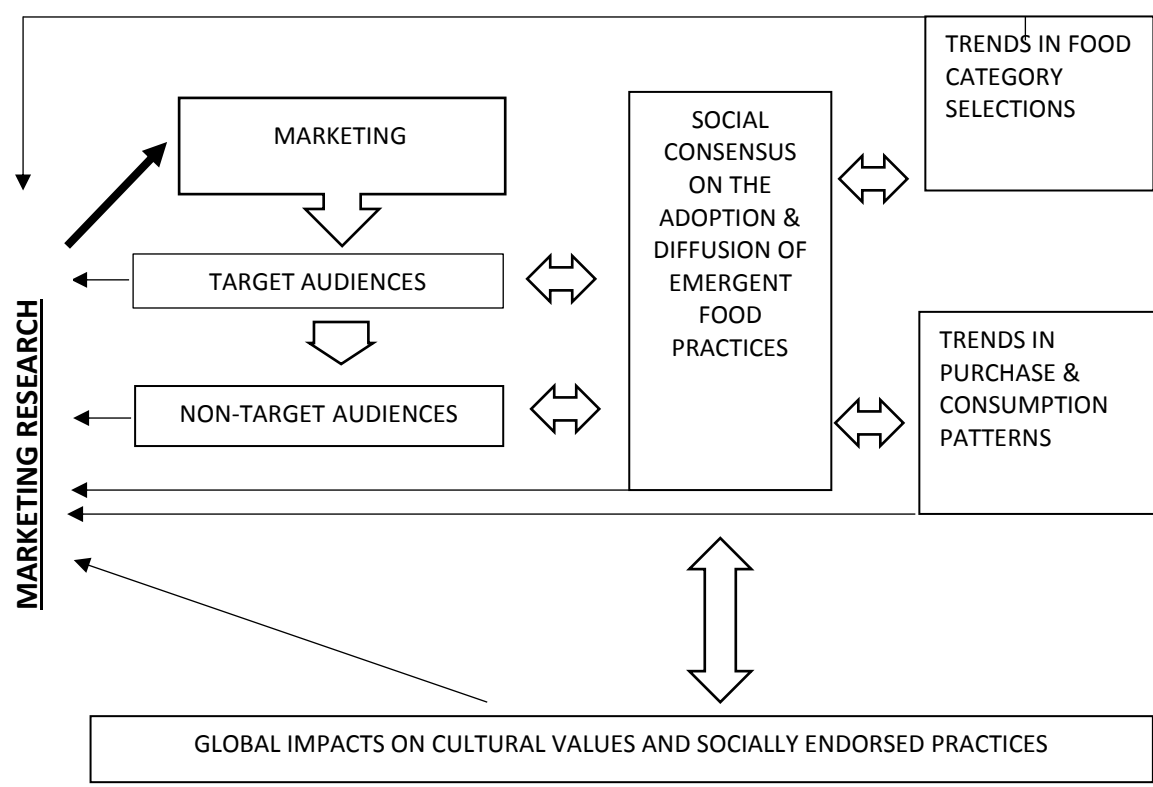
Food marketing impacts the cultural values that underpin and shape food behaviours

Six reviews (Harris et al, 2009a; Harris et al, 2009b; Chandon & Wansink, 2010; Chandon & Wansink, 2012; Popkin, Adair & Ng, 2012; Glanz et al, 2012) and twenty individual studies (Barthel, 1989; Signorielli & Lears, 1992; Wansink, 1996; Signorielli & Staples 1997; French et al, 2001; Nielsen & Popkin, 2003; Witkowski, 2007; Wansink, 2007; Sharpe et al, 2008; Buijzen, Schuurman & Bomhof, 2008; Harris et al 2009c; Isaacs et al, 2010; Schneider &

Davies, 2010; Sharpe & Staelin, 2010; Dhar & Bayliss, 2011; Wang et al, 2012; Williams et al, 2012; Haws & Winterich, 2013; Costa, 2013; Banwell et al, 2013) were identified as evidence of food marketing impacts on generic food behaviours.

Generic impacts are effects on universal food behaviours that transcend brand and category level product choices. The sector-level trend to supersize of out of home portion sizes for example, has also shifted expectations regarding in home portion sizes (Nielsen & Popkin, 2003; Vermeer, Steenhuis & Seidell, 2010). Socially salient marketing cues to buy and consume are interpreted as sociocultural signals that engaging in excess consumption and /or ‘mindless eating’ patterns (of any/all food and/or drinks) is socially acceptable (Herman & Polivy, 2008; Wansink, 2007; Wansink, 2010; Boyland et al, 2013).

Figure 2: Food Marketing and Sociocultural Impacts



DISCUSSION

What are the strategic implications for policy of food marketing effects on sociocultural determinants of food behaviours?

In its introduction this paper outlined how policy strategy statements demonstrate a keen awareness that food marketing significantly impacts the sociocultural and physical food environment. It also presented evidence that the focus of marketing control policy and research has largely concentrated on its micro level impacts.

Evidence identified in the review indicates contemporary food marketing is contributing to macro level shifts in food culture as well micro level behavioural decisions. Evidence of population level shifts in purchase propensities, increased demand for heavily promoted food categories and the evolution of new norms, values and food behaviours through social consensus building processes were found. Impacts on non-target as well as target audiences were also revealed.

Macro level impacts, variously described in the literature as second order, spill over and/or ripple effects are mediated via dynamic and complex processes. They may be intended or unintended and are perhaps most commonly, a mix of both. They may have positive or negative consequences for the dietary health and wellbeing of individuals and/or populations. Currently however, because food marketing is heavily dominated by promotions for HFSS foods and drinks the bulk of contemporary food marketing is not supportive of dietary public health goals. The findings of this review indicate there is an evidence-based case for the scope of future research and policy to be broadened. Inclusion of food marketing's macro level impacts on the sociocultural food environment in future policy and research development has the potential to strengthen responsible marketing policy impact. Reconfiguring the assumptions and preconceptions about food marketing's macro level, sociocultural effects would provide direct support for its strategic environmental aims and contextual support for its aims to constrain marketing's impacts on individual food purchase and consumption behaviours.

How can negative macro level effects of food marketing be mitigated?

One potential approach to strengthening policy through an expansion of its scope, is to adopt systems level policy strategies. There is a growing interest in how systems science can be used to address the public health challenge of NCD and its complex multifactorial aetiology (Finegood, Merth & Rutter, 2010; Smith & Petticrew, 2010; Swinburn et al, 2013). Furthermore, the extensive systems science literature offers a substantive evidence base that can support the design and deployment of integrated packages of responsible marketing policy actions (Boulding, 1956; Parson, 2013). One of the most influential systems-oriented resources, available to inform and support a more systems-oriented approach to marketing control policy is the obesity systems map developed by the Foresight review team (Butland et al, 2007; Gortmaker et al, 2010; Finegood et al, 2010). The map identifies four psychobiological traits as key to the current 'steady state' of the obesogenic system. The four traits are appetite control, psychological ambivalence, dietary habit and physical activity^{4,11}. Links can be traced between the psychobiological traits of appetite, psychological ambivalence, dietary habit and food marketing (Butland et al, 2007, p. 43-46). System science logic indicates targeting these could reduce marketing's contribution to the steady state of the system and its obesogenic outcomes (Finegood et al, 2010; Gortmaker et al, 2010). For instance, the critical significance of dietary habit in maintaining the obesity systems' equilibrium indicates interventions could be designed to reduce the routine reinforcing impacts of HFSS food marketing. Similarly because appetite and psychological ambivalence traits, predispose individuals to respond to food availability cues by consuming in excess of physiological need, there is a strong rationale for reducing the salience of marketing that promotes HFSS foods. An example of a policy action targeted to this aim would be restricting all price promotions to non-HFSS foods and drinks.

A quantitative analysis of the effects of a Canadian food marketing intervention on household food expenditures provides an indication of the potential effectiveness of an intervention successfully disrupting one component of an obesogenic food environment: An evaluation of the effects of a fast food advertising ban for French language TV advertising found an US\$88 million reduction in food advertising expenditure resulted in a 13% reduction in household propensity to purchase fast foods. The study estimated that over a 15 year period the effect would result in 0.6 kg less weight gain per person than for

individuals living in an environment where advertising normalised the purchase and consumption of just this one food category. The study compared its effects on French TV viewers to the behaviours of Canadians who were native English speakers. They were not impacted by the ban because English language TV did not ban fast food advertising. Through a carefully controlled analysis of its impacts and how they were mediated, the study demonstrated that individual level reductions in exposure to advertising could not fully account for the intervention's effects. It demonstrated that the reduction in purchase propensity was in fact attributable to the ban's effects on its sociocultural environment. (Dhar & Bayliss, 2011).

A recent case study on innovative policy response options to fast food marketing provides additional insights on how a systems science approach to responsible marketing policy could strengthen its impacts (Schrempf, 2014). The case study identified two areas of opportunity at sector and firm level and two at the environmental level. The first recommendation – avoiding the targeting of children - re-affirms the critical value of retaining policy actions targeted to marketing's micro level impacts. The second recommendation - for the marketing sector to accept responsibility for consumer misperceptions arising from their cumulative exposure to marketing messages demonstrates how systems thinking supports policy to include unplanned as well as planned and anticipated impacts of marketing in future policy development. For example, marketers could be required (as they are in France) to include health messages on packaging, advertising and other promotional materials. The third recommendation - to establish mechanism through which the fast food industry makes a policy determined financial contribution to obesity-related public health costs - illustrates how a reframed policy approach could increase the accountability of private sector stakeholder for population level outcomes. The fourth recommendation - for food marketers to contribute expertise and data on consumer trends - is an example of how a systems science approaches can create opportunities for novel sources of evidence and insight to contribute to innovative policy development.

Study strengths and limitations

This study is a response to the multiple calls for dietary public health policy development to increase its utilisation of evidence and methods from other disciplines and fields, especially the social sciences and business/management subject areas (Seiders & Petty, 2004; McCarthy et al, 2011; Moodie et al, 2013; University of Copenhagen, 2013).

The scoping and critically interpretation of evidence methodologies were conducted in accordance with good practice recommendations for applied policy research (Civil Service, 2012; Thomas, Newman & Oliver, 2013; Hagen-Zanker & Mallett, 2013). It has generated a pool of evidence that supports the argument that in addition to its individual level impacts, food marketing is contributing at the environmental level to obesogenic sociocultural norms, values and practice. This is an important evidence contribution. To date, responsible marketing policies have been designed around the assumption that marketing environmental impacts are moderators of policy effectiveness, but to date have not been informed by evidence on the specific nature of prevailing environmental factors (Polonsky, Carlson & Fry, 2003; Cairns et al, 2013).

A large proportion of evidence the review has identified reports on developed economies, especially the USA. This limitation is not unique to this study. Evidence reviews examining marketing's micro level impacts have made similar observations (Cairns, Angus & Hastings, 2009; WHO, 2010; WHO, 2012). In view of the increasing significance of global marketing and its impacts on low and middle income countries, this is an important limitation of this review and the global evidence base. The search and screen strategies were designed and developed with this limitation in mind. The adoption of an REA strategy aimed to ensure the review captured evidence from a wide range of disciplines and a representative overview of the international evidence base.

The review's critical appraisal of implications for policy is based on secondary analysis of policy statements and actions. A more comprehensive and reliable analysis could be obtained by conducting primary research on policy makers and their fellow stakeholders' views on policy aims, and the barriers and enablers to progressing those aims.

The study's main research strength is that as a first evidence synthesis on the sociocultural impact of food marketing, it provides a foundation for the development of a future research agenda. Its thematic mapping of findings for example, can inform and support the planning and design of future research such as systematic evidence reviews and policy evaluations/ natural experiments. It has also demonstrated that the evidence generated by disciplines such as business and marketing as well as cultural anthropology and media studies can complement and build on the established, primarily micro level focused, dietary public health evidence base.

Its strongest contribution to responsible marketing policy development is that it has provided clear evidence in support of its macro level objectives and the underpinning rationale for those objectives. It has also highlighted there is an evidence gap on the effective design, development and evaluation of intervention targeted to moderating food marketing's sociocultural impacts and should therefore be a future research priority.

CONCLUSION

The review has presented evidence that contemporary food marketing is moderating sociocultural determinants of food behaviours. It has demonstrated these impacts are unsupportive of dietary public health policy. It has presented an evidence-based case, for the food marketing control policy and research communities to revise their assumptions and preconceptions about the nature and impacts of food marketing. It has demonstrated how and why a systems-based conceptualisation of food marketing more closely reflects the realities of contemporary food marketing practices and impacts. Building on this, it has argued that the adoption of systems-based conceptualisations of marketing can facilitate the identification and development of innovative policy strategies and actions.

The review reported in this article is the first synthesis of evidence on marketing's impacts on the sociocultural food environment. The conceptual and empirical evidence it has brought together should be viewed as a provisional exploration of the potential for reconfigured approaches to support innovative policy and research development. Nevertheless, its findings, do provide a foundation from which future policy and research agendas that take account of food marketing's dynamic impacts on its sociocultural food environment can be progressed.

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Chapter 4:

Rethinking responsible marketing policy strategy

Content

Cairns G (2013) Evolutions in food marketing, quantifying the impact, and policy implications. *Appetite*, 62, pp.194-197. Five year impact factor of the journal *Appetite* is 3.323.

Evidence Contributions

The paper reports the results of an international policy analysis. It demonstrates that prevailing policies conceptualise food marketing as a micro level, managed and manageable phenomenon. It demonstrates that as a consequence, there are significant gaps between the strategic aims and goals of extant policies and their inherent capacity to achieve them.

Knowledge Translation Contributions

The paper is based on an original report: Cairns G & Hastings G (2010) Mapping and Exploring Policy Options to Constrain Non-broadcast Advertising of High Fat, Salt and Sugar Foods to Children. The report was commissioned by the Scottish Government to inform the planning process of its Obesity Strategy (Scottish Government, 2011). A copy of this is included in Chapter 5.

An abbreviated version of the report was also provided as a supporting resource for a one day *Workshop Examining Policy Options available to the Scottish Government on Interactive Digital Marketing of Food and Non-alcoholic Beverages to Children and Youth* on 2.11.11. The workshop was convened by the Scottish Government. It was organised by Cairns and colleagues, and held at the University of Stirling. Outcomes of the workshop are reported in Chapter 6.

4.1 Evolutions in food marketing, quantifying the impact, and policy implications

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Research report

Evolutions in food marketing, quantifying the impact, and policy implications[☆]

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ABSTRACT

A case study on interactive digital marketing examined the adequacy of extant policy controls and their underpinning paradigms to constrain the effects of this rapidly emerging practice.

Findings were interactive digital marketing is expanding the strategies available to promote products, brands and consumer behaviours. It facilitates relational marketing; the collection of personal data for marketing; integration of the marketing mix, and provides a platform for consumers to engage in the co-creation of marketing communications. The paradigmatic logic of current policies to constrain youth-oriented food marketing does not address the interactive nature of digital marketing. The evidence base on the effects of HFSS marketing and policy interventions is based on conceptualizations of marketing as a force promoting transactions rather than interactions. Digital technologies are generating rich consumer data. Interactive digital technologies increase the complexity of the task of quantifying the impact of marketing. The rapidity of its uptake also increases urgency of need to identify appropriate effects measures. Independent analysis of commercial consumer data (appropriately transformed to protect commercial confidentiality and personal privacy) would provide evidence sources for policy on the impacts of commercial food and beverage marketing and policy controls.

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Introduction

Historically marketing theory and marketing control policy paradigms have cast marketers as the producers of marketing communications and consumers as the recipients of these communications (Wilkie & Moore, 2003). The emergence of interactive digital technologies is driving a rapid evolution from marketer-driven promotions aimed at consumers to interactive co-creational and user-generated marketing communications (Precourt, 2009).

This paper reports on a case study that examined the adequacy of current food marketing to children policies to control digitally mediated, interactive marketing of high fat, salt, sugar (HFSS) foods to children.

Interactive digital marketing

Interactive digital marketing (IDM) describes a broad range of communication platforms and tools, including mobile phone text

and visual media messaging, social networking sites, product review websites, wikis, blogs, chat rooms, online gaming sites and websites hosting user generated content such as video, photos and consumer reviews. Digital technologies collect and process marketing-relevant personal data. This data can be aggregated to inform mass marketing activities or processed at a micro-level to support highly targeted marketing such as online behavioural advertising, personalised purchase incentives and to encourage consumer engagement in brand-based promotional activities.

Digitally mediated communications are enabling a shift from traditional, centrally produced and distributed marketing to more 'conversational', collaborative marketing relationships. Conversations comprise a mix of spontaneous commentary and dialogue and commercially initiated brand-based content. The commercial sector is well aware of the significant potential benefits and risks of such conversation. A 2007 global survey by the Nielsen market research company found more than seventy five per cent of respondents rated peer to peer recommendations as the most trustworthy form of advertising (cited in IAB, 2008). Conversely, digitally mediated sharing and dissemination of information and opinion exposes brands and corporations to public scrutiny and comment. Negative reactions can quickly develop into reputational damage which is difficult to reverse and companies seek to minimise risk, but must simultaneously avoid being perceived to be manipulating interactions (Kozinets, de Valck, Wojnicki, & Wilner, 2010; Laczniak, 2006). Unsurprising therefore, that expertise and technology to monitor and evaluate user generated content and secondary social responses independent of confidential

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commercial strategy has already been developed (see for example <http://www.liveworld.com/>).

Co-creation

'Connect, collect, and co-create' are a bundle of unique IDM functions which can be employed independently of other marketing strategies and activities or integrated to enhance synergies.

Connecting consumer and producer is a prerequisite for marketing relationship. Codes on packaging or in television advertisement entered into a website or as a text to an SMS (short messaging service) for example can be used to initiate a new relationship, reinforce an existing one, or introduce an individual to a virtual community built around a brand or package of consumer interests, such as music and food. IDM and particularly social media have proven to be particularly efficient platforms through which to collect personal data. It has been suggested that the user data associated with the social networking site, MySpace, was the primary reason that the Murdoch News Corporation paid nearly US\$600 million to own it (Chester & Montgomery, 2007). Social networking, blogging and micro-blogging sites, even photo and video sharing sites for example are a rich source of data about personal preferences, behaviours and opinions.

Perhaps the most fundamentally game changing aspect of IDM is its capacity to support and promote *co-creation*: Prahalad and Ramaswamy (2000) were the first to describe the shift from marketing as a centrally controlled management function to one driven by relationships with its customers. They argue that understanding consumption and production as separate economic activities is superseded by a convergence of producer and consumer roles. User generated virally disseminated promotion of price-discounted offers; special interest forums such as Procter and Gamble's (P&G) social network site, Vocalpoint (previously named Tremor) where consumers are engaged in marketing and brand development are two examples of this shift (Sheth & Usley, 2007; Vargo & Lusch, 2008; Zwass, 2010).

Vargo and Lusch (2004, 2008) propose 'service dominant logic' (SDL) as a more informative model of the nature and effect of co-creational marketing, than that provided by traditional 'goods dominant logic'. Vargo and Lusch describe ten paradigmatic features of the SDL marketing model which they call the 'foundational premises'. The foundational premises reflect SDL recognition of the consumer as an active agent, playing multiple roles in production as well as consumption of social as well as commercial outputs. Changes in consumer behaviours and values in response to interactive collaborative marketing are therefore important commercial indicators as much as financial measures (Ballantyne & Varey, 2008; Sheth & Usley, 2007; Vargo & Lusch, 2004).

Policy interventions to control the promotion of foods and beverages to children and youth

Food is one the most heavily marketed product categories to children and youth. It is estimated that fifty to eighty per cent of food marketing to children expenditure promotes HFSS foods. Marketing increases preference, purchase and consumption of HFSS foods in general as well as brand choices (Cairns & Hastings, 2009; McGinnis, Appleton Gootman, & Kraak, 2006). Frequent consumption of HFSS foods is a recognised risk factor for chronic degenerative diseases including obesity, heart disease, stroke and some cancers (WHO, 2004). The evidence that the marketing of HFSS foods is contributing to the prevalence of overweight, obesity and associated non-communicable disease, such as stroke, heart disease and cancer is therefore convincing, although its contribution relative to other recognised influences is less clear (Harris, Pomeranz, Lobstein & Brownell, 2009; WHO, 2004, 2010).

In response to this evidence, a plethora of self-regulatory, co-regulatory and statutory controls on food marketing of HFSS foods have been set up all around the world in the last decade (Hawkes & Lobstein, 2011).

Methods

Desk research that drew on a recently completed mapping exercise (Hawkes & Lobstein, 2011) as well as other sources was used to collate policy approaches and interventions aimed at constraining the effects of HFSS food marketing. Vargo and Lusch's 10 foundational premises were used to provide a comparative paradigmatic framework. The framework provided the basis for a qualitative assessment of the paradigmatic assumptions underpinning prevailing policies and their capacity to control interactive digital marketing and its co-creational effects.

The study also collected publicly available market research data on marketing activities, and promotional strategies, providing a snapshot of current food and beverage IDM and children's responses. A literature review examined the evaluative evidence on the effectiveness of current policy to constrain the effects of HFSS food and beverage marketing.

Results

Policy paradigms

Self regulatory and co-regulatory codes of good practice, such as the Children's Food and Beverage Advertising Initiative (CFBAI) in the US, and the European Union Pledge Programme (EU Pledge) were found to be typical of the policy instruments that have been implemented in developed and developing countries. Codes were found to address similar parameters although there was much variation in specific standards such as the age ranges protected and the nutritional criteria applied. Some codes stated they were intended to cover interactive, digital marketing, as well as broadcast and other more traditional marketing methods and channels. None of the voluntary codes or statutory recognised the potential of the consumer as an active agent in the creative marketing process. Policies focused on the content of commercially generated communications and the consumer was cast as a passive recipient of marketing messages.

The role of the consumer-producer relationship in the evolution of food culture was not addressed. Indeed, Fitzpatrick, MacMillan, Hawkes, Anderson, and Dowler (2010) has noted that food culture is currently rarely addressed in food policy. Other research has also found that research-relevant policy does not capture the magnitude of the indirect social and cultural effects of food marketing. For example, the effects on children's food behaviours of their cumulative exposure to marketing and the effects of marketing promotions on parents and other moderators of children's food behaviours (Cairns et al., 2009; Harris et al., 2009).

An overview of findings from the qualitative analysis of food marketing policies paradigmatic assumptions and their capacity to address co-creational marketing is presented in Table 1, Comparison of Service-Dominant Logic and Food Marketing Policy Underlying Paradigms.

Promotion of HFSS foods to children and youth

The promotion of HFSS foods to children is a major economic activity in its own right. A US Federal Trade Commission (FTC) review of expenditure, activities, and self-regulation of food marketing found US\$ 1.6 billion out of a total 9.6 billion of food marketing expenditure targeted children and youth. Sixty three

Table 1
Comparison of service-dominant logic and food marketing policy underlying paradigms.

SDL foundational premises	Similarities and differences between prevailing policy and SDL paradigms
Service is the fundamental basis of exchange	Partial paradigmatic overlap: Policies do not address service-mediated exchange such as brand-based activities but statements such as 'assist consumers to make appropriate choices' indicate some recognition
Indirect exchange masks the fundamental basis of exchange	No paradigmatic overlap: All policies exclusively address marketing of consumer products and not the value creation/addition processes leading to the final product choices available for exchange
Goods are a distribution mechanism for service provision	Partial paradigmatic overlap: Policy aims to 'rebalance' nutritional content of foods in the market and marketing landscape reflect an understanding of distribution and communication as marketing-based services but absence of thresholds or standards indicates not perceived as priority policy objective
Knowledge and skills are the fundamental source of competitive advantage	Partial paradigmatic overlap: Policy preference for non-statutory market self-correction indicate policy perceptions of corporate knowledge and skills as protean and responsive, rather than fundamental to core business strategy
All economies are service economies	Very limited paradigmatic overlap: Absence of policy on relationship marketing for example indicate little weight given to influential role of service-based relationships in marketing effects
The customer is always a co-creator of value	No paradigmatic overlap: Policies restrict controls to direct corporate communications only, not co-creational process such as brand-based social networks or and outputs such as user-generated content
The enterprise cannot deliver value, but only offer value propositions	Very limited paradigmatic overlap: Policies focus on consumer as information recipient, not active interpreter and implementer of value proposition
A service-centred view is inherently customer oriented and relational	Very limited paradigmatic overlap: All policies demonstrate strong focus on mass promotion of goods, and absence of controls on relational marketing
All social and economic actors are resource integrators	Very limited paradigmatic overlap: Policies positions do not recognise children as integral to household food provisioning decisions, protection of children restricted to their role as direct purchasers or 'pesters'
Value is always uniquely and phenomenologically determined by the beneficiary	Very limited paradigmatic overlap: Restrictions on licensed characters, use of celebrities are one of few examples of policy concerned with control of more holistic customer experience than simple consumption of goods

Adapted from Vargo and Lusch (2008).

per cent of targeted spend was for carbonated non-alcoholic beverages, fast foods and breakfast cereals. The FTC survey found that the proportion of marketing expenditure on digital media was small (five per cent) but also noted that the digital media costs are proportionately lower than for consumable marketing activities because of its (economically defined) non-rival nature (FTC, 2008). A follow up 2010 study by the FTC will in due course provide additional information on trends, which are likely to show further shifts from traditional to digital platforms and channels.

The case study reviewed commercial websites and market research reports and found many examples foods and non-alcoholic beverage IDM to children and youth. IDM and non-digital media marketing targeted activities were increasingly integrated. Commercial practice was found to have embraced all aspects of co-creational marketing rapidly and wholeheartedly.

Evaluation of policy control effectiveness

The impact of policy intended to control child-oriented food marketing in the last decade has been limited. Independent evaluations of food marketing find the nature and content of promotional activity continues to primarily promote HFSS foods and beverages and children's exposure is still unacceptably high (Boyland, Harrold, Kirkham, & Halford, 2011; Kunkel, McKinley, & Wright, 2009; Harris et al., 2009; Kraak, Story, Wartella, & Ginter, 2011).

Discussion

Digital technologies enable market places to also be social spaces. Children and youth are some of the most active contributors to user generated content (BMRB, 2008; EC, 2011). They are the 'digital natives' of the electronic ecosystems of MP3 players, Web 2.0 mobile devices, broadband, virtual worlds, networks, SMS, and MMS which support communicative relationships and creative interaction.

Digital technologies are changing commercial practices. As an Executive Vice President of McDonald's at the American Marketing

Associations' MPlanet 2009 conference observed: "we don't have a magic wand we can wave to make sales happen. The days of command and control are gone. Today, consumers are our partners in how brands are conceived and sold." User generated content affirms and further develop brands, seeds and nurtures brand-based communities and has become a critical resource in commercial marketing (Precourt, 2009).

Commercial operators have strong incentives to monitor, influence and understand the dynamics and outcomes of the interactions occurring in digitally facilitated social spaces. Marketing strength is rooted in the quantity and quality of consumer and market research data. Contemporary marketing intelligence is now drawing on even greater volumes of detailed data and processing power as a result of interactive digital technologies. The implications of commercial ownership of large volume of personal data, the protection of children's personal privacy, and their exposure to targeted promotions are matters of public interest in their own right (Youn, 2009). Notwithstanding concerns about the protection of children online, the current availability of large volumes of real-time, real-life data and data processing power also represents a new source of policy-relevant data that could be independently analysed to monitor policy progress and inform future policy development.

The contribution of commercially owned data to evidence-informed future policy development would be a meaningful and socially responsible action (Flyvbjerg, 2001; Lacznik, 2006); Walt, Shiffman, Schneider, Murray, and Brugh (2008) has described the temporal limitations of policy analysis, suggesting it can take more than 10 years to understand and evaluate the effects of policy interventions. Practice-based evidence has been recommended to achieve faster public health strategy responses to the obesity crisis in the UK's Foresight Report on Obesity (Government Office of Science, 2008). The Foresight report almost certainly envisaged intervention practice as the primary source of such evidence. However, consumer and market research data, appropriately anonymised to preserve individual as well as commercial confidentiality could similarly contribute valuable insight on marketing practice and how it indirectly as well as directly influences food behaviours; quantitative measures of its effects; as well as faster evidence-

based mechanisms to monitor and evaluate the effectiveness of food and beverage marketing control policies. Making available data for independent monitoring and evaluation of good marketing practice and consumer response is recommended as a critical prerequisite for best practice in self-regulation (EC 2006). Commercial operators have repeatedly expressed commitment to supporting diet-related health policy. The recent uptake of interactive digital technologies for commercial marketing purposes, which is generating both new sources of detailed consumer data and new mechanisms to process this data, provides a timely and unique opportunity for commercial operators to do so.

In contrast to the rapid recognition by the private sector of the commercial consequences and implications of IDM, there is very little independent published research to date on the social impact of IDM. There is however, a substantial body of literature on social networks and how network members interact and engage in shared behaviours, generating new behavioural norms and collective intelligence (Holland, 1995; Surowiecki, 2004, cited in Zwass, 2010). Furthermore, there is a substantial literature demonstrating that social networks have significant effects on physical and social well being (Centola, 2010; Christakis & Fowler, 2007; Cohen-Cole & Fletcher, 2008). Research tracking the clustering of health-related traits within social networks for example, has demonstrated social ties are strongly associated with obesity and other health outcomes. The evidence indicates that the capacity of network relationships to spread social norms, behaviours and epidemiological trends is mediated through social interaction and shared community culture, not physical proximity (Centola, 2010; Christakis & Fowler, 2007). This literature is clearly potentially relevant to IDM in general and social media marketing particularly. A further benefit of the sharing of commercial consumer data collected involving co-creational platforms and supported by digital technologies could be the opportunity for secondary analysis specifically examining culturally and socially mediated impacts of marketing on behaviours.

Conclusions

The study found no evidence to suggest that current prevailing policies have the capacity to constrain the effects of the interactive collaborative marketing of HFSS foods and beverages.

Recommendations for future policy developments are to modify policy to better address the interactive nature of food marketing and to secure agreements on the sharing of commercial data for the purposes of monitoring and evaluation of marketing activity and policy actions to constrain its effects. Independent secondary analysis of this data to further knowledge and understanding on the interaction and influence of marketing on food culture is also recommended.

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Chapter 5:

Planning policy-research collaboration

Content

The Chapter comprises a paper and an extract from a national government strategy implementation plan.

The five year impact factor for the journal in which the paper (Cairns G & Stead M (2009) 'Nutrition communication, obesity and social marketing: works in progress' *Proceedings of the Nutrition Society*, 68 (1), pp. 11-16) was published is 5.273. Cairns conceived the paper's structure and content. She also presented an earlier draft to the Nutrition Society. Stead commented on the first draft of the paper and approved final version.

The extract is taken from the Scottish Government's Obesity Route Map Action Plan. Item 1.16 is a real world demonstration of how the principles set out in the paper can be interpreted by policy makers and translated into policy actions. It sets out a participatory policy and research development plan which was subsequently operationalised as a Cairns-Scottish Government collaborative action. Its implementation and outcomes are reported in the published peer reviewed paper included in Chapter 6.

Evidence Contributions

Conceptual evidence of the potential utility of normative research methodologies in dietary public health and marketing control policies research.

Knowledge Translation Contributions

Support in the planning and implementation of a programme of marketing control policy development.

5.1 Obesity and social marketing: works in progress

Proceedings of the Nutrition Society (2009), **68**, 11–16
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A Meeting of the Nutrition Society, hosted by the Irish Section, was held at the O'Reilly Hall, University College Dublin, Dublin, Republic of Ireland on 18–20 June 2008

Symposium on 'The challenge of translating nutrition research into public health nutrition'

Session 5: Nutrition communication Obesity and social marketing: works in progress

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Internationally, socio-economic trends reinforce the complex physiological mechanisms that favour positive energy balance, leading to an accumulation of excess body weight and associated metabolic disorders. This so-called 'obesogenic environment' is characterised by increasing accessibility and affordability of energy-dense foods and declining levels of physical activity. In the face of such rapidly-rising obesity rates there is general consensus that strategies to address trends in weight gain must go forwards in the absence of complete evidence of cause or effective prevention strategy. Thus, strategy implementation and evaluation must contribute to, as well as be informed by, the evidence base. Social marketing research and practice has a track record that strongly indicates that it can contribute to both the evolving knowledge base on obesity and overweight control policy and the development of effective intervention strategies. Social marketing draws pragmatically on many disciplines to bring about voluntary behaviour change as well as requisite supporting policy and environmental change. Key objectives include: generating insights into the drivers of current behaviour patterns; important barriers to change; client-oriented approaches to new desirable diet and lifestyle choices. Social marketing recognises that target clients have the power to ensure success or failure of obesity control policies. Social marketing seeks to identify genuine exchange of benefits for target adopters of behaviour change and the advocates of change, and how they may be developed and offered within an appropriate relevant context. Social marketing adopts a cyclical approach of learning, strategic development and evaluation, and therefore is well placed to integrate with the multi-disciplinary demands of obesity prevention strategies.

Social marketing: Obesity and overweight: Behaviour change: Obesogenic environment

Global context

Changing patterns of food production, distribution, marketing and consumption and declining physical activity levels in many parts of the developing world are driving the global trend of weight gain^(1–3). Overweight and obesity affects more than half the adult population in the developed world, and is now more prevalent in the developing world than chronic undernutrition⁽⁴⁾. Furthermore, prevalence is increasing overall at a faster rate in developing economies than in developed economies. In Mexico, for example, obesity prevalence is accelerating faster than anywhere in the world, leading to 28.1% of females and 18.6% of males >15 years of age classified as obese in

2006⁽⁴⁾. Alongside the trend towards excess weight gain are multiple changes in nutrition quality of the diet, some contributing positively, and some negatively, to epidemiological trends. Complex starchy carbohydrates are being replaced with more protein, more total and saturated fats and more refined simple carbohydrates and sugars^(3,5). These dietary changes, along with changes in consumer perceptions of food, food consumption norms and body image, commonly described as a nutritional transition, often co-exist with continued undernutrition (particularly micronutrient deficiencies). In many instances this double burden of malnutrition can be found in the same household⁽¹⁾ and raises unique public health and communication challenges.

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Table 1. Benchmarking criteria for social marketing (adapted from Andreassen⁽¹³⁾)

1	Behaviour change	Intervention seeks to change behaviour and has specific measurable behavioural objectives
2	Consumer research	Intervention is based on an understanding of consumer experiences, values and needs. Formative research is conducted to identify these factors. Intervention elements are pre-tested with the target group
3	Segmentation and targeting	Different segmentation variables are considered when selecting the intervention target group. Intervention strategy is tailored for the selected segment(s)
4	Marketing mix	Intervention considers the best strategic application of the 'marketing mix', which consists of the four 'Ps' of 'product', 'price', 'place' and 'promotion'. Other 'Ps' might include 'policy change' or 'people' (e.g. training is provided to intervention delivery agents). Interventions that only use the promotion 'P' are social advertising, not social marketing
5	Exchange	Intervention considers what will motivate individuals to engage voluntarily with the intervention and offers them something beneficial in return. The offered benefit may be intangible (e.g. personal satisfaction) or tangible (e.g. rewards for participating in the programme and making behavioural changes)
6	Competition	Competing forces to the behaviour change are analysed. Intervention considers the appeal of competing behaviours (including current behaviour) and uses strategies that seek to remove or minimize this competition

The growing evidence base on the key factors contributing to patterns of 'globesity' in nutritional transition countries and those in the developed world is contributing to the convergence in thinking internationally on causal factors. This process in turn is generating promising insights into more effective preventive measures against excess weight gain.

The recently-completed Foresight review of obesity and overweight in the UK⁽⁶⁻⁸⁾ provides a very comprehensive and thorough summary of current understanding. A culture that promotes energy-dense foods and increasingly sedentary lifestyles, combined with a biological predisposition towards modest overconsumption of energy is creating an emerging norm of excess weight gain and metabolic abnormalities. The drivers are systems-wide and influential throughout the life cycle. Thus, strategies that promote and support healthy weight management must also be consistent with, and relevant to, a broad range of circumstances and unique nutritional needs. This task is huge and requires the engagement and resources of many stakeholders. The goals include enabling and incentivising individual choice, supporting with appropriate information and policy controls, and shifting the distribution curve for body weight and activity levels towards more healthful norms.

The challenge of how this objective can be achieved at a population level, sustainably and equitably, is most definitely still considered a work in progress⁽⁷⁾.

The evolving nature of social marketing

Social marketing can offer insights into many of the inter-related constituent parts of what has come to be known as the 'obesogenic environment': it offers a unique approach to understanding interpersonal factors that influence pre-existing behaviour patterns and which of these factors may be responsive to behavioural change levers. Most crucially, social marketing research is rooted in the pragmatic aim of generating insights into bridging the intention-behaviour gap⁽⁹⁾.

Social marketing has its origins in efforts to deliver public health interventions to resource-poor communities

and individuals in the developing world. A core principle of early social marketing initiatives was the leveraging of both the logistic and engagement expertise of the commercial sector to achieve key public health goals⁽¹⁰⁻¹²⁾. Social marketing cut its teeth developing strategies and techniques that influenced both the supply and demand side. The marketing efforts for products such as barrier contraceptives and hand soap, as well as services such as immunisation, were designed to improve awareness of their benefits, increase real and perceived accessibility and most crucially enable and promote voluntary behaviour change. Soon afterwards, the infant concept of social marketing began taking steps in the direction of behaviour change independent of any associated products or services.

The potential of the social marketing prodigy to bring about behaviour change purely through the use of marketing techniques and thinking began to be recognised. This recognition was not, and is not, a blinding light of revelation. The emerging marketing skill set for behaviour change is based on a growing understanding of the power of marketing to bring about voluntary behaviour change. Marketing uses client-focused research techniques such as segmentation of target groups. Segmentation concentrates on identifying which groups of interpersonal and external factors are most influential (positively or negatively) in behavioural change. For example, these factors may include aspirational values, real-life behaviours and real or perceived barriers to change. These findings may have little obvious link to fundamental health objectives such as reducing fat content of the diet, but do provide the mechanism to facilitate desired change by linking to lifestyle choices of broad groupings of individuals. Marketing methods then use this knowledge to develop and refine genuine exchange of benefits 'offers' to the target groups. The principle of exchange is critical to the success of marketing and is based on the recognition that any voluntary change incurs costs (such as inconvenience, uncertainty of outcome), is optional and must therefore offer valued benefits (e.g. immediate outcomes not long-term risk reduction). Table 1 provides a summary of key characteristics of social marketing principles, as defined by Andreassen⁽¹³⁾.

Social marketing researchers and practitioners are not only honing skills in the use of their own tool box. They are also finding where these tools fit in, complement or indeed challenge the approaches and methods used by their more traditional public health peers and colleagues (and indeed other social sectors concerned with behaviour change). For example, a description has been given of the use of the social marketing and response tool to position and adapt diabetes interventions to be more effective in reaching, and being adopted by, ethnic minority groups than 'more traditional top down approaches'⁽¹⁴⁾. Interventions that last from 12 weeks to 1 year have achieved better clinical outcomes, improved knowledge levels and positive dietary change by investing in preliminary social marketing research, culturally-sensitive modification of programmes (psycho-demographic segmentation) and further development informed by audience-focused evaluation.

As social marketing continues to forge early career paths in fields such as public health, an extent of experimentation and reflection is both necessary and desirable. Social marketing is best understood as a pragmatic framework for understanding how and why individuals make lifestyle choices (that result in unintended as well as intended consequences) and for devising and marketing desirable alternatives. Good-quality social marketing is theory based and goal driven, but also critically reflective, seeking creative insight from multiple disciplines including psychology, sociology, communications, behavioural economics, business and commerce^(9,15).

The pragmatic and multi-disciplinary approach of social marketing fits well with the current demand for new thinking and responses to the complex multi-factorial global trend of excess weight gain and associated ill health and disease.

Better understanding of how and why overweight and obesity have become the most prevalent form of malnutrition in the world can both learn from, and inform, social marketing as an evolving paradigm for behaviour change.

Competitive analysis and effective responses

Enabling and bringing about voluntary behaviour change is the core objective of social marketing. To be effective social marketing, like commercial marketing, must start by understanding the competition. Competition may come in many guises: commercial marketing activities; perceptions of the expectations of influential others; other demands on time and resources encouraging maintenance of existing behaviour patterns (the status quo). These factors are all examples of what may be influential competition to desirable behaviour change.

Commercial marketing activities may be benign, even beneficial, presenting consumers with greater choice and novel routes to healthful lifestyle choices. Conversely, choices available may create subtle but powerful barriers to change through their influence on awareness, motivation and environmental infrastructure. Low priced well-targeted promotion of, and ready availability of, energy-dense and/or low-satiating-power foods is an example of competition against more healthful choices. Geographic studies

have found higher density of quick-service restaurants in less-affluent neighbourhoods⁽¹⁶⁾. This area of research provides interesting examples of how commercial marketing practices make less healthful food choices so easy that they become almost 'monopolistic' for those with restricted purchase options such as lack of transport and tight budgets. A further illustration of this kind of competitive analysis is the 2003 Hastings Report, a systematic evidence review of the effect of food promotion targeting children⁽¹⁷⁾. The review finds that the content of food promotion focuses heavily on foods that do not fit with recommended dietary guidelines and is adversely influential in children's food health perceptions and preferences.

The evidence generated from critical analysis of market forces may indicate that competitive forces are so powerful that policy change is required to enable large-scale behavioural change to occur. Just as social marketing research has been highly influential in providing the evidence base for policy change on tobacco marketing, analysis of the commercial influences on consumers' diet and weight-management perceptions and behaviours may provide evidence for appropriate obesity control policy^(6,8,17).

Alternatively, analysis of the impact of commercial marketing influences may generate evidence for alternatives to legislative intervention. For example, understanding the reasons for the success of commercial marketing of food and beverages can inform and guide more effective counter-marketing strategies. Research on consumer response to commercial marketing can provide insights on how to most effectively shift perceptions (such as cool, fun, convenient) around desirable but less-healthful foods and food groups. Commercially-focused market research such as the LifeChoices survey⁽¹⁸⁾, which examines the relationship between heuristic decisions about out-of-home eating and drinking choices and weight management concerns, bring an alternative perspective on consumer priorities to more academic research methodologies. Such research highlights consumer preferences for food choices that save time, meet social needs and fit with existing taste preferences and expectations.

Engaging the multiple agents of change

Social marketing also seeks to change the behaviour across the broad stakeholder base, e.g. public health and education professionals, parents, peer groups and of course mass media. The rationale for this approach is rooted in social cognitive theory, which recognises interaction of the internal environment and interpersonal influencers on behaviour choice. For example, the Walk to School campaign provides the stimulus for schools and parents to create safer easier opportunities for children to walk or cycle to school and increase levels of physical activity⁽¹⁹⁾.

Message intermediaries such as the media can be highly influential in moderating perceptions of norms and values. Media messages and themes may reinforce existing behaviours and perceptions (e.g. it is not safe for children to walk to school) or become part of the impetus for change (e.g. walking to school is not only safer than using the car, but educationally, socially and physically beneficial for children)⁽¹⁹⁾.

Trust is recognised in innovation diffusion theory as an essential component of the behaviour change process^(20,21). Change is risky, unpredictable and inconvenient; in general, requiring individuals to temporarily step outside their 'comfort zone'. Tools and strategies that reduce sense of unease and discomfort are therefore very valuable. Campaigns and organisations that are successful and establish trust not only achieve their immediate objectives but also establish brand value⁽²²⁾.

Brand value is one of the most powerful tools of the marketing tool box. An established brand is a hugely influential symbol encouraging both repeat behaviour (in the commercial world, for example, repeat purchase) and new behaviour (e.g. a willingness to buy and try a new commercial product). As long as the brand continues to deliver on perceived promises, it conveys and reinforces commitment, a sense of relationship, and is interpreted as a guarantee to deliver a bundle of values. Conversely, poor brand image or a brand image that does not fit with perception of what is desirable discourages the risky business of change. For some individuals the brand image of 'Weight Watchers' may be more attractive than the image of NHS-based weight-reduction advice; for others, the converse. The 'brand image' of former US President Bill Clinton was used to great effect to promote walking and active lifestyles for better health and weight management⁽²³⁾.

Social marketing may also be used to enhance the effectiveness of the professional skills of stakeholders who seek to promote behaviour change. Social marketing techniques such as segmentation and consumer insight research framed within the diffusion of innovation theory enable resources to be targeted and customised to enhance relevance and impact by identifying key perceived barriers and motivators for broad-target adopter groups⁽²⁰⁾. For example, active lifestyle campaigns based on increased uptake of community facilities may use messages focused on health benefits, delivered through healthcare services, to target those individuals with current health concerns. To reach those individuals who are currently non-users because of childcare and work commitments, personal transport or financial constraints, adaptation of the community services supported with advertising communicated through local socially-based channels may be more effective.

Delivering value to the target adopters

Segmentation, targeting, positioning and building brand value are not just valuable tools in the implementation of social marketing research and interventions, they are also useful in putting client orientation at the heart of behaviour change thinking.

Voluntary behaviour change is by definition under the control of the target adopter. Not only does the choice to try new behaviours lie with the target adopter, he or she also determine its sustainability. Diet and lifestyle choices that impact health such as weight management must be maintained for years, through the multiple stages of the life cycle and/or changes in life circumstances in order to improve health outcomes^(6,8,24,25). Social marketing aims to engage and establish strong and valued relationships

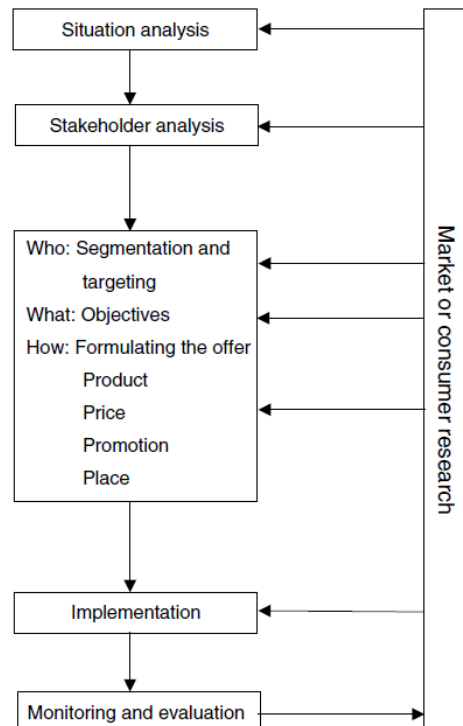


Fig. 1. Social marketing plan. (Adapted from Hastings⁽²⁶⁾.)

with the client or client groups. Social marketing recognises that productive and resilient relationships must offer something to both parties, a mutually-beneficial exchange. The concept of value exchange is perhaps the most definitive characteristic of a social marketing approach to any public health or social behavioural change issue. Social marketers recognise that behaviour change ultimately delivers benefit to the end consumer but also presents a cost^(15,26).

Obvious potential tactics are minimising cost (e.g. by identifying routes to more active lifestyles and healthier diets that involve acceptable levels of disruption) and maximising delivery and communication of benefits (e.g. by highlighting immediate changes to health rather than focusing on long-term risk reduction).

Additionally, however, to be effective a social marketing approach would aim to root direct intervention within an overall strategic plan. Direct interventions are most effective when linked with weight-management influencers on multiple levels (individual, sectoral and environmental) and multiple stakeholder channels (consistent messaging, via multiple channels and engaging support of stakeholders who might otherwise inadvertently represent barriers)⁽²⁷⁾. For example, changes to school food services will be more effective if they consult and respond to students, staff and family. Food service planning might also consider how best to address local competition such as the chip van or corner shop, build brand value through local media and quality service delivery and employ a continuous cycle of feedback, adaptive response and communication (see Fig. 1).

Similarly, programmes to encourage more active lifestyles might offer clear incremental goals, consider fiscal implications and offer flexibility with a range of uptake options. Communication of short- and long-term benefits, and starting with a needs assessment from the target audience perspective would also be recommended from a social marketing perspective.

Critical research questions from a social marketing perspective

From a client-oriented perspective, a current situation analysis raises questions such as:

1. as overweight and obesity becomes more prevalent than healthy weight, how does this trend contribute to perceptions and tolerance of unhealthy body weight as the norm;
2. who are the key stakeholders from a professional perspective, and who or what are key opinion leaders, motivators and barriers to change from a layperson perspective; how do these perspectives differ and what are the implications for these differences;
3. what are the most effective potential and current motivators for weight control and how can they best be marketed;
4. how can the most influential stakeholders become more fully engaged;
5. what are the unintended consequences of obesity-focused interventions and communications, and might these factors impact on the credibility of future initiatives;
6. what are the barriers, incentives or catalysts for multi-sectoral policy alignment. How can new thinking and approaches in support of behavioural change be 'marketed' at this sectoral level;
7. what are the key criteria for measuring efficacy and progress.

Many of these questions fit well with the proposed iterative implementation and research cycle of policy action and interventions to address the current trends in overweight.

Conclusion

Operationally, social marketing takes a 'work in progress' approach. Conceptually, social marketing is an evolving framework through which original insight on the global challenges of obesity may both inform and learn. Obesity research and practice is also a 'work in progress'. There is consensus that strategies to prevent and treat weight gain must go forwards in the absence of complete evidence; experience of implementation and evaluation of impact will contribute to the evidence base.

Social marketing in partnership with other approaches and disciplines can bring new and creative thinking and practice to this collective effort. Reviews of social marketing effectiveness in bringing about diet- and lifestyle-based behaviour change as well as requisite environmental and policy level change have found clear evidence of success^(27,28) Almost certainly the relationship between

social marketing and obesity is yet to come of age, so watch this space!

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Prevention of Obesity Route Map -Action Plan

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1.14	<p>Using social marketing to influence social norms and empower healthier food choices. We will extend the Scottish Government's 'Take Life On' campaign to include a range of community partnerships including supermarkets and community food schemes to increase consumer awareness of the benefits of healthy eating and encourage healthier food choices through incentives such as price promotions.</p>	<p><input checked="" type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low</p>	<p>SG The food and drink industry FSAS</p>	<p>A joint partnership between the Take Life On campaign and a supermarket is planned for 2011/12 involving in-store product promotions and signage within stores located in areas of multiple deprivation. The marketing activity will demonstrate that healthy food can be inexpensive and easy to prepare, to influence behaviour at point of purchase</p> <p>The Take Life On website will continue to be updated to ensure that prominence is given to the importance of physical activity for children and how to swap high fat, high sugar snacks for more healthy options.</p>	<p>Any supermarket partnership activity will identify pre and post activity effect will likely include:</p> <ul style="list-style-type: none"> • Total store sales • Total store sales vs. control group • Changes to average basket spend and changes vs control group • Changes within key product categories e.g. produce • Reporting of data • Reporting of coupon redemptions. <p>Independent field support evaluation will also be undertaken.</p> <p>All of the evaluation to be completed by end of March 2012.</p>
1.15	<p>Ensuring simple, direct and consistent communication of what a lower energy, less energy-dense diet is for an audience that is more likely than not to be overweight. Official guidance to the public on a healthy diet needs to provide easily understood practical advice about recommended total quantities and energy consumption, not just a healthy balance when portion sizes may be excessive.</p>	<p><input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input checked="" type="checkbox"/> Low</p>	<p>SG FSAS</p>	<p>The Take Life On recipe cards give advice on cooking basic recipes with balanced, FSA approved nutrition and portion advice. 18,500 of these recipe cards were distributed during the Morrisons field support events in 2010 and independent evaluation showed that 64% of consumers were using the recipe cards following the event.</p> <p>The Take Life On website currently also includes recipe pages and provides advice on diet and portion size.</p>	<p>It's envisaged that recipe cards will be distributed at future partnership/field support events during 2011/12.</p> <p>Milestones to be developed.</p>
1.16	<p>We are exploring opportunities to restrict advertising of foods high in fat, salt and sugar (HFSS) foods through non-broadcast media as outlined in the National Food and Drink Policy and we will continue to support a pre-9pm ban on advertising in broadcast media of HFSS.</p>	<p><input checked="" type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low</p>	<p>SG</p>	<p>SG has begun to explore options around this action and have commissioned Institute of Social Marketing at Stirling University to look at options available to Government and look at practice in other countries. Phase 1 of research into measures that may be available to restrict HFSS food advertising is complete. Next steps are to bring together key stakeholders to discuss those measures that promise the biggest impact while being deliverable and within the powers of Scottish Ministers.</p> <p>A workshop to discuss the issue of HFSS food promotion in the digital market will be held on 2 November 2011.</p>	<p>Hold workshop to discuss the issue of HFSS food promotion in the digital market, especially where young people are the target audience, by end November 2011.</p>

Chapter 6:

Implementing policy-research collaboration

Content

The Chapter comprises a paper which at the time of the viva was under peer review for journal publication and a national government media communication/news release (Scottish Government, 2013).

Evidence Contributions

Empirical evidence of a collaborative approach to research and policy development facilitating the translation of evidence on policy priorities into an innovative policy action.

Knowledge Translation Contributions

Support for the identification, planning, implementation of, as well as public communications for, a novel policy action.

6.1 Reporting and reflecting on a programme of phronetically planned food marketing control policy development and research

(Under peer review at time of viva)

Author: Georgina Cairns

Abstract

A plethora of food marketing control policies aimed at reducing the impact of food and drink marketing on food behaviours and strengthening health promoting strategies have been enacted over the last decade. Impact to date has been disappointing. Translational evidence gaps have been identified as contributory factors. Dissonance in stakeholder motivation to engage with initiatives intended to strengthen policy controls have also been identified as progress barriers.

A collaborative and iterative programme of research and policy development aimed to address these gaps. The programme was structured by the planning framework, phronesis.

This article describes and evaluates the programme's policy development processes and its evidence and intervention outcomes. It reflects on lessons learned and implications for future research and policy planning. It concludes that phronesis has the capacity to strengthen collaborative food marketing policy and research programme planning and impact. Potential policy benefits include the identification of innovative options, evidence-based support for their development, as well as strengthening of strategic focus and critical evaluation of their underpinning logic. Potential research benefits include the generation, critical appraisal and synthesis of a multi-disciplinary range of evidence resources. Conflict management skills can strengthen the impact of phronetically planned programmes.

INTRODUCTION

1.1 Calls for innovative food marketing policy and research are growing

For more than a decade multiple food and drink marketing policy controls initiatives aimed at shifting commercial practices towards more 'responsible food marketing' have been implemented (Hawkes and Lobstein, 2011; Cairns et al, 2013). Adoption of responsible food marketing as a sector level norm is a policy goal because it is envisioned as a pathway towards a food environment which '*fosters and encourages healthy dietary choices and promotes the maintenance of healthy weight*' by creating a reconfigured marketing landscape (WHO 2010, p. 4).

Despite the widespread diffusion of responsible marketing policy initiatives, the marketing landscape continues to be strongly dominated by food and drinks that are energy dense and high in fat, salt and sugar (hereinafter HFSS foods) (Powell et al, 2013; FTC 2012; Landon, 2013). Consequently, there have been numerous calls for innovation in intervention approaches and research agendas (Sassi et al, 2010; Moodie et al, 2013; Roberto et al, 2015). A growing interest in the potential for social science constructs and methodologies to advance marketing control policies is also apparent (McCarthy et al, 2011. University of Copenhagen, 2013).

The majority of prevailing control policies are the product of multi-stakeholder development processes and are voluntary in nature (Hawkes & Lobstein, 2011; Bryden et al, 2013; Roberto et al 2015; Swinburn et al, 2015). The European Union's (EU) Pledge Programme under its Platform on Diet, Physical activity and Health and the US's Children's Food and Beverage Advertising Initiative are examples of strategies aimed at engaging the private sector in substantive and effective shifts towards more responsible marketing practices (BBB, 2015; WFA, 2015).

Some dietary public health scholars argue for the complete exclusion of the private sector from the policy cycle and for voluntary strategies to be replaced by legislative measures (Brownell & Warner, 2009; Stuckler & Nestle, 2012). The prevailing preference amongst

policy makers however, continues to be for approaches based on multi-stakeholder participation and non-statutory policy intervention (Hawkes & Lobstein, 2011; Bryden et al, 2013; Roberto et al 2015; Swinburn et al, 2015).

Evidence on how the participation of the private sector and other influential stakeholders can strengthen, rather than undermine policy efficacy and effectiveness is a recognised evidence gap (McKinnon et al, 2009; Bryden et al, 2013). Integrated, normative research programmes developed in collaboration with policy makers can help to address this gap. They can do this by generating original, contemporaneous evidence on factors observed to be effecting the development and outcomes of specific policy initiatives. Furthermore, retrospective evaluation of the programme's process and outcomes can also contribute to the global evidence base (Flyvbjerg, 2001; Buse et al 2005; Butland et al, 2007).

1.2 Reasons to consider phronesis as a strategic policy and research planning option

Phronesis is a term describing (1) an Aristotelian philosophical tradition and (2) a research approach grounded in social science and intended to directly contribute to policy progress (Flyvbjerg 2001; Flyvbjerg, Landman & Schram 2012). Phronesis was first formally identified as an intellectual virtue by Aristotle. It translates in modern terminology to 'prudence' or 'practical wisdom', reflecting the Aristotelian principle that context-specific expertise can and should play a vital role in value rational reasoning and deliberative decision making (*ibid.*). More recent commentaries on its potential to contribute conceptually and instrumentally to research and policy include: Turoldo (2009) suggested phronesis is a more fit for purpose ethical frame for scoping and planning public health policy interventions than approaches shaped by traditional biomedical ethics paradigms and natural science experimental methodologies. Kavanagh (2014) has advocated phronesis as a framework for the critical evaluation of social and ethical impacts of marketing and to guide the development of more responsible marketing practices. Archibald (2015) recently reported in this journal how the application of phronetically planned research was used to strengthen evidence-based community education and to generate '*open, recursive, dynamic, non-linear and values-explicit practices and processes*'.

The urban planning scholar, Flyvbjerg has taken a lead role in developing Aristotle's original construct into a planning strategy for policy-oriented research. Most significantly, Flyvbjerg has integrated Foucauldian theory on the links between power and knowledge into the conceptual and instrumental scope of phronesis (ibid.; Flyvbjerg 2002). Key characteristics of phronetically structured research programmes are a capacity to support disciplinary pluralism, the contributions of a heterogeneous stakeholder constituency and the monitoring and evaluation of the impact of power relations on policy development (Flyvbjerg 2002; Flyvbjerg, Landman & Schram 2012; Blarke & Jenkins 2013; Patsiaouras, Saren & Fitchet 2015). Examples of its research applications to date include pro-social behaviour change (Hargreaves 2012), human resource management (Zackariasson, Styhre & Wilson 2006), teacher training (Salīte, Gedžūne & Gedžūne 2009), energy policy analysis (Blarke & Jenkins 2013), nursing (Phillips & Hall 2013), ethnographic approaches to health systems research (Nambiar 2013), and critical analysis of marketing's impacts on water supply services (Patsiaouras, Saren & Fitchet 2015).

Scholars advocate structuring a research programme around four overarching questions
These are:

- Where are we going?
- Does it matter?
- What can be done about it?
- Who gains and who loses?

The translation of these four core policy questions into context specific research questions is intended to ensure research approaches grounded in the social sciences are designed and developed in ways that can effectively support collaborative research and policy programmes.

Advocates of phronetic scholarship also advocate the utilisation of three types of knowledge and evidence in phronetically planned research. These are instrumental/technical; universal, empirical evidence (respectively described as '*techne*' and '*episteme*' in Aristotelian terminology) and context or issue specific, '*phronetic*' evidence (Flyvbjerg 2001; Kavanagh

2014). In this context, phronesis can be understood as sector and or issue specific 'prudence' or 'practical wisdom'. It contributes to the evidence pool by using specialist expertise to characterise and critically evaluate the current status of the policy challenge, proposed policy actions and potential/newly emergent evidence on implications for policy progress.

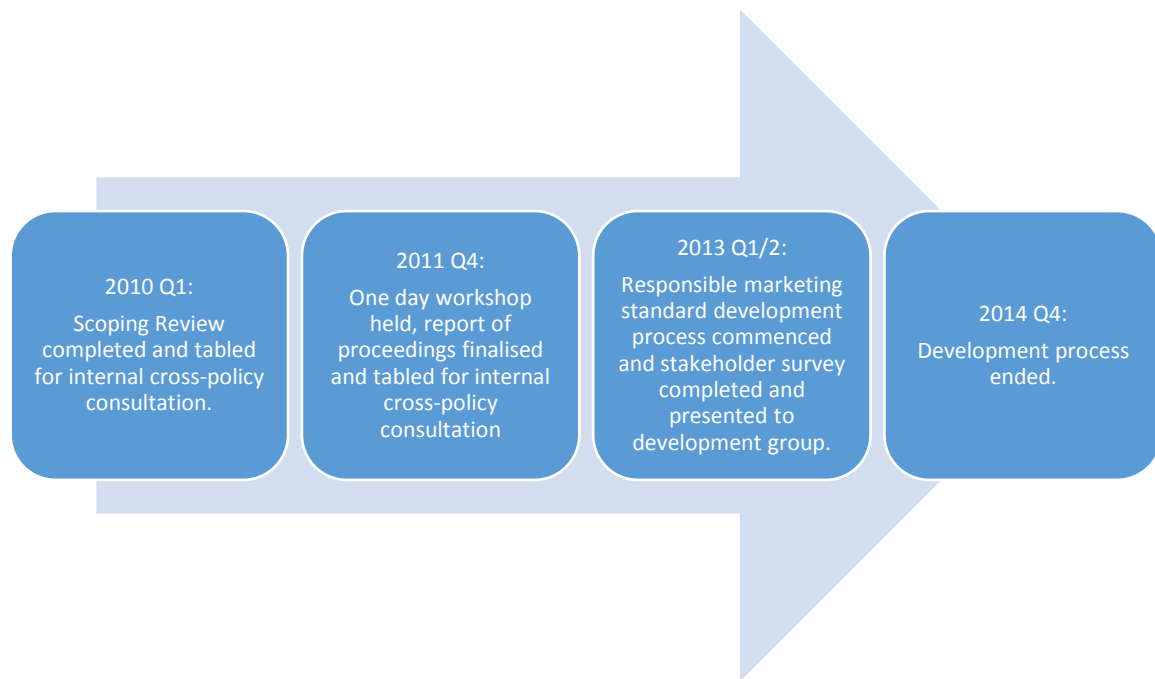
Phronesis therefore describes both a *research strategy* and a *type* of evidence (Flyvbjerg 2001; Hargreaves 2012; Flyvbjerg Landman & Schram 2012). As a research strategy its primary purpose is to facilitate the identification, development and evaluation of collaboratively developed but also robust policy actions. It aims to do this by adhering to a pragmatic but at the same time, value rational theory of change. As well as a research strategy intended to generate evidence *for* policy, it has a secondary purpose which is to generate evidence *on* policy and thus contribute to the global evidence base.

1.3 Article context and purpose

This article presents the conduct and results of a collaborative programme of policy and research aimed at controlling the impacts of food and non-alcoholic beverage marketing (hereinafter food marketing) structured by the four research questions core to phronesis. The programme's aims were to strengthen the food marketing controls of one of the United Kingdom's (UK) four devolved government's whilst maintaining congruence with other policy priorities and obligations. The policy initiative identified through this research programme was an independently defined and verified set of benchmark standards for responsible food marketing (hereinafter standard or standards). Development of the standard was formally initiated by the devolved government's policy makers but was wound down before completion following the withdrawal of key stakeholders from the development process. Figure 1: Timeline for Research and Policy Activities outlines the sequence of events.

Figure 1: Research and Responsible Marketing Standard Development Collaboration

Timeline



Three policy commissioned applied research activities and an independently initiated, empirically focused, retrospective policy analysis are reported. A rapid evidence assessment (REA) of policy challenges and response options, a priority setting workshop and a survey of stakeholder responses to the policy initiative were commissioned by policy makers. Each of these research activities represented an issue and context-specific translation of one or more of the four core phronetic research questions and was developed iteratively and collaboratively. The purpose of reporting all three research activities in this single article is to provide a concise summary of findings and to demonstrate how epistemic, technical and phronetic evidence and expertise were used in combination to support the identification and development of the intervention and its underpinning theory of change.

The research objective of the fourth activity, a retrospective policy analysis was to identify global evidence and insights generated by the collaborative research and policy programme that could be helpful to future global food marketing policy and research. Its findings are included here as a contribution to the global evidence pool and as an example of the generation of 'prudent' evidence and learning from phronetically planned policy research.

Brief descriptions of the four research activities are provided in the methods section. Findings from the three applied policy research activities are reported in the results section. Findings from the post-hoc analysis and their implications for future policy are presented in the discussion section. The article concludes with lessons learned *for* and *on* food marketing control policy development.

METHODS

2.1 Rapid Evidence Assessment

The aim of the REA was to answer context and issue specific research questions translated from the core phronesis questions, '*where are we going?*' and '*does it matter?*' Specific research objectives were to (1) map current trends in food marketing and policy and impacts to date (2) outline implications for future policy development including options to strengthen policy. An important caveat to the second objective was that it should explicitly take account of congruence with overlapping national policy obligations and priorities such as food based economic growth policies.

A critically interpretive scoping review of grey and peer reviewed evidence was conducted. Its protocol was guided by recommendations on methodology for critically interpretive REAs commissioned to support policy planning. The goal of such methodologies is to generate a menu of practicable policy initiatives based on best evidence currently available and to contextualise these within a current status report (Burton et al, 2007; Government Social Research, 2008; Khangura et al, 2012; Thomas et al 2013).

2.2 Policy Prioritisation Workshop

A one day multi-stakeholder workshop was held to identify priority actions and/or strategies based on the findings of the REA. Its design closely mirrored other collaborative research and policy scoping and prioritisation workshop based methods reported in the literature (Gregory & Keeney 1994; De Lopez, 2001; Reed et al, 2009). The participant list was developed to reflect the heterogeneous nature of the food marketing policy stakeholder constituency and to capture a wide range of epistemic, technical and phronetic knowledge

and evidence. The final list of twenty participants comprised four public health policy makers (PHP), three policy makers whose interests in food marketing were not primarily in public health (NPHP), two representatives of quasi-autonomous/non-departmental national public organisations (QUANGO), two stakeholders from the private food industry (FI), two stakeholders working for trade associations representing marketing and/or food commercial operators (TA), two stakeholders working for inter-governmental public health bodies (IPHP), three stakeholders drawn from the public health and consumer advocacy sector (CA), and three professionals and academics invited because of their independent expertise (IE).

Participants were provided with a summary version of the REA report in advance of the meeting and briefed that the purpose of the workshop was to ‘to explore opportunities to restrict the marketing of foods and drinks high in fat, salt and sugar to children in the digital marketplace’. Additionally, participants from each of the stakeholder constituency sub-groups listed above presented brief expert overviews on relevant topic areas, such as current EU and the UK law and digital marketing trends. The workshop was conducted under the Chatham House Rule to encourage open discussion and information sharing (Chatham House, 2014). Meeting proceedings were recorded and transcribed and a draft anonymised précis of workshop proceedings was circulated to all participants to check for any factual errors before its finalisation. The final report included summaries of the workshop briefing materials, participant discussions, workshop wrap up comments as well as a short paper summarising implications of workshop conclusions for future policy development.

2.3 Survey of Stakeholder Responses

In support of the government decision to develop a standards-based responsible food marketing intervention, research intended to inform the development process was commissioned. Semi-structured telephone and skype interviews with twenty one key informants and four consumer focus group discussions (FGDs) were conducted. Research objectives were to identify stakeholder views on perceived benefits, barriers and enablers for the successful development and implementation of the intervention.

Key informants were recruited using a sampling frame designed to reflect the composition of the stakeholders participating in the policy development process. Quota targets were two each PHP, QUANGO, TA and CA, marketing sector (MI) key informants. To ensure FI representation reflected the sector's heterogeneity, a quota target of two each from the grocery retail, food processing/manufacturing and retail catering sub-sectors was also set. In order to reflect the input of specialist independent expertise in the development process, one IE in food health claim standards, one IE in public health policy and food marketing and one IE in public health marketing were also included in the sample. Interviews were audio recorded and took from 15 -60 minutes.

Recordings were transcribed and two researchers coded and thematically analysed complete transcripts with the aid of the qualitative data analysis software package Nvivo10. The researchers had regular discussions to ensure consistency in interpretation and to further facilitate the iterative identification of main themes and constructs. Results from the thematic analysis were made available in presentation and report formats to policy makers and to the intervention development group participants during the first phase of the formal intervention development process.

2.4 Policy space analysis

To identify policy implications for future policy development, a policy space analytical frame was used to critically appraise the collective outcomes of the research-policy programme and identify implications for future policy. Outcomes included evidence identified from the three applied policy research projects, along with researchers' observation of the responsible marketing standard development process as participants in that process.

A policy space analysis conceptualises stakeholder responses to a policy issue as dynamic phenomena, subject to flux over time and in response to situational shifts (Grindle & Thomas, 1991; Buse et al, 2005; Chrichton, 2008). A policy space analytical frame sets out three groups of factors with the dynamic capacity to reduce or expand opportunities for policy goals to be developed and translated into effective intervention. These are: (1) prevailing international and national governance *context*, (2) acceptability and utility of policy *content* and (3) *circumstantial* factors such as stakeholders' perceptions and

responses to proposed policy actions and their underpinning rationale (Buse, 2008; Chrichton, 2008, Walt et al, 2008). The aim of the analysis was to identify the factors found to be significant to development of this policy initiative that were also likely to be of significance to the conduct and outcomes of future policy initiatives.

RESULTS

Summary results for the REA, workshop and stakeholder survey are reported below.

3.1 REA: Policy Challenges and Options

The main conclusions of the review are presented below, along with key supporting evidence sources identified by the REA.

- Food marketing targeted to children predominantly promotes foods and drinks that sharply contrast with the food based dietary guidelines (McGinnis et al 2006; Cairns et al, 2009).
- Food marketing directly influences children's food behaviours (ibid.).
- Digital marketing impacts children's behaviours and facilitates the diffusion of market-led shifts in behaviours and behaviour determinants (Chester & Montgomery, 2009; Montgomery & Chester, 2011).
- The rapid rise in digital marketing research and promotional techniques is an issue of concern to multiple policy sectors, including those concerned with child welfare, consumer rights and the personal privacy of all age groups, as well as global and sovereign governance of the world wide web (ibid.).
- For more than a decade, there have been significant increases in voluntary, mandatory and co-regulatory food marketing intervention activity (Hawkes & Lobstein, 2011).
- Despite high levels of compliance with voluntary codes and statutory regulations children's exposure to HFSS food marketing remains high (Kaiser Foundation, 2006; Kunkel, 2009).
- The added value food chain, including the marketing and advertising of food and drinks are high value components of the national economy (Zenith Optimedia, 2008;

ASA, 2009; Mintel, 2009; WARC, 2009). Policy actions targeted to public health policy goals that do not take account of the impact of any intervention on economic and trade policy goals are likely to encounter strong resistance from multiple stakeholders and policy areas.

- As a member state (MS) of the European Union (EU), and a devolved government of the UK, national level policy is constrained by EU and UK reserved powers. International trade rules and treaties also constrain policy scope (Garde, 2008; Sassi, 2010).
- International calls for more effective policy action note the evidence base is convincing and the need is urgent (WHO, 2010; UN, 2011).

3.2 Workshop: Identification of Policy Priorities

Workshop discussions identified the following criteria as critical to determining future policy action priorities:

- ‘Piecemeal’ approaches to intervention are inherently weak. Therefore, because children and young people are easily able to spend a large amount of unsupervised time accessing age-inappropriate food marketing through an expanding range of digital technologies, an intervention targeted only to this demographic group and/or emergent marketing trend is unlikely to be effective.
- The WHO and the UN’s recognition of HFSS food marketing as a significant public health risk factor is and will continue to result in an expansion of opportunities for policy action.
- The current polarisation and contested nature of discourse and debate on food marketing and its contribution to the rising prevalence of obesity and non-communicable diseases (NCDs) is unhelpful to policy development. Building a functional network of stakeholders united by the paradigmatic principle that all stakeholders share a responsibility to mitigate the effects of HFSS food marketing is currently an under-served policy goal.
- Mass media is an influential determinant of public opinion and support for private and public sector action. Media relations should constitute an integral component of intervention planning and evaluation.

- Digitally facilitated internationally disseminated marketing is a rapidly growing phenomenon and is undermining nation level governance capacity to constrain the reach and impact of food marketing.
- The scope for individual MS's of the EU to enact legislative controls on food marketing and/or marketing targeted to children is limited.
- There are 'loopholes' and variations in the interpretation and implementation of prevailing voluntary initiatives. For example, the EU Pledge, an EU-wide recognised code of practise on food marketing to children does not address interactive activities such as user-generated/social media based marketing and does not include a definitive set of nutrition-based criteria to guide pledge signatories on which food and drink formulations the code should be applied to.
- Future initiative must be designed to be 'future-proof'. This means design and content must be broad and comprehensive enough to 'get ahead' of technology and end the catch up between commercial marketing innovations and policy responses.
- Both for profit and not-for-profit sector representatives believe there may be potential benefits for a responsible food marketing standard to be deployed as a 'hybrid' alternative to legislative and self-regulatory approaches.
- Independent standardisation is already widely deployed in the private food production and distribution sectors. It is therefore a familiar intervention strategy which increases its potential acceptability to private sector stakeholders.
- Any future standard setting/auditing body must be independent of commercial interests and evaluative criteria must be demonstrably robust and evidence-based.
- The development of an effective standard is contingent on strong policy leadership supported by multi-stakeholder expertise and independent, robust evidence.

3.3 Survey: Stakeholder responses to selected policy intervention

Complete results of the stakeholder survey are reported in a companion paper (Cairns & Macdonald, forthcoming). A summary of the results presented to the responsible marketing standard development group is reported below:

- Almost universal recognition amongst survey respondents that marketing comprises a multifarious range of activities and strategies in addition to direct advertising. For

example, price promotions and displays at point of sale to encourage impulse purchase were identified as appropriate marketing activities and strategies to include in a set of responsible marketing standards.

- Identified public health benefits of a standard were reduced marketing pressure on consumers to purchase and consume HFSS foods and drinks and increased practical support for consumers aiming for their daily diet choices to be guided by national dietary guidelines.
- Identified commercial benefits of a standard were opportunities to increase reputational capital and public awareness of private sector innovations.
- Identified policy benefits of a standard were the opportunity to build public and other stakeholder support for cost and time efficient intervention approaches and gain support for the concept that advancing dietary public health is a shared responsibility.
- Rising rates of obesity and NCDs are recognised as an urgent global priority. Support for an independent standard is likely to be strengthened by future global initiatives.
- Identified barriers to standard development were lack of conceptual clarity amongst stakeholders on the scope and purpose of the standard. Also identified, were how it differed from other dietary public health initiatives and the potential risk for a multi-stakeholder development process to result in weak and unfocused qualifying criteria for responsible marketing accreditation.
- Identified barriers to standard adoption and diffusion were administrative burdens and financial costs to the private sector for accreditation, and low credibility for the standard if accreditation criteria were perceived to be weak.
- The most important factor identified as critically enabling to standard development and impact was a strategic, step wise communications plan. Many respondents recommended the communications plan should include strategic pre-intervention activities. Respondents recommended this as means to build public awareness and support for the concept of more responsible food marketing and to strengthen conceptual clarity on the purpose and scope of the standard. Respondents also recommended that a communications plan should aim to build a credible, and easily memorable 'brand identity' for the standard. The importance of building public

confidence in the third party/parties responsible for standard setting, audit and accreditation was also highlighted as a priority by multiple respondents.

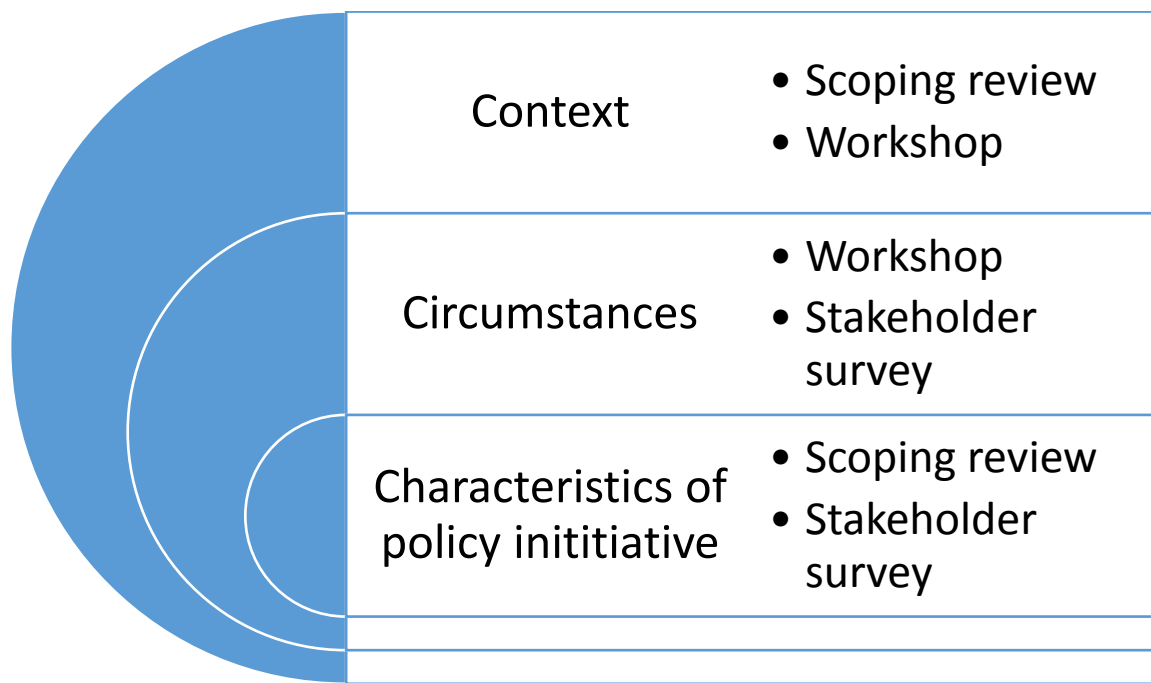
- The stakeholder paradigmatic perception most closely associated with positive support for the standard was that the rising prevalence of obesity and NCDs is a shared responsibility requiring a multi-stakeholder, multi-initiative response. The stakeholder attitude most closely associated with low support and/or opposition to the standard was low trust of other stakeholders.
- All respondents identified strong policy leadership as the most influential factor in strengthening stakeholder relations and building an effective 'community of practice'.

DISCUSSION

4.1 Policy space analysis

This section builds directly on the findings reported above, supplemented with the researcher's observations as participants of the standard's development process. It aims to identify globally relevant evidence and explore implications for future policy-research collaboration and development. Figure 2: Responsible Food Marketing Policy Space illustrates how evidence from the various research activities contributed to analysis. Results are reported narratively, organised around four factors that emerged as key to policy space expansion and/or contraction.

Figure 2: Responsible Food Marketing Policy Space



4.1.1 Congruence with other public policies

Sovereign powers are inevitably constrained by international, regional and national commerce and economic growth objectives supported by an infrastructure of statutes and treaties.

The 2011 UN Political Declaration on the prevention and control of non-communicable diseases (NCDs) has recognised this weakness in current policy scope and calls for internationally coordinated action (UN, 2011). Extant national and EU statutes for example, have no legally binding power over marketing content originating outside their borders (Garde, 2008). Hence, the REA and workshop discussions both highlighted the need for food marketing controls to extend beyond national borders and for national level policies to be coordinated. They also highlighted the unique potential for standards to progress an internationally scoped strategy. The extensive multi-sector evidence and dialogue literature base on how the cross-border utility of standards has been maximised and barriers to effectiveness reduced can help to inform policy on how policy space can be expanded and

effective transnational controls progressed (see for example, Guler et al 2002; Deaton, 2004; Fulponi, 2006; Fransen& Kolk, 2007; Brunsson et al 2012).

A second important cross-policy domain factor is that because of the economic value and integration of the added value food chain, substantive policy impact must take account of unintended, second order effects of policy on the supply chain (Guyomard et al, 2012; McCarthy et al, 2011). Some policy analysis have argued that closer cross-policy collaboration is not only necessary to reduce barriers, it can act as a policy enabler by strengthening the capacity for public policy and private sector innovations to develop in tandem and be mutually supportive (Booth 1989; Butland et al, 2007; Sassi, 2010).

Increasing public and policy concerns regarding the rise and impact of digital technologies on personal privacy and marketing effects is a rapidly emerging trend. However, technology innovations also have the potential to expand the options for stronger governance in the future. For example the increasing range of digital technologies can expand opportunities for intra- and inter- national policy coordination, monitoring and evaluation to date.

To date, policy incongruities and/or inconsistencies have tended to diminish policy space. However, current trends in technology and policy are creating new opportunities for policy action. For example, the continued diffusion of globally agreed policy actions and strategies, such as those urged by the 2011 UN Political Declaration, along with the increased capacity for large volumes of data to be collected and shared rapidly through digital technologies can support policy areas and jurisdictions to combine forces and develop mutually supportive policies and strategies.

4.1.2 Paradigmatic perspectives

A clear association between shared responsibility perspectives and view that the scope of responsible marketing policy should be expanded from the protection of children to a reduction in the exposure of all age groups to food marketing emerged from the research programme. This linked pair of perspectives was observed across the whole stakeholder constituency, namely, the private, public and not-for-profit sectors and consumers. Similarly positive attitudes regarding the intervention were also associated with positive perceptions

regarding the capacity of multi-stakeholder participation in the initiative to strengthen synergies with other interventions. These findings contribute to previous research findings indicating that shared responsibility perspectives and public messaging may be helpful to progressing multi-stakeholder food marketing controls and their subsequent adoption and diffusion (Hemmati, 2002; Schrempf, 2012; Niederdeppe & Shapiro, 2015).

Reservations amongst stakeholders, regarding the possibility of developing a standard that could accurately and proportionately set standards for good practice across the whole myriad of marketing methods was apparent. However it was also noteworthy that stakeholder survey respondents with previous experience in the development and/or application of independent standards identified a range of countervailing/enabling strategies. Suggested strategies were predominantly targeted to building a demonstrably consistent approach to the moderation and evaluation of the whole mix of marketing techniques. Evidence and learning from other sectors on how paradigmatic consensus regarding the objectives and utility of a standards-based intervention can be developed and used to expand policy space area also available (Miles & Munilla, 2004; Fransen & Kolk, 2007; Ingenbleek & Immink, 2010; Thow et al, 2014).

Conceptual clarity regarding the purpose and underpinning logic for an intervention or package of interventions is recognised as an intermediate but sometimes challenging policy objective in its own right (Buse, 2008; Cairns et al, 2014; Hawkes et al, 2015). Divergent perspectives on the scale of the problem, causative factors and proportionate response options have been observed and noted as unhelpful to collaborative food marketing policy development (Millstone & Lobstein, 2007; Matthews, 2008; Kraak et al, 2014; Swinburn et al, 2015). Strengthening conceptual clarity and agreement on what constitutes marketing and specifically responsible food marketing has been identified as a gap in the translational evidence base and in the scope of prevailing policy (Booth 1989; Matthews, 2008; Lobstein, 2013; Cairns, 2013; Elliott et al, 2014; Swinburn, 2015). The stakeholder survey and workshop discussions found almost universal recognition across all stakeholder groups of the multifarious nature of marketing. There was also clear support for comprehensive food marketing control policies. Research and policy can build on these findings by identifying how public support can contribute to an expansion of policy space. For example by

investigating how to build on these attitudes and strengthen stakeholder perceptions regarding the legitimacy of, and urgent need for additional interventions.

4.1.3 Public communications

As well as acting as an independent influencer of public opinion, mass media provides a platform for public communications aiming to shape public perceptions on policy actions. In the absence of an active public communications strategy, public perceptions about government policy are vulnerable to influence by stakeholders most active and/or proficient in their public communications. For instance, a review of media coverage on the launch and foreclosure of the standard for example, found only one independent news report. The rest were found to be verbatim reproductions of new releases from private and public sector stakeholders. Press releases inevitably privilege the communicators' viewpoint and interests.

Public communications are also highly influential in public attitudes to the protagonists of policy action. The stakeholder survey revealed stakeholder and public support for the standard was significantly strengthened by the backing of a government whose administration had already achieved significant reputational capital and public support. On the other hand, stakeholder confidence in the standard was undermined by low public visibility for the competence of the independent third party assigned responsibility for its development and deployment.

The potential for significant levels of public communications to be actively applied to advance food marketing control policy appears to have been under-exploited to date (Brownell & Warner, 2009; Field et al, 2012; Niederdeppe & Shapiro, 2015; Brownell & Roberto, 2015). Rapid deployment of previously prepared communication plans designed to build on anticipated shifts in policy circumstances and public opinion have contributed to the development and diffusion of independent standards in other sectors (Guler et al 2002; Fulponi 2006; Brunsson et al, 2012). Both workshop and stakeholder survey participants predicted catalytic events which strengthened public acceptance of policy initiatives would arise in the future. Monitoring trends in public opinion and advance communications planning could facilitate rapid policy responses to such 'windows of opportunity'.

Workshop discussions and survey respondents emphasised that a responsible marketing accredited standard must transparently demonstrate consistency in its applicability across the whole marketing mix. Safeguarding measures such as assessing eligibility of applications for the standard against a validated nutrient-based framework such as the UK's nutrition profiling scheme (Rayner et al, 2013) were suggested.

Credible demonstration of an intervention's logic and applicability also serves to expand policy space for its development and deployment (Chrichton, 2008). A step-wise communications strategy with the purpose of first building a compelling case for the standard and subsequently demonstrating its utility and trustworthiness was recommended by survey key informants. A strategic communications plan was also advocated as a means by which to avoid the purpose and/or logic of a responsible marketing standard being confused with the logic and/or purpose of nutrition labelling healthy eating signposting schemes.

Strategic communications targeted to building a strong but simple brand identity was also recommended in order to reduce consumer information burden and to strengthen its competitive-advantage-conferring capacity for standard-compliant food marketers. This finding is echoed in the cross-sector literature on the critical contribution of public perceptions to the utility of independent standards (Deaton, 2004; Fransen & Kolk, 2007; Ingenbleek & Immink, 2010).

4.1.4 Building a community of practice

The translational evidence base could be expanded by drawing on the technical, epistemic and phronetic evidence available, from an engaged community of stakeholders. Potential research benefits are the generation of innovative evidence and theories of change and the cross-checking of the validity and reliability of evidence. Potential policy benefits could include faster development pace, more innovation in the design, development and evaluation of interventions, and more synergy for packages of policy action (Gregory & Keeney, 1994; Gonzales-Padron & Nason, 2009; Schrempf, 2012).

Trust in stakeholder relations and networks is recognised as perhaps the most critical determinant to the building of a community of practice comprised of stakeholders with mixed backgrounds and motivations (Miles & Munilla, 2004; Fransen & Kolk, 2007; Fulponi, 2006, Gonzales-Padron & Nason 2009; Thow et al, 2014). Evidence from other initiatives indicates that building trust levels is likely to require substantial investment in time and other resources and can be extremely challenging (Flyvbjerg, 2001; Fransen & Kolk, 2007; Bryden et al, 2013). The evidence from the stakeholder survey, workshop discussions and ultimately the failure of the development process to achieve its goal indicate there are significant barriers to building a truly functional and effective community of practice around the policy challenge of adverse food marketing impacts.

The survey and primary evidence from other sectors identifies policy leadership as the fundamental key to managing the risks and benefits of multi-stakeholder participation and building an effective community of practice from a loose coalition of stakeholders with diverse motivations and paradigmatic perspectives.

4.2 The contribution of phronesis to research and policy outcomes

The programme's collective outcomes summarised in this article provide promising evidence of the capacity for phronesis to facilitate the strengthening of food marketing policy and research. Phronetic principles provided an integrative planning structure for the programme's normative goals. It contributed to policy development by facilitating evidence-based support for the management of multi-stakeholder processes, and in the identification and development of an intervention and its underpinning logic. It contributed to research impact through its strategic support for the generation, synthesis and critical appraisal of an expanded and multi-disciplinary range of evidence resources.

Structuring the REA through the translation of the core phronesis questions 'Where are we going?' and 'Does it matter?' provided a unifying framework for the scoping review to critically interpret and present evidence on the scale, significance and trends in commercial food marketing practice and policy options. In its role as a normative research planning framework phronesis supported innovation, reflection and revisions in policy development direction and strategy. For example, the core phronesis question on 'what can be done

about it?’ which provided the focus for the workshop also helped to create a forum for sharing epistemic, technical and phronetic evidence and a radical revision to policy direction (from targeting digital promotions of food and drink to young people to responsible food marketing across the whole mix of marketing activities and target audiences).

Phronesis emphasises that an understanding of stakeholder goals and assumptions can provide useful insights on how to monitor and manage stakeholder networks and relations (Flybjerg 2002; Flybjerg Landman & Schram 2012; Patsiaouras Saren & Fitchet 2015). The focus on power manifested through the core ‘who gains, who loses?’ phronesis question enabled the programme to monitor variances in stakeholder interests and influence – both consistent features of multi-stakeholder policy development (Hemmati, 2002; Flybjerg 2002; Wheeler, Colbert & Freeman 2003). The stakeholder survey highlighted discrepancies in stakeholder motivations and power relations. It increased awareness of these factors and their potential to strengthen and/or threaten the development and subsequent adoption and diffusion of a responsible marketing standard.

Evidence from the programme including its ultimately unsuccessful outcome on the critical importance of stakeholder relations may not have been revealed by a less integrated approach to research and policy. The integrated approach was also helpful in revealing the significance of differences in paradigmatic perceptions with regards to support for a multi-stakeholder initiative. These findings add to an emergent global evidence pool on the impact of stakeholders on marketing policy progress (see for example, Matthews 2007; Millstone & Lobstein 2007; Kraak, Swinburn, Lawrence & Harrison 2014). The collective evidence for example indicates that a task force convened around a specific operational objectives requires support in order to evolve into a cohesive community of practice. For example, an overarching strategic mandate is first agreed and strong policy leadership is demonstrated throughout.

The collective outcomes from this programme also illustrate the value of ‘prudence’ or ‘practical wisdom’ to policy development and research. The supportive structure facilitated the contribution of expertise and evidence from a heterogeneous mix of stakeholders, an

iterative policy and research development process and for all forms of evidence to contribute to a value rational but also highly instrumentally focused theory of change.

In summary, the evidence from this programme of research indicate that phronesis as a planning strategy that can support food marketing policy development and research collaboration. It also has the capacity to support innovation and development planning. It provides an underpinning rationale for balancing evidence-based value rational reasoning analysis (for a comprehensive approach to responsible marketing) with instrumental and pragmatic factors (such as congruence with other policies and highlighting the critical importance of public opinion and communications). It can also facilitate the contribution of multiple stakeholders and evidence sources to the development process, the monitoring of power relations in the stakeholder network and policy processes, and a shift from natural to social science research approaches for food marketing policy development.

LESSONS LEARNED AND RECOMMENDATIONS

Evidence and learning from this programme of research and policy collaboration indicate that the development of a set of standards with the capacity to make an effective contribution to responsible food marketing policy is feasible. Developing standards however, is contingent on insightful assessment of context and strategic management of circumstances. It is also clear that the normative aim of supporting and progressing policy action must be balanced by giving due weight to evidence against, as well as for, policy direction and strategy. For example, the research findings regarding the critical importance of establishing and nurturing stakeholder relations suggest that greater efforts to engage stakeholders in policy rationale before embarking on the intervention development process were advisable.

As well as a willingness to invest substantively in building a community of practice and an evidence-based theory of change, the evidence from this programme also indicate that food marketing control policy based on voluntary, multi-stakeholder participation requires robust policy leadership.

The outcomes from this programme of research indicate that phronesis can make a useful contribution to the highly contested and to date intervention-resistant food marketing policy arena. However for its evidence to directly contribute to policy development, its findings and their implications must be communicated rapidly and in forms accessible to a very broad audience. Alongside this in policy areas where polemic and lack of consensus is prevalent, additional skills such as negotiating conflict may also be required.

In summary, it seems phronesis has the potential to strengthen food marketing policy development and contribute to the evidence base on what intervention strategies are effective and why. Further development and testing of phronetic approaches to food marketing policy is recommended.

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6.2 Scottish Government 'Responsible marketing of food and drink' news release

News

April 24, 2013



Responsible marketing of food and drink New standard to cut sale of foods high in fat, salt and sugar

Scotland is taking the lead in responsible marketing of food and drink to cut Scotland's obesity problem.

The Scottish Government has teamed up with the British Standards Institute to develop a new Scottish marketing & advertising standard.

This standard – a halfway house between voluntary self-regulation and legislation - will provide a benchmark for the responsible marketing of food and drink to cut the consumption of food high in fat, salt and sugar.

A one day event is being held in Edinburgh today with representatives from some of the major supermarkets, food manufacturers, advertisers and health experts, to begin the process of developing a standard. Over the next year the British Standards Institute will work with industry to develop a Scottish Standard.

Minister for Public Health Michael Matheson said:

“Scotland has the third highest levels of obesity in the world, caused in part by an overconsumption of food high in fat and sugar. So this is an exciting new piece of work, which

has the potential to become a world leader in the area of advertising, and I'm delighted that Scotland is at the forefront.

"We know that people are significantly influenced by marketing and advertising. By introducing a standard for the responsible marketing of these products, we can begin to address some of the significant public health issues caused by our poor diet.

"This is the start of a long process and I am encouraged that representatives from some of the major supermarkets, catering companies and food manufacturers are today taking part in the first stage. I am determined that we collectively deal with this issue and this new standard will help the food industry play a leading role in being part of the solution."

Background

The Scottish Government's Route Map to Preventing Overweight and Obesity in Scotland includes action on in store and external marketing and advertising. The creation of the Standard is in line with the World Health Organisation report on Marketing of Food and Non-Alcoholic Beverages to Children report 2010. It is expected that the Standard will be finalised and published in Summer 2014.

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Chapter 7:

An example of how rethinking can support the identification of innovative policy options

Content

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Evidence Contributions

The paper is the first report of research into the potential for an independent benchmark standard to advance and strengthen responsible food marketing policy goals.

Knowledge Translation Contributions

Knowledge exchange with the United Kingdom's Department of Health policy makers and stakeholders engaged in the scoping and prioritisation project, 'An analysis of the regulatory and voluntary landscape concerning the marketing and promotion of food and drink to children'.

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7.1 Responsible food marketing policy and standardisation: an exploratory study

Responsible food marketing and standardisation: an exploratory study

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Abstract

Purpose – The purpose of this paper is to explore the feasibility and utility of developing an independently defined and accredited benchmark standard for responsible food marketing. To identify provisional evidence and insights on factors likely to be critical to its successful development and its capacity to strengthen the effectiveness of responsible food marketing policy.

Design/methodology/approach – Desk-based cross-policy domain case study.

Findings – There is promising evidence that the development and deployment of an evidence-based, independently defined and verified responsible food marketing standard is feasible. Provisional findings on factors critical to the development of an effective standard and strategically significant evidence gaps are presented as insights in support of future food marketing policy and research planning.

Research limitations/implications – Further investigation of these preliminary findings is required.

Practical implications – The study has provisionally identified an innovative intervention with the potential to strengthen statutory, voluntary and internationally coordinated food marketing control policy approaches.

Originality/value – This is the first report of research into the potential for an independent benchmark standard to advance and strengthen responsible food marketing policy goals.

Keywords Case study, Marketing, Policy, Exploratory research, Standards

Paper type General review

Introduction

Policy makers and analysts have expressed interest in the potential for an independent benchmark standard (hereinafter food marketing standard) to strengthen responsible food and drink marketing policy (hereinafter responsible marketing policy) (Scottish Government, 2014; Bryden *et al.*, 2013; NHF, 2011). Responsible food marketing policy is an umbrella term for policy targeted to the promotion of new practice and ethos norms in food and drink marketing. A fundamental aim is a reduction in the volume and persuasive power of marketing promotions for energy dense foods and drinks high in fat, salt and sugar (hereinafter foods HFSS). Policies are based on the voluntary and usually first or second party (i.e. self-regulated) monitoring and evaluation. Typically, they make reference to a wide range of potential targets. For example, they usually aim to target sponsorship, competitions-based marketing, social media campaigns, price discounting, point of sale/impulse appeals and package-based promotional graphics



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and messaging in addition to advertising. Corporate targets usually include grocery retailers, food processors and caterers, especially quick service restaurants and other out of home/take away providers of foods and drinks.

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To date, no evidence on the feasibility or potential utility of standardisation as a food marketing policy lever is reported in the literature (Bryden *et al.*, 2013; NHF, 2011; Scottish Government, 2014). Because sector-level (i.e. at scale) acceptance and acceptability at scale is one of the prerequisites for standardisation to achieve its objectives (King *et al.*, 2005; Guler *et al.*, 2002), the contribution of piloting and/or small trials evidence is likely to be limited. A large scale “natural experiment” of an implemented standard is probably the only fully reliable means of testing feasibility and effectiveness of a food marketing standard (Sassi, 2010; Butland *et al.*, 2007). However, development of a standard requires a significant investment of policy resources. In advance of this, exploratory research drawn from another policy domain may offer a cost-efficient source of evidence and insights on potential feasibility, effectiveness and factors critical to success. This paper reports on a case study that aimed to do this. It was commissioned (by a government health department) as part of a larger, mixed methods, scoping and prioritisation project on non-mandatory food marketing policy options. A full report on the complete project, including details on the various project tasks, interim findings and final conclusions is available at (NHF, 2011).

The objectives of this paper are to:

- Demonstrate how and why the case of the sustainable fisheries and the Marine Stewardship Council certification scheme (hereinafter the case of the MSC) was assessed as a close case match to the case of food marketing.
- Present evidence on the inherent and contextual characteristics of contemporary food marketing and its policy environment. Use this and MSC case evidence to prospectively assess the feasibility of developing a responsible marketing standard.
- Present preliminary evidence and insights on factors (including evidence gaps) likely to be critical to the development and effectiveness of a food marketing standard.

Rationale for exploring standardisation as a responsible food marketing policy lever

Over the course of approximately the last fifteen years, the impacts of commercial food marketing and the capacity of policy to control these (hereinafter the case of food marketing) has emerged as a phenomenon of significant importance to dietary public health policy (Cairns *et al.*, 2013; Hoy *et al.*, 2012). The prevalence of diet-related non-communicable diseases (NCDs) has risen sharply during this period (Ng *et al.*, 2014; WHO, 2014). Also, during this period many novel marketing practices and strategies have emerged. For example, digital technologies have facilitated a growth in viral marketing and highly personalised marketing based on behaviour profiling (FTC, 2012; NHF, 2011). Qualified by the caveat that there are many evidence gaps on the causality, food marketing is identified as a contributory factor in multiple contexts and at multiple levels (Butland *et al.*, 2007; Acs *et al.*, 2007; Moodie *et al.*, 2013). For example it is responsible for the salience of foods HFSS in the food environment. It increases the quantity and frequency of their purchase. It normalises their inclusion in the daily diet (Butland *et al.*, 2007; Chandon and Wansink, 2010; FTC, 2012; Cairns *et al.*, 2013).

Public health policy has launched multiple food marketing control initiatives. Many initiatives simultaneously aim to promote marketing and health literacy, change commercial practice (especially reducing their impacts on children) and reduce the salience of foods HFSS in the food environment (Hawkes and Lobstein 2011; Acs *et al.*, 2007). To date, policy impact has been limited. Consequently, there have been multiple calls for research agendas to be revised. A greater focus on identifying innovative intervention strategies and the translation of evidence into normative, policy-oriented support is emerging as a priority (Butland *et al.*, 2007; McCarthy *et al.*, 2011; University of Copenhagen, 2013).

Consumers' positive responses to nutrition labelling but their reports of difficulties in using this information to make healthful food choices are indicative of the challenges they face in the prevailing marketing landscape (Maubach *et al.*, 2014). They report common marketing techniques act as barriers, rather than enablers towards these goals (NHF, 2011; Wansink and Chandon, 2006; Grunert and Wills, 2007). For example, they report difficulties in differentiating between genuinely health supportive marketing and misleading, or confusing, promotions (Zimmerman and Shimoga, 2014). Similarly, the salience of price promotions for foods HFSS undermines consumer's positive responses to dietary health recommendations and marketing promotions for products that are supportive of these (Haws and Winterich, 2013; Glanz *et al.*, 2012). Hence information deficits have been identified as one of the factors contributing to the weak impact of policy on consumer's food behaviour to date (Sharma *et al.*, 2010; Harris *et al.*, 2009a; Tomer, 2013).

Information deficits can also be barriers to the adoption and diffusion of responsible food marketing on the supply side (Golan *et al.*, 2000; Tomer, 2013; Guler *et al.*, 2002). There is evidence of food marketers exploiting information ambiguities to obscure organisational ethos and processes that are unsupportive of dietary health policy goals (Harris *et al.*, 2009b; Hoy *et al.*, 2012; Malhotra, 2012). Policy analyses have also highlighted how prevailing information deficits in the market place mean potential suppliers of responsible marketing are unable to differentiate their practices from suppliers of less health supportive marketing. They are therefore unable to gain any competitive advantage for practicing health supportive marketing. They therefore face difficulties in offsetting any profit losses incurred as a result of reducing or ending marketing promotions for foods HFSS (Golan *et al.*, 2000; Tomer, 2013).

Additionally, it is argued that introducing public health responsibility quality controls and oversight into marketing strategies and activities can support public health supportive innovation along the whole of the added value food chain (Albersmeier *et al.*, 2009; Fulponi, 2006). The supporting rationale for this argument is that by strengthening the trustworthiness and credibility of marketing's role as signalling institution in the market, consumer and supplier information needs could be better supported. This can reduce informational market barriers and facilitate growth in the market for health supportive innovations such as product reformulation, smaller portion sizes, etc. (Golan *et al.*, 2000; Hoy *et al.*, 2012). A marketing standard therefore might not only help to address the harmful impacts (in public health terms) of current food marketing practices, but also inherent limitations of supply chains to be supportive of dietary public health priorities.

The evidence on the effectiveness of standards-based interventions indicate widely varying levels of impact (Vogel, 2010; Brunsson *et al.*, 2012). There is also a vibrant and lively discourse in the literature on the implications of policy strategies increasingly relying on non-statutory and/or economic incentive-based regulatory regimes to

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promote corporate and consumer behaviour change (Bernstein and Cashore, 2007; Eberlein *et al.*, 2014). Notwithstanding this, policy makers with food marketing control responsibilities continue to express interest in the potential for a standards-based intervention to strengthen non-mandatory policy regimes and strategies (Bryden *et al.*, 2013; NHF, 2011; Scottish Government, 2014). It is part of a broader preference for food marketing control policies based on the voluntary participation of multiple stakeholders and an assumption that intervention can result in market self-correction (Wilde, 2009; Sharma *et al.*, 2010; Hawkes and Lobstein, 2011). The initial motivation for this study was to explore how standardisation might strengthen voluntary policy strategies. However, evidence presented later in this paper, also suggests that its capacity to strengthen the impact of statutory policy regimes may represent an additional opportunity for future responsible marketing policy and strategy.

In summary, this section has outlined how and why information deficits are depressing consumer demand for, and supply side incentives to engage in, responsible marketing. It has outlined how and why the development of an independent benchmark standard may reduce information deficits. It has described how this can support the adoption and diffusion of innovative and more health supportive markets and marketing.

Conceptual rationale for considering standardisation as a food marketing policy lever

Cashore (2002) notes that standards are one of a number of non-state market driven form of governance. They are increasingly favoured by policy makers as a lever for voluntary corporate and/or consumer behaviour change. Political science research highlight this is part of the broader trend in western developed economies towards neo-liberal policy strategies (Vogel, 2010; Eberlein *et al.*, 2014). Sociologists have highlighted that standardisation is also a response to a growing priority in policy making on how to develop and establish governance options that regulate across as well as within national borders (Gereffi *et al.*, 2001; Eberlein *et al.*, 2014).

Notwithstanding, differences in explanations for their proliferation, the theory underpinning their policy utility derives from the work of Stigler in the 1961's (Stigler, 1961; Roheim Wessells, 2002) and the 2001 Nobel Laureates, Stiglitz, Akerlof and Spence (Royal Swedish Academy of Sciences, 2001). In their public announcement of the prize winners, the Nobel committee acknowledge their work as forming the core of modern information economics' and through this laying "the foundation for a general theory of markets with asymmetric information" (Royal Swedish Academy of Sciences, 2001).

Information economics is the source of the explanatory theory for how information deficits can inhibit the development of markets. The theory also accounts for the corrective effects of standards-based interventions across a wide range of commercial sectors and policy domains (see, e.g. Stigler, 1961; King *et al.*, 2005; Giovannucci and Ponte, 2005; Nadvi and Wältring, 2002; Fulponi, 2006).

The purpose of standardisation is to correct information deficits by providing a credible and trustworthy signal to the market, usually in the form of accreditation, certification and/or labelling mechanisms. In whatever form it is deployed, as a market signaller, it communicates the presence (and by default the absence) of a good practice to the market and/or stakeholders. A good practice that can be incorporated into a supplier's product, process or organisational ethos but which other stakeholders cannot readily confirm the presence or absence of is a credence attribute. Standardisation also facilitates the independent monitoring and evaluation of the credence attribute's incorporation. It therefore reduces opportunities for suppliers to make false claims and

increases opportunities for suppliers offering the credence attribute to gain profitable returns for their adoption of the good practice. For example, independent verification of the presence of a credence attribute can help firms incorporating the good practice to develop a new market and/or receive a price premium for the good practice, and/or accrue reputational capital. Information economics theory highlights how and why an independent standard has the potential to correct market information deficits and through this support the adoption and diffusion of new practice norms.

Evaluative evidence on the effectiveness of standards indicate impact is contingent on many factors (Brunsson *et al.*, 2012; Eberlein *et al.*, 2014). However, information economics theory does provide a core framework from which the potential for standardisation to advance policy goals can be prospectively evaluated. Scholars of standardisation identify five policy environment characteristics (hereinafter critical standardisation factors) as necessary and sufficient for standardisation to be a potentially effective policy lever (Deaton, 2004; Nadvi and Wältring, 2002). The presence or absence of the five critical standardisation factors can only assess it in principle utility. Other contextual factors will also contribute to final outcomes arising from a standards-based intervention. Nevertheless, an assessment of their presence and in what form is clearly a logical start point for exploratory research. The five critical standardisation factors are listed below:

- (1) consumer uncertainties as a consequence of information deficits in the market place;
- (2) asymmetric access in the market place to information about product or process qualities which disadvantages consumers and advantages suppliers;
- (3) the availability of science-based evidence with the capacity to address information deficits support the development;
- (4) limited opportunities in the market place for suppliers willing to adopt the good practice to achieve profitable rewards alongside opportunities for suppliers willing to engage in disingenuous and/or cheating behaviours to do so without being detected; and
- (5) sector-level adoption of the good practice has the potential to result in significant public good benefits.

An additional factor in support of the case for considering standardisation as a responsible marketing policy lever is its potential to build stakeholder consensus on the purpose and legitimacy of a standard (Cashore, 2002). Legitimacy is used here to describe the “generalised perception or assumption” (amongst policy stakeholders that an intervention) “is desirable, proper or appropriate within the socially constructed system of norms, values, beliefs and definitions” (Suchman, 1995, p. 574). This factor is highly pertinent to responsible marketing policy. Lack of consensus on appropriate intervention forms and scale is recognised as an ongoing barrier to policy progress (Kraak *et al.*, 2014; Millstone and Lobstein, 2007; Matthews, 2008).

In summary, this section has built on the preceding section to outline the theory-based rationale for exploring standardisation as a potential responsible marketing policy lever. It has highlighted how and why standardisation may have the capacity to reduce prevailing information deficits and thereby facilitate the development of a market for responsible marketing. It has highlighted why standardisation is an intervention with the potential to address the specific responsible marketing challenge

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of building stakeholder support for globally applicable forms of governance. It has however, also recognised that evidence on the impact of standards across a wide range of commercial sectors and policy domains is mixed.

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Rationale for using the MSC case as a source of cross-sector evidence

The five critical standardisation factors are not dichotomous variables; their inherent and contextual qualities are critical to standard feasibility and potential utility (Brunsson *et al.*, 2012; Nadvi and Wältring, 2002). For example, there are substantive difference in the evidence used and variables targeted by the ISO 22000 Food Safety Management System (ISO, 2009), which is a process standard, and the BSI 100500:2011 Anti-bribery Management System for Good Governance and Business Ethics (BSI, 2011), which is an organisational ethos/culture standard.

A preliminary assessment of the MSC case indicated it shared many characteristics with the case of food marketing. These included their slowly cumulative, multi-factorial causation pathways, and policy perception that both organisational ethos and processes should be targeted, international cooperation and coordination should be strengthened and that development should involve the participation of a broad base of stakeholders (FAO, 2009; Ward and Phillips, 2008; Roheim Wessells, 2002).

The case of the MSC was also selected because an extensive and rich evidence base was considered (by the research project team, including the policy makers who commissioned the research) to be an important criterion in case study selection. The MSC scheme has over the last two decades generated a substantial formative, process and impact evaluative evidence base (FAO, 2009; Ponte, 2012). The provisional assessment of the MSC as a suitable case study was further confirmed as the study progressed and is reported in the Results and Discussions sections of the paper.

Rationale for case study methodology

Case study is frequently employed as an exploratory research methodology, particularly in research aiming to explore “how” and “why” questions (Yin, 2009; Darke *et al.*, 1998). Case study is recommended for “inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident” and where research strategy aims to “combine rigour, relevance and pragmatism” (Darke *et al.*, 1998). Case study is also recommended as an appropriate methodology when research aims include the “description of specific examples of practice to illustrate a principle” and/or to generate “novel insights, actionable ideas and future research priorities” (Lyons, 2005).

Additionally, case evidence has been identified as a valuable source of preliminary evidence and insights for policy planning and development purposes (Flyvbjerg, 2006; Yin, 2009). For example, cross-sector process and impact evidence on a policy lever established in one policy area can provide insights on planning and development priorities to another policy area with no experience of its application but considering its potential feasibility and utility as a novel policy initiative (Bryden *et al.*, 2013; Smith and Petticrew, 2010).

Methods

Mapping and qualitative assessment of inherent and contextual characteristics of food marketing and MSC cases

The five critical standardisation factors were used as a framework to structure a mapping of inherent and contextual characteristics of the case of the MSC. The same

frame was used to structure the mapping of the case of food marketing and evaluate the feasibility of developing an evidence-based independent benchmark standard. Specific research objectives were to:

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- investigate if the MSC was a close case match and therefore an appropriate source of secondary evidence; and
- use MSC case insights and evidence to guide the identification of critical standardisation factors in the food marketing and policy environment literature and the qualitative assessment of their capacity to support the development of a standard.

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Compilation of a case history of the MSC certification scheme

A desk-based case history of the MSC was compiled. The research objective was to identify and synthesise evidence could provide provisional insights on how a food marketing standard might be developed. The following set of questions which were developed in collaboration with the larger research project team and focused on normative policy development knowledge needs were therefore used to guide the literature search and its synthesis:

- How were parameters for responsible fishing practice agreed?
- How are scientific principles used to underpin MSC assessment criteria and process?
- How was consensus developed and conflicts of interest handled?
- How are issues of commercial confidentiality handled?
- How does the MSC assess its impact?

Identification of factors contributing to the adoption, diffusion, impact and limitations of the MSC certification scheme

The MSC case history was critically appraised through a strengths, weaknesses, opportunities and threats (SWOT) lens. The research objectives were to: first, identify evidence and insights on factors that had played barrier and/or enabling roles in the development and utility of the MSC certification scheme; and second, to identify evidence gaps likely to be critical to future food marketing standardisation research and policy development progress.

Results

A qualitative assessment of MSC and food marketing critical standardisation factors

Table I, qualitative characteristics of MSC and food marketing critical standardisation factors provides a summary of findings from the mapping and qualitative assessment exercise. Results found the case of the MSC to be a close case match to the case of food marketing. In both cases causal pathways are cumulative and multi-factorial. They contribute to long-term outcomes that are adverse to the public interest. The MSC case and the food marketing case are both characterised by stakeholder disagreement on the relative significance of commercial practice contributions to these adverse outcomes. In both cases, substantive international evidence bases are available to inform and support the design, development and deployment of a standard. In both cases, there is clear recognition of the importance of policy targets to include organisational ethos as well as commercial practices. Additionally, in both cases, actors across the whole

Table I.
Qualitative characteristics of MSC and food marketing critical standardisation factors

Critical standardisation factors	The case of the MSC	The case of food marketing
	Information uncertainties	Causal links between fisheries practice and sustainability of wild fisheries stocks and their environments are complex, multi-factorial and cumulative. Estimates of effect sizes are therefore based on modelling, rather than experimental or evaluative data (FAO, 2009). Prior to the initiation of the MSC certification scheme, uncertainty (of information on outcomes) generated divergent, sometimes, actively contested views on proportionality of policy actions targeted to fisheries sustainability. MSC certification has reduced but not eliminated information uncertainties (Gulbrandsen, 2009; Kaiser and Edwards-Jones, 2006; Leadbitter <i>et al.</i> , 2006)
Information asymmetries	The multi-link value, geographically highly distributed and fragmented value chain for fisheries products resulted in asymmetric access to information on the sustainability of practices. Its effects were exacerbated by the prevailing information uncertainties. Independent audit and verification of sustainability claims of the MSC created more equalised access to information. As a consequence growth in market demand and the adoption and diffusion of responsible fishing practices was supported because external stakeholders could use the MSC scheme to seek out products associated with sustainable fishing practices more easily. Independent verification also strengthened external stakeholder confidence in the veracity of sustainability claims which in turn supported both supply and demand side driven market growth (Cummins, 2004; Parkes <i>et al.</i> , 2009)	Independent standards have been identified as a mechanism through which asymmetric access to information could be reduced (Golan <i>et al.</i> , Sharma <i>et al.</i> , 2010). For example, labeling schemes have been proposed to address the difficulties consumer experience in differentiating marketing promotions that support their dietary health goals from marketing promotions that covertly and/or inadvertently undermine their health-focused food choices and purchase intentions (Harris <i>et al.</i> , 2009b; Haws and Winterich, 2013; Chandon and Wansink, 2012). Unequal access to evaluation data on compliance with responsible food marketing codes has also been found to undermine broad stakeholder community's confidence in the veracity of private sector responsible food marketing claims (Matthews, 2008; Harris <i>et al.</i> , 2009a; Wilde, 2009). It has been argued that this scepticism has in turn contributed to the lack of diffusion of responsible food marketing practices (Golan <i>et al.</i> , 2000; Matthews, 2008; Wilde, 2009)
Availability of evidence resources	The availability of an extensive internationally applicable evidence base has been critical to the development of transparent and objectively verifiable indicators of sustainable fishing practices	An extensive and internationally applicable pool of evidence is available to support the development of criteria for responsible food marketing benchmarking and audit. The

(continued)

Critical standardisation factors	The case of the MSC	The case of food marketing
	and their public acceptance (Gulbrandsen, 2009; Parkes <i>et al.</i> , 2009). The evidence base is sufficiently extensive to enable criteria to be interpretively adapted on case-by-case basis without undermining the robustness of the assessment frame (Gulbrandsen, 2009; Parkes <i>et al.</i> , 2009; Owens, 2008)	development of the WHO global strategy on diet, physical activity and health (WHO, 2004) for example was underpinned by an extensive review of the international evidence. There is also a range of evidence-based, validated frameworks to support case-by-case assessments. For example, the UK's nutrient profiling model currently used as a support resource in the administration of extant food marketing policy controls could also contribute to building case-specific assessments of responsible food marketing certification applications (Rayner <i>et al.</i> , 2013)
Information deficits	Evidence reviews on the effectiveness of marine fisheries sustainability policies conclude that prior to the MSC, there were few incentives for the private sector to adopt sustainable fishing practices and/or sustainable fisheries sourcing policies (Parkes <i>et al.</i> , 2009; Accenture, 2009; Ponte, 2012). The reviews note that in the absence of trustworthy certification there were many barriers to marketing responsible sourced fish products and therefore to the development of a value chain supportive of sustainable fisheries and fishing practices, values and norms (Parkes <i>et al.</i> , 2009; Accenture, 2009)	There is evidence of marketing practices relying on information deficits regarding the veracity of marketing claims and appeals for short-term competitive advantage. For example: legal judgements have upheld complaints against marketing campaigns portraying a high sugar, chocolate spread as a healthy breakfast item (Malhotra, 2012; <i>The New York Times</i> , 2012). There is also good evidence that intensive food marketing creates conditions of cognitive overload for price conscious consumers (Hoy <i>et al.</i> , 2012; Haws and Winterich, 2013; Zimmerman and Shimoga, 2014). These effects have depressed public demand and supply side incentives. They have also depressed the development of health supportive norms, values and practices along multiple points of the added value chain (Seiders and Petty, 2004; Golan <i>et al.</i> , 2000; Sassi, 2010; Tomer, 2013; Williams <i>et al.</i> , 2012)
Public good benefits	Unsustainable fishing practices are recognised as one of a number of factors contributing to the loss of fisheries habitats and the extinction of some fish species (FAO, 2009; Parkes <i>et al.</i> , 2009). The public good benefits of sustainable fisheries practices becoming the industry norm could be substantial (FAO, 2009). Because wild marine fisheries are globally shared resources, the critical need for policy to be coordinated	The health and economic burden of diet-related chronic diseases has been declared by the United Nations General Assembly to be one of the greatest global threats to future gains in public health (UN, 2011). A shift from a predominant focus on the promotion of HFSS foods to more healthful foods and drinks has been identified as a priority public interest goal. Anticipated benefits include positive impacts on the food environment

(continued)

Table I.

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Critical
standardisation
factors

The case of the MSC

The case of food marketing

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internationally and for controls to extend across borders is also increasingly emphasised (Accenture, 2009; FAO, 2009; Giovannucci and Ponte, 2005)

as well as individual food choices (Butland *et al.*, 2007; Scottish Government, 2014; Tomer, 2013; Chandon and Wansink, 2010). Furthermore, because the impacts of contemporary food marketing practice increasingly extend beyond national boundaries, there are a growing number of calls for policy controls with international jurisdiction (Hawkes, 2006; WHO, 2010; UN, 2011; Moodie *et al.*, 2013)

Table I.

length of the added value chain are potential stakeholders – from primary commodity suppliers (e.g. fishing fleets and producers of fats and sugars) through the processing and manufacturing sectors, to retailers and their customers.

The results of this assessment therefore suggest that a food marketing standard modelled on similar objectives and processes to the case of the MSC is in principle feasible and potentially effective.

MSC case history Box 1.

Box 1. Case history on the development and deployment of the MSC certification scheme and its impact to date

How parameters for responsible fishing practice are agreed

The MSC was initiated in 1996/1997. The aim was to: first, create a universal framework for the assessment of the impact of fisheries practices on fisheries sustainability; and second, to link an evidence-based benchmark standard for sustainable fisheries practices to the market through an independent, and an internationally recognised certification scheme (Cummins, 2004; Parkes *et al.*, 2009).

The Food and Agriculture Organization’s (FAO) Code of Conduct for Responsible Fisheries (FAO, 1995) was used initially as the internationally applicable foundational resource. The multi-stakeholder participatory development process involving over three hundred organisations over a two year period resulted in the MSC principles and criteria for sustainable fishing (Accenture, 2009; FAO, 2009; Parkes *et al.*, 2009; MSC, 2014).

How scientific principles are used to underpin assessment criteria and processes

The framework for MSC assessment is underpinned by three evidence-based “principles” (i.e. core strategic goals). The purpose and scope of each principle is supported by a statement of intent and detailed technical criteria. Each application for MSC certification is assessed by an expert panel which sets case-specific technical criteria for the assessment. A fishery applying for certification is scored against the technical indicators and a preliminary report is issued for peer review and public comment. A chain of custody assessment which traces product through the supply chain, and ensures that integrity of origin claims are verifiable is also a requirement. Inspection and certification is carried out by independent, accredited auditors (Owens, 2008; MSC, 2014).

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Stakeholders have the opportunity to contribute to the initial consultation and revision process and to challenge the certifiers' provisional decision. The final report which provides an assessment of the fishery against the MSC standard is made available in the public domain. In the event that a stakeholder disagrees with the report's assessment and/or final recommendation, a formal objections protocol exists to facilitate its consideration by an independent adjudicator. If awarded, certification is valid for five years, subject to a satisfactory annual review report. After five years, a complete re-assessment is required (MSC, 2014).

How consensus has been developed and conflicts of interest handled

A number of reviews conclude that the MSC has achieved significant consensus amongst its stakeholders. This is attributed to its strategy of basing design and development of standard principles and criteria on internationally recognised evidence. As a consequence, although scientific evidence in support of detailed MSC processes and decisions is on occasions contested, there is significant consensus on the conceptual foundations for its approach (Accenture, 2009; Hernes and Mikalsen, 1999; Owens, 2008). The MSC programme has also taken demonstrative steps to ensure compliance with the rules of the World Trade Organisation which has served to reduce the risk of trade-based conflict (Foley, 2012; Parkes *et al.*, 2009; Owens, 2008).

Transparency in the management of potential conflicts of interest has been targeted as a core objective in its own right. Strategies to reduce conflict of interest risk include all formal applications beginning with a public announcement to encourage the submission of information from stakeholders not involved in the application process. Additional oversight and governance structures in response to concerns from some stakeholders about consistency in the setting of case-specific assessment criteria and compliance indicators have also been introduced (MSC, 2014; Owens, 2008). The MSC has also developed its own consultation and engagement good practice guidance resources (Parkes *et al.*, 2009; Owens, 2008).

How issues of commercial confidentiality have been handled

Fisheries considering applying for MSC certification can request a confidential pre-assessment. This is intended to provide information on improvements in practice that may be required whilst protecting the potential applicant from reputational risk. If the applicant decides to progress to full assessment only data that relate to financial affairs, are matters of national significance or are subject to data protection legislation can be withheld from the assessment process (MSC, 2014).

How the impact of the MSC is assessed

Evidence on whether the scheme has achieved its primary goal of improving the sustainability and environmental impact of marine fisheries practices is to date unclear. However because the MSC is a relatively recent initiative, and impacts take many years to become apparent evaluations of the scheme have commented this is unsurprising (Accenture, 2009; FAO, 2009; Gutiérrez *et al.*, 2012; Owens, 2008).

Other indicators of impact are encouraging. The MSC is the world's most widely accepted scheme amongst the private and policy sectors for sustainability and traceability certification of marine fisheries. The FAO Round Table report for example, concludes that retailers through "enlightened self-interest" (FAO, 2009, p. 1) are now pursuing MSC certified fish sourcing policies despite low consumer recognition of the MSC brand (Campling *et al.*, 2012; FAO, 2009; Ponte, 2012). Currently, 8 per cent of the world's edible wild caught marine fish is certified as MSC compliant (Gutiérrez *et al.*, 2012; Parkes *et al.*, 2009).

There is also evidence that the MSC has contributed to new working practices, shifts to more environmentally benign fishing methods and increased awareness of environmental impacts (Accenture, 2009; Parkes *et al.*, 2009).

Factors contributing to the development, impact and limitations of the MSC

The results of the SWOT structured analysis of the MSC case are presented below.

Strengths. Transparent consensus building with a very wide range of stakeholders has helped the MSC to be perceived as acceptable, credible and legitimate

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(Accenture, 2009; Parkes *et al.*, 2009). The fishing industry, for example, is reported to be increasingly accepting of audit and certification as an inevitable and legitimate “cost of doing business” (FAO, 2009, p. 16; Ponte, 2012). The albeit mixed but significant capacity of the MSC scheme to attract the support of non-consumer stakeholders has been identified as perhaps the most significant determinant of this outcome. For example, lobbying organisations were instrumental in highlighting the unsustainability of certain commercial fishing practices. They have also been active in highlighting retailers’ sourcing and procurement policies and strategies (Ponte, 2012; Campling *et al.*, 2012). As a consequence, multiple retailers mindful of reputational capital risks, have been proactive in their adoption of sustainably sourced fish buying policies. Evaluative assessments conclude that whilst evidence of consumer demand has contributed to corporate policy shifts, strategic reputational risk management has to date played a larger role in the adoption and diffusion of MSC certification (FAO, 2009; Gulbrandsen, 2014).

Continual adaptation of compliance indicators without undermining the MSC’s core principles has contributed to supplier’s acceptance of the initiative’s credibility and legitimacy (Gulbrandsen, 2009; Parkes *et al.*, 2009). Increases in stakeholder trust have also strengthened demand for sustainably sourced fish (Campling *et al.*, 2012; Parkes *et al.*, 2009).

Weaknesses. Consumer demand for MSC certified fish products is weakened by lack of price premiums; retailers have commented that “sustainability is difficult to market” and that affordability has to be “built in” (FAO, 2009, p. 12). Costs also impact the supply side. Fisheries located in low income economies have been deterred from participating in the MSC scheme because of the costs such as consultancy and certification fees, setting up and running data collection systems, etc. (FAO, 2009; Jacquet *et al.*, 2010; Ponte, 2012). The lack of recognition for the sustainability of traditional, small scale fishing practices has also been identified as a weakness of the MSC scheme. It excludes fisher folks engaging in these practices on a small scale from the benefits of the growing marketing for sustainably sourced marine fish and by default therefore favours large scale and/or industrialised fish harvesters (Jacquet *et al.*, 2010).

Despite the confidential pre-assessment option, corporate concerns about reputational risk have slowed the engagement of the fisheries value chain with the MSC initiative (Gulbrandsen, 2009; Owens, 2008). Additionally, analysts have also noted that opportunities in the pre-assessment phase for the MSC to support potential new applicants to improvement practices are currently under-exploited (Parkes *et al.*, 2009; Christian *et al.*, 2013; Bush *et al.*, 2013).

The potential for the judgement of independent third party auditors responsible for assessment and certification to be influenced by commercial concerns has also been noted. Some scholars have concluded that third party certifiers are sometimes “overly generous” (Christian *et al.*, 2013, p. 10) in their interpretation of if and how MSC certification applicant meet MSC sustainability criteria (Jacquet *et al.*, 2010).

Opportunities. The FAO Round Table concluded, there is “[...] some agreement that the MSC Fisheries Assessment methodology and related standardised assessment tree is currently the most useful methodological tool for assessing whether a fishery is sustainably managed” (FAO, 2009, p. 22). Furthermore, the MSC accreditation process has identified gaps in policy frameworks. The exchange of ideas, information and learning between the MSC and government agencies has been observed to be

stimulating positive changes in government strategies (Gulbrandsen, 2014). It is also generating stakeholder consensus and public recognition of the importance of intervention in support of sustainable fisheries and fishing practices (FAO, 2009; Gutiérrez *et al.*, 2012; Kaiser and Edwards-Jones, 2006).

Threats. Insufficient availability of MSC certified products has resulted in some retailers sourcing uncertified product (Accenture, 2009; Gutiérrez *et al.*, 2012). It has also contributed to the proliferation of other certification schemes, some of which are less robust (Accenture, 2009). The multiplicity of sustainability certification schemes in the market have undermined consumer recognition of the MSC's trademarked certification label and its logo. This generates mixed messages about fisheries sustainability and allowed some suppliers to continue engaging in disingenuous behaviours (Accenture, 2009; Greenpeace, 2009). Although evaluation suggests the MSC has reduced information asymmetries and increased market confidence in sustainability claims, reports of disingenuous behaviours continue to be reported (Greenpeace, 2009).

Evidence that some fisheries applying for certification have already adopted sustainable fishing practices has led to some query the effectiveness of the MSC to date (Parkes *et al.*, 2009; Ponte, 2012). However, this question requires further exploration because it does not take account of the potential for applicants to be supported to develop more sustainable policies and practices during the pre-assessment phase (as discussed under possible weaknesses of the MSC).

Discussion

Feasibility of developing a responsible food marketing standard

The MSC case demonstrated the critical importance of a substantive and internationally applicable evidence base in the development of practice standards. It demonstrated how and why resources, such as FAO Code of Conduct for Responsible Fisheries (FAO, 1995) can be used to set clearly defined foundational principles for a benchmark standard. It also highlighted their role in facilitating flexible assessments without compromising consistency in intervention objectives. The MSC case history also illustrated how development built on an internationally applicable evidence base can help build stakeholder consensus on intervention objectives, processes and scale.

A substantive international pool of evidence and resources that could inform the design, development and deployment of a responsible marketing standard was identified. For example, the WHO global strategy on diet, physical activity and health (WHO, 2004) was identified as an important reference point for the identification and development of core principles. The WHO set of recommendations for the marketing of foods and non-alcoholic beverages to children was identified as a key strategy document for strategy and priority planning. Together, they provide a foundational base of knowledge resources from which an evidence-based benchmark standard could be developed.

The MSC case demonstrated that the combination of transparency of process, robust evidence and the adaptive translation of assessment criteria on a case-by-case basis also contributes to adoption and diffusion of standardisation. For example, in the case of the MSC, comprehensive evidence-based assessment capacity has increased the acceptability, credibility and legitimacy of certification amongst policy control stakeholders (Owens, 2008; Gutiérrez *et al.*, 2012). It is noteworthy that the standards literature reports other cases where reputational capital concerns have been more critical to the adoption and diffusion of new standards for corporate behaviour than

consumer demand (Cashore, 2002; Ponte, 2012; Gulbrandsen, 2014). The study confirmed there is an extensive international pool of evidence available to support the development of a food marketing standard (Chandon and Wansink, 2012; Cairns *et al.*, 2013; Butland *et al.*, 2007).

The case of the MSC demonstrated that addressing stakeholder perceptions in circumstances where there are diverse and competing explanations for the policy challenge/phenomenon of interest is an important objective in its own right. Lack of consensus is not only a barrier to adoption and diffusion and therefore the development of a critical mass necessary for meaningful impact. It can also be a barrier or enabler in the design and development of a standard and its subsequent uptake. The MSC case indicates that building consensus is likely to be a resource intensive process (FAO, 2009; Parkes *et al.*, 2009; Accenture, 2009; MSC, 2014). Previous food marketing policy research has noted the significant heterogeneity of food marketing stakeholder perceptions is a barrier to policy development (Kraak *et al.*, 2014; Millstone and Lobstein, 2007; Matthews, 2008). Building consensus could progress standardisation and policy impact. The results of this study indicate research is needed to better understand food marketing stakeholder's motivations for engaging in the development and deployment of a food marketing standard.

The case of the MSC demonstrates the critical influence of reputational capital concerns on individual corporation decisions to engage with the MSC scheme. On the one hand, there is evidence that the combination of lobbying and multiple retailer's long term, strategic reputational strategies have been the primary motivator for supermarkets to adopt sustainable sourcing policies in the absence of direct consumer demand (Ponte, 2012; Gulbrandsen, 2009). On the other hand, reputational risk concerns are believed to deter some suppliers from applying for certification. The MSC's confidential pre-assessment advice option was set up to address this possibility. It is therefore one example of how reputational risk concerns can be addressed without compromising the credibility or robustness of certification (Owens, 2008; Ponte, 2012).

Because multiple retailers are powerful actors in the value chain, their adoption of sustainable policies has also been one of the most important factors in the sector-level diffusion of and the MSC certification through the value chain (FAO, 2009; Gulbrandsen, 2014). This is an insight that may be particularly pertinent to responsible marketing policy. Reputation has been an influential factor in stakeholder responses to previous food marketing policy initiatives (Kraak *et al.*, 2014; Millstone and Lobstein, 2007). Garnering the support of grocery retailers for an independently benchmarked, audited and verified responsible marketing standard may not only result in changes to retail practices. It is likely to be an important lever for the wider adoption and diffusion of benchmarked responsible marketing practices, norms and values through the whole added value chain. These impacts are likely to be strengthened further by ensuring the support of public health advocacy groups is made publicly visible.

The case of the MSC along with evidence in the standards literature indicate standardisation can fill the "global space that has eluded the control of states and international organisations" (Gereffi *et al.*, 2001, pp. 56-65). Where standardisation supports cross-border trade, suppliers have an incentive to adopt and thus the pace and scale of its diffusion may be strengthened (Nadvi and Wältring, 2002; Fulponi, 2006; King *et al.*, 2005). Gulbrandsen (2014) has argued that procurement policies requiring suppliers to be independently accredited as compliant with a standard is typically one of the most important drivers of its adoption and

diffusion. The MSC case provides some insights on how to increase the feasibility of developing an internationally applicable standard. For example, it demonstrated the benefits of ensuring compliance with international trade rules was included in development processes from the outset. It also demonstrated the benefits of anticipating how assessment criteria could be designed to be applicable across a heterogeneous mix of policy, physical, socio-economic and technology environments (Foley, 2012; Parkes *et al.*, 2009; Accenture, 2009). The recent and rapid onset of globally coordinated food marketing has increased the challenges for regional and national-level food marketing-level policy controls (Hawkes, 2002, 2006, 2008). Insights on global applicability may therefore be one of the most important contributions of this study to the evidence base.

Potential policy utility of a responsible food marketing standard

The MSC case along with many examples in the literature demonstrate standardisation can advance public interest through positive impacts on the adoption and diffusion of a credence attribute. They do this by reducing information deficits where asymmetrically distributed information is preventing the growth of a market for the credence attribute (Nadvi and Wältring, 2002; Giovannucci and Ponte, 2005; Henson and Reardon, 2005; Campling *et al.*, 2012).

The capacity for benchmark criteria to be identified and applied in more flexibly comprehensive forms than in legislative instruments can increase applicability – for example to multiple methods, strategies and contexts (King *et al.*, 2005; Terlaak, 2007). This can be particularly valuable to sectors characterised by rapid innovation and technological change (Henson and Reardon, 2005; Brunsson *et al.*, 2012; Nadvi and Wältring, 2002).

This adaptive capacity has significant potential utility for food marketing control policy. For example, prevailing regulations are designed to only address the direct effects of food marketing, such as effects on purchase of specific brands (Chandon and Wansink, 2010; Hoy *et al.*, 2012; NHF, 2011; Cairns, 2013). Because standardisation can also address indirect impacts, it offers a novel opportunity to address indirect effects. For example, the aggregate and cumulative effects of the marketing sector on consumer demand for food and drink categories (Chandon and Wansink, 2012; Cairns, 2013). The inability of policy to keep pace with technology facilitated marketing innovation has also been identified as a weakness of prevailing legislation and voluntary codes (Galbraith-Emami and Lobstein, 2013; Kraak *et al.*, 2011). The inherently adaptive capacities of standardisation may also be a helpful lever for policy aiming to address this. By designing a standard that is flexible but robust enough to be “future proof” it may strengthen the longer term applicability and effectiveness of policy regimes.

The literature also demonstrates that standardisation has the capacity to strengthen control policies in policy environments where compliance is low and/or enforcement is weak (Giovannucci and Ponte, 2005; Hatanaka *et al.*, 2005). This is significant for food marketing policy: poor and/or inconsistent sanctioning has been identified as a contributor to the weak impact of statutory and self-regulatory policy controls (Harris *et al.*, 2009a; Sharma *et al.*, 2010). Recent reviews of self-regulatory food marketing policy have therefore emphasised robust disincentives for non-compliance are critical to effectiveness (Bryden *et al.*, 2013; Sharma *et al.*, 2010). Research on how to build compliance with a responsible marketing standard should therefore be considered in future development. For example, further exploration on

how the impact of standards can be strengthened through the development of co-regulatory status warrants further investigation. The standards literature offers a rich and practical source of exemplars and case evidence that can inform future primary research (Vogel, 2010; Gulbrandsen, 2014; Eberlein *et al.*, 2014). It is important to emphasise however, that standards cannot replace public action where private interests are in direct conflict with those of consumers and/or policy (Vogel, 2010; Gulbrandsen, 2014; Eberlein *et al.*, 2014; Henson and Reardon, 2005; Terlaak, 2007). In the case of the MSC, for example, examples of disingenuous behaviours in the sometimes extended and complex supply chain from wild fisheries to retail products continue to be noted (Foley, 2012; Greenpeace, 2009).

Study contributions to the evidence base and limitations

The research results presented in this paper are a response to calls for innovation focused dietary public health policy research (University of Copenhagen, 2013) and greater use of practice-generated evidence (Butland *et al.*, 2007). It builds on best practice recommendations for close collaboration with policy makers in research planning (Pawson, 2002a, b; Davies *et al.*, 2000) and the use of cross-sector evidence in the conduct, of normative public policy research (Pawson, 2002a, b; Davies *et al.*, 2000). The normative focus of the questions used to structure case history is congruent with the highly policy-oriented purpose of the study. However, as in all applied research, its generalisability is likely to be limited.

Study design was also guided by best practice recommendations on the use of a single case (i.e. the MSC) to explore construct validity (i.e. the qualitative nature of critical standardisation factors) (Darke *et al.*, 1998; Flyvbjerg, 2006).

Although many qualitative similarities in the two cases were identified, one potentially significant difference is how evidence for their respective credence attributes is identified and applied. In the case of the MSC, the evidence base that informs standard design is on fishing practices and their direct contributions to the marine environment and wild fish stocks. In the case of food marketing, the development of standard designed to promote the credence attribute of responsible marketing would need to draw on two related but distinct pools of evidence grounded in separate disciplinary fields. These are: first, social science evidence on food marketing's direct contributions to consumer food behaviours and the food environment; and second, public health evidence on the contribution of consumer food behaviours and the food environment on dietary public health outcomes. Because the study did not identify any reason why drawing on more than one pool of evidence might be a barrier to developing and deploying a standard, although this difference is noteworthy, it does not appear to undermine study findings.

SWOT analysis was used in accordance with literature's recommendations for its use in planning purposes in the not-for-profit sector; this literature also recognises its predictive limitations (Kong, 2008; Piercy and Giles 1989; Valentin, 2001). The insights generated in this study therefore are also provisional and require further investigation. One potentially important insight relates to how impact is assessed. Because there is clear evidence of MSC impact on awareness and sourcing policies but evidence of positive environmental impact is more equivocal, some analysts suggest its utility has been quite limited. Ponte has argued, for example, that the MSC is "better tuned to creating a 'market for sustainable fish rather than sustainable fisheries'" (Ponte, 2012, p. 300). The main counter argument to this is that there is evidence that the MSC has contributed to the recovery of some fish stocks. Also, that longer time frames are

required for its effect sizes on other fish populations and their habitats to become measurable. Implications that can be drawn from these deliberations for any future responsible marketing standard policy and/or research initiative are that clarity on its goals and how they are measured should be approached as a priority from the outset. MSC case evidence also demonstrates why evaluation should consider multiple levels of impact. It demonstrated why building consumer demand and economic incentives for suppliers to practice responsible food marketing are important objectives in their own right. On the other hand, it is also demonstrated the importance of ensuring a standards initiative is designed to achieve and be evaluated against its primary goal also. In the case of the MSC this is environmental impact; in the case of food marketing it is the sector-level adoption of health supportive marketing strategies and methods. Although the study has highlighted this as an important planning priority, it revealed limited insight on how this might be achieved.

Notwithstanding these caveats, as the first investigation of the feasibility and utility of standardisation for responsible food marketing policy, this study has generated original insights and evidence. Its focus on a real life policy case, has generated practical insights that can inform future planning and development. Their generalisability is of course limited, especially in view of its single case design. On the other hand, the use of a theory-based analytical frame is recognised as a mechanism through which potential universal evidence contributions of case study research can be identified and inform future research and policy planning (Flyvbjerg, 2006; Yin, 2009).

Conclusion

The study's primary findings are that the case of the MSC is a useful source of preliminary evidence and insights for policy and research concerned with the development of a responsible marketing standard. Secondary analysis of MSC case evidence suggests the development of a responsible food marketing standard is feasible. The evidence on its potential to strengthen prevailing responsible marketing policy regimens is also promising. Further research and/or preliminary policy development is therefore warranted.

A future food marketing standardisation research agenda can build on the preliminary evidence from this exploratory study. It can also build on the substantive evidence bases on standardisation and food marketing identified and used as the study's secondary evidence sources.

Future research objectives should include capturing the diversity of stakeholder perceptions and motivations to engage with the development of standard and exploring implications for future policy effectiveness. For example, research aimed at increasing understanding on how stakeholder acceptance and uptake of a standard can be supported is recommended. Related to this, research on how to establish and grow positive attitudes regarding a responsible marketing standard's legitimacy and trustworthiness is needed. Research on how to identify and manage risks associated with multi-stakeholder participation in the design and development of standard is also recommended as a future research priority. This should aim for deep insights on the interest and power relations of the stakeholder community. Evidence on how these can be monitored and managed in support of the public interest goals of health supportive food and drink marketing is also recommended. Research grounded in political science may be helpful towards this aim.

The study has revealed a number of insights that can contribute to future policy and research initiatives. It has highlighted the critical importance of utilising internationally

applicable evidence. It has demonstrated how this can be used to develop core principles, target objectives and indicators of impact. It also revealed insights on how development might be progressed. For example, it identified evidence on the challenges and benefits of multi-stakeholder participation in the development of benchmark standard. It similarly highlighted the importance and challenges of building effective safeguards against potential conflicts of interest into the protocol of a standard scheme. It has highlighted the potential for a responsible marketing standard to strengthen statutory as well as voluntary, self-regulatory approaches. Its signalling effects can support informed consumer choice and thereby increase demand. This can in turn motivate the supply side to develop new credence attribute-based services and products. It has also demonstrated that because of its impacts on reputational capital standardisation may advance the adoption and diffusion of more socially responsible norms, values and practices in the absence of clear consumer demand. However, its most significant insight is the potentially unique capacity of standardisation to strengthen international governance of the increasingly globalised food marketing sector.

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Chapter 8:

An example of how rethinking can support the development of innovative policy options

Content

The chapter comprises a paper and a mass media article. The paper: Cairns G & Macdonald L. (2016) Stakeholder insights on the planning and development of an independent benchmark standard for responsible marketing, *Evaluation and Program Planning*, 56, pp. 109-120. The journals' impact factor is 1.394. The media article report is a news item on the policy initiative reported in the paper (Scott-Thomas, 2013). Cairns was principal investigator and wrote complete first draft of journal article. Macdonald as research assistant was involved in interviews and focus group discussions. She also wrote parts of the original report and commented on first and subsequent drafts of journal article.

Evidence Contributions

The paper reports the first primary research on stakeholder knowledge and perceptions regarding the strengthening of responsible marketing policy through an independent benchmark standard.

Knowledge Translation Contributions

By sharing a report of the survey descriptive findings (Cairns & Macdonald, 2013) with the standard's Steering Group (contemporaneously with development of the standard), the survey findings supported Scottish Government efforts to build a community of practice.

8.1 Stakeholder insights on the planning and development of an independent benchmark standard for responsible food marketing

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Stakeholder insights on the planning and development of an independent benchmark standard for responsible food marketing



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ABSTRACT

A mixed methods qualitative survey investigated stakeholder responses to the proposal to develop an independently defined, audited and certifiable set of benchmark standards for responsible food marketing. Its purpose was to inform the policy planning and development process.

A majority of respondents were supportive of the proposal. A majority also viewed the engagement and collaboration of a broad base of stakeholders in its planning and development as potentially beneficial. Positive responses were associated with views that policy controls can and should be extended to include all form of marketing, that obesity and non-communicable diseases prevention and control was a shared responsibility and an urgent policy priority and prior experience of independent standardisation as a policy lever for good practice.

Strong policy leadership, demonstrable utilisation of the evidence base in its development and deployment and a conceptually clear communications plan were identified as priority targets for future policy planning. Future research priorities include generating more evidence on the feasibility of developing an effective community of practice and theory of change, the strengths and limitations of these and developing an evidence-based step-wise communications strategy.

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1. Introduction

1.1. The case for intervention

The 2011 United Nations General Assembly Political Declaration on non-communicable diseases prevention and control notes *'the global burden and threat of non-communicable diseases constitutes one of the major challenges for development in the twenty-first century, which undermines social and economic development throughout the world, and threatens the achievement of internationally agreed development goals'* (UN, 2011, p. 1). The Declaration specifically highlights the need to: *'promote the development and initiate the implementation as appropriate of cost-effective interventions . . . discouraging the production and marketing of foods that contribute to unhealthy diet . . .'* (UN, 2011, p. 1).

The evidence in support of the Declaration reference to marketing is compelling. Globally, 50–80% of total food and beverage marketing promotes energy dense food and drinks high

in fat, salt and sugar (hereinafter HFSS foods) (Cairns, Angus, Hastings, & Caraher, 2013; FTC, 2012; Kelly et al., 2010). Currently, a wide range of techniques are used to promote these foods and are found to be highly persuasive (Chandon & Wansink, 2011; Harris, Brownell et al., 2009). Promotional communications for example boost sales with messages intended to encourage impulse purchases, remind consumers of the hedonistic pleasures of consumption, and assuage guilt responses and concerns about health impact (ibid.). Similarly, messages and images on packaging and the placement of products in store are highly effective purchase promoting techniques (Cohen & Babey, 2012; Hawkes, 2010; Glanz, Bader, & Iyer, 2012). In-store marketing strategies such as end of aisle display and shelf signage have been found to increase purchase levels by up to 500% (Gustafson, Hankins, & Jilcott, 2012; Sorensen, 2009). Price-based incentives are particularly persuasive (Chandon & Wansink, 2012; Epstein et al., 2012; Kirchler, Fischer, & Holzl, 2010). Special offers and discounts for bulk purchasing for example increase planned as well as spontaneous purchasing of low perishability, ready to eat food and drinks such as snacks products and sweetened carbonated beverages (Ailawadi & Neslin, 1998; Neslin & van Heerde, 2009).

In addition to marketing techniques designed to prompt direct sales, indirect marketing methods are used to build long term

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demand. The impacts of sponsorship for example, may not generate measurable effects on sales volume but do increase awareness and favourable attitudes towards sponsors' brands, specific products and product categories (Carter, Edwards, Signal, & Hoek, 2012). Social media based campaigns may include purchase incentives but their most important effects on purchase and consumption behaviours are mediated through their effects on brand loyalty and its integration into routine social interactions as a result of peer to peer communications and endorsements (Montgomery & Chester, 2011).

The 'Big Five' most heavily promoted foods are confectionery, sugar-sweetened breakfast cereals, salty savoury snacks, sugar-sweetened drinks and 'fast foods' (Cairns, Angus, & Hastings, 2009; FTC, 2012). The ubiquitous and integrated nature of marketing techniques used to promote these and other HFSS foods has created a marketing system that focuses heavily on HFSS foods. The skewed focus leads to higher levels of purchase and consumption of these heavily promoted food categories, not just increases in sales of the specific brands being promoted (Chandon & Wansink, 2002; Chandon & Wansink, 2011; Neslin & van Heerde, 2009). As a consequence, the net contribution to the food environment of current food marketing practices is obesogenic. It is unresponsive of the public health goal to reduce consumption of HFSS foods and replace with less energy dense, micronutrient rich foods such as fruit, vegetables and wholegrains.

1.2. Innovation in responsible marketing policy development is an urgent imperative

The term 'responsible marketing' is frequently used to describe and denote the policy aim of shifting the marketing landscape away from its predominant focus on low nutrition to more healthful foods and drinks (Booth, 1989; WHO, 2010). For more than a decade, an array of public policy and private sector initiatives targeted to this aim have been introduced (Hawkes & Lobstein, 2011). Independent evaluations indicate their impact has been disappointing (Chambers, Freeman, Anderson, & MacGillivray, 2015; Elliott et al., 2014; Galbraith-Emami & Lobstein, 2013).

In the few territories where statutory controls have been implemented, regulations have failed to address the multi-faceted nature of marketing. For example, in the UK, where television advertising of HFSS foods is subject to statutory controls, activities such as point-of-sale and viral promotions for HFSS foods as well as sponsorship by brands producing HFSS food and drinks are subject only to non-binding guidance (Landon, 2013; NHF, 2011).

Reviews of food marketing policy have also noted that the recent and rapid rise in globally coordinated, digitally facilitated marketing are increasing the challenges for regional and national level policy controls to constrain the health adverse impacts of food marketing (Cairns, 2013; Hawkes, 2006; Hawkes, 2008). For example, in the UK, Malaysia, Australia and the Republic of Ireland where legislation on broadcast advertising has been enacted, controls are only applicable to programming and advertising originating from the country of jurisdiction. They have no remit over websites, entertainment programmes or advertising originating from countries outside their sovereign borders and available through the Internet (BAI, 2013; IASO, 2010).

Currently however, more responsible marketing policies are based on voluntary rather than statutory self-regulation (Hawkes & Lobstein, 2011). And independent evaluation finds their impact even weaker than for statutory controls (Galbraith-Emami & Lobstein, 2013; Kunkel, McKinley & Wright, 2009; Powell, Harris, & Fox, 2013).

Multiple reasons for the weak impacts of both voluntary and mandatory governance frameworks have been identified. They include the limited and inflexible scope of regulations,

inconsistencies in definitions of what constitutes responsible marketing practice; a lack of transparency in monitoring and evaluation, a lack of incentives to adopt more responsible practices and weak sanctions for non-compliance (Harris, Pomeranz et al., 2009; Sharma, Teret & Brownell, 2010).

The time lag between the evolution of new marketing methods and the design and implementation of policy designed to constrain these methods is also problematic to policy impact and effectiveness. For example, the facilitation of marketing promotions through digital technologies is currently undergoing a rapid expansion (Montgomery & Chester, 2011; NHF, 2011). This trend is significantly expanding marketing's reach and impact. The majority of prevailing policy frameworks however, were designed and implemented prior to the wide scale adoption and diffusion of digital marketing and are therefore not designed to address their effects (Chandon and Wansink, 2012; Hoy, Childers, & Morrison, 2012; Harris, Brownell et al., 2009; Thomas & Gostin, 2013).

In addition to inherent weaknesses in prevailing policy designs, market based barriers to policy effectiveness have also been identified. For example, consumers who express a preference for responsible marketing also report an inability to identify and/or apply information that could help them to exercise this preference (Harris, Brownell et al., 2009; Haws & Winterich, 2013; Sorensen, 2009). This inhibits consumer demand for responsible marketing in general as well as their willingness to pay additional costs to receive this benefit. A consequence of this is opportunities for responsible marketers to offset opportunity costs incurred by restricting their promotional marketing campaigns and appeals to healthful food categories only are severely limited. Supplier incentives to engage in responsible marketing are therefore also inhibited (Booth, 1989; Harris, Pomeranz et al., 2009). In economic terms, this can be understood as a case of market failure that may be resolvable through corrective intervention(s) (Butland et al., 2007; Sassi, 2010).

1.3. How and why standardisation may have the capacity to strengthen responsible marketing policy

Standardisation for the purposes of this paper refers to the development and application by an independent entity of a set of parameters and indicators for a credence attribute. A credence attribute is a product, process or organisational quality that external observers cannot readily confirm the presence or absence of. The underpinning rationale for policy-led standardisation is to encourage the development of a market for a credence attribute where (1) sector level, wide scale adoption offer significant public interest benefits but few commercial benefits in the short term and (2) lack of market information has been identified as a significant barrier to the development of such a market (Brunsson, Rasche & Seidl, 2012; Deaton, 2004). Responsible food marketing, ethical business practices and environmentally sustainable sourcing are all credence attributes.

Exactly what components and indicators of good practice are included in a standard are determined on a case by case basis and are typically adapted and refined over time. Components of a responsible marketing standard might include restricting sales prompting methods (such as price point of sale, price discounts and displays) and limiting awareness raising strategies (such as sponsorship) and methods (such as broadcast advertising during peak viewing hours for children and young people) to only non-HFSS foods.

The potential for standardisation to address some of the prevailing weaknesses of food marketing control policies has been noted in the literature (Bryden, Petticrew, Mays, Eastmur, & Knai, 2013; Golan, Kuchler, Mitchell, Greene, & Jessup, 2001; Sharma et al., 2010). This recognition is based on the evaluative evidence

from other sectors because to date standardisation not been fully piloted and/or tested as a food marketing control policy option.

There is however a substantive evidence base on the development and impact of standardisation on markets for credence attributes that can advance the public interest but are unlikely/unable to become established in the absence of a corrective intervention. This includes the food value chain, where standards have been used to establish and spread the adoption of credence attributes such as more robust practices in terms of health and safety, animal welfare, environmentally sustainable sourcing and labour rights (Fulponi, 2005; Hatanaka, Bain, & Busch, 2005; Nadvi & Wältring, 2002).

Case study research has noted that marine fisheries sustainability is a credence attribute that qualitatively, closely parallels responsible food marketing (NHF, 2011; Sharma et al., 2010). For example, the degradation of marine fisheries environments and the rising prevalence of obesity and non-communicable diseases are both the outcomes of complex, multi-factorial and cumulative pathways of causation. Both are phenomena that have been the subject of extensive independent research, which has generated comprehensive, internationally accepted evidence bases. These evidence bases have the capacity to inform and support the drafting of responsible practice standard parameters, detailed guidance criteria on implementation, as well as compliance indicators. In both, however, it is noted that active intervention is required for this information to be translated and therefore available to disrupt prevailing market failures and support the development of a credence attribute-based market. It is also widely recognised that both are policy challenges requiring coordination at the global level if intervention is to be effective (there is an extensive literature on the opportunities and challenges associated with both policy issues—see for example, FAO, 2009; MRAG, 2010 for marine fisheries sustainability and Moodie et al., 2013; Stuckler & Nestle, 2012 for food marketing).

Hence, the next section of this paper uses process and impact evaluative evidence from the Marine Stewardship Council (MSC) standard for sustainable fisheries practices to illustratively outline why standardisation has recently emerged as a policy option of interest to policy makers aiming to promote more responsible food marketing practices.

The MSC scheme is an international scheme that has been in operation for nearly three decades. It has impacted a wide range of policy regimes with varying degrees of success (FAO, 2009; MRAG, 2010). Its most important impact in policy environments based on voluntary compliance, is that it has created opportunities for private sector stakeholders, such as retailers of fish products to protect and strengthen their reputational capital (ibid). Reputational capital for the purposes of this paper refers to the sum total of positive and negative perceptions about the corporation's compliance with social and ethical standards and their impact on a firm's market value (Suh & Amine, 2007).

A secondary positive impact of the MSC scheme on voluntary policy regimes has been that by increasing recognition for, as well as the credibility of, sustainability claims, the MSC has strengthened market confidence. This has helped a small market to become established and grow (FAO, 2009; MRAG, 2010).

The most important impact of the MSC scheme on statutory policy regimes is that it has transcended the sovereign border limits of national legislation. Case evidence has provided real world illustrations of how standards acting as 'norm like institutions' which 'fill the global space that has eluded the control of states and international organisations' (Gereffi, Garcia-Johnson, & Sasser, 2001, p. 64–65) have strengthened and extended the impact of statutory controls. For example, providing oversight for added value fisheries product chains that cross multiple territories with

differing levels of monitoring and enforcement capacities (FAO, 2009; MRAG, 2010).

1.4. Setting and context for the research

In light of prospective assessments that a food marketing standard may have the capacity to advance responsible food marketing policy goals, the Scottish Government initiated the development of a food marketing standard in partnership with the British Standards Institute in 2013. Following a launch workshop in Quarter 1, a development group was appointed and tasked with developing a responsible marketing standard. As well as establishing an independent benchmark standard, the purpose of the initiative was to facilitate more public recognition of responsible marketing and create incentives for food and drink marketers to engage in marketing practices that could make positive contributions to dietary public health policy goals. The development brief indicated that it was anticipated that the standard would ideally address a range of marketing techniques and methods. Exactly what would be included was not finalised but the brief identified price promotions, sponsorship of sporting events, displays that encouraged impulse purchasing, and promotional packaging as high priority targets. The brief also included proposals to strengthen protections for children and young people. For example, the brief proposed extensions to the broadcast time periods and programming slots when the advertising of HFSS foods is not permitted.

In Quarter 3, 2013, a cluster of the private sector development group members announced in a joint statement they were withdrawing from the development process. Specific reasons given included their unwillingness to support the price promotion and advertising restriction proposals. In light of the implications of their withdrawal for future adoption and diffusion of the standard, in Quarter 4, the Scottish Government announced it had decided to cease any further development of the standard.

Prior to the launch of the development initiative, the Scottish Government had commissioned a qualitative survey into stakeholder responses to the proposal to develop a responsible marketing standard. Its primary purpose was to generate evidence that could encourage and support the development of a 'community of practice' in support of the development and implementation of the standard. For the purposes of this paper, the term community of practice is used to describe a 'group of people who share a concern or passion for something they do and learn how to do it better as they interact regularly' (Wenger, 2011).

An additional research objective was to identify evidence that could be universally relevant and helpful to future responsible marketing policy and research. Critical appraisal of the descriptive results through thematic analysis and assessment of stakeholder interest and influence levels in support of this aim was therefore also conducted.

A mixed methods qualitative survey was conducted in Quarters 1 and 2, 2013. Its descriptive findings were presented to the responsible marketing standard development group in Quarter 2. Critical appraisal of survey results was completed after the Scottish Government's decision to end development of the standard.

This paper reports on the conduct of the survey and the subsequent, post-hoc critical analysis of its findings. Implications for future policy development and research, along with an overview of lessons learned from the overall policy and research process are explored in the discussion section. Despite the failure of this first attempt to develop an independent benchmark for responsible marketing, the findings of the research reported here, indicate standardisation may yet be a feasible future policy option. The paper therefore concludes with a summary of key insights

intended to inform and support future responsible (food) marketing policy development and research.

2. Methods

2.1. Semi-structured interviews of key informants

A key informant was defined as an individual with a recent history of active engagement in food marketing policy and/or standardisation. A sampling frame designed to reflect the composition of stakeholder types participating in the policy development process was used to set key informant quota targets. Two representatives from each of the following stakeholder typologies were recruited as key informants: public health policy makers, quasi-autonomous non-government organisations, trade associations whose remit include food marketing, consumer advocacy organisations, and private marketing services firms whose business portfolios included food and/or non-alcoholic beverage marketing. Additionally, and to ensure representation from the private food sector reflected the private food marketing sector's heterogeneity, a quota target of two each from the grocery retail, food processing/manufacturing and retail catering service sectors was also set. Finally, in order to ensure the anticipated input of specialist independent expertise in the development process was also reflected in the sample, independent experts (one each) on food standards, dietary public health policy development and public health marketing and public relations were also included in the sample.

The personal knowledge and networks of the research team plus searches of documents and websites were used at the start of the recruitment process to identify potential key informants. Additional potential respondents were identified through snowballing as the survey was progressed. Records of all recruitment correspondence were recorded in a contact diary. Once a stakeholder quota target was met, communications with other individuals identified as potential representatives for that stakeholder group were brought to a close. No further efforts were made to capture or record their response to being approached by the research team.

Interviews were conducted in Quarters 1 and 2, 2013. In advance of scheduled interviews, key informants were contacted by email. The communication provided a short briefing on independent standardisation and the proposed responsible marketing standard, as well as the purpose of the survey. Researchers interviewed key informants by Skyping from a university office base to the key informant. All interviews were audio-recorded. The key informant was free to choose the venue from which they participated and to decide if the interview was conducted audio-visually or only via an audio line. The interviews were semi-structured using a discussion guide designed to ensure the interviews were consistent in scope but flexible enough to capture the heterogeneity of informants' backgrounds, expertise and interests. Stimulus materials in the form of a mock up 'responsible marketing' marque and food and drink packaging carrying the marque were made available digitally during the interview. A copy outlining main discussion area headings is presented in **Box 1**: Outline of discussion guide for semi-structured interviews with key informants.

2.2. Consumer focus group discussions

Consumer responses were explored via four focus group (FG) discussions. FG participants were recruited using professional recruiters who followed a detailed screening and recruitment protocol. Screening questions were used to exclude consumers who expressed extremes of interest/no interest in healthy eating.

Box 1. Outline of discussion guide for semi-structured interviews with key informants

(Guideline probe and follow up question for each of the discussion areas listed below not included)
Introductions, brief reprisal of purpose of study, stimulus materials, research protocol.
Respondent details:

- organisational affiliation and role;
- interest and involvement in food and health issues.

Independent standardisation and certification:

- prior (generic) personal and/or organisational knowledge, experience and attitudes regarding standardisation;
- perceptions/attitudes and preferences/expectations regarding development and impact of proposed responsible marketing standard;
- perceptions/attitudes and preferences/expectations regarding Scottish Government and British Standards Institute as sponsors of responsible marketing standard.

Wrap up

- invite to add any further comments or raise questions not covered in discussions so far
- thanks and close interview.

Screening questions were also used to ensure the composition of the FGs met its recruitment quotas with regards to gender, age, socio-economic status, and rural/small town or urban/city residency. Recruiters' were also briefed to ensure final recruited sample for each group included at least one main and one non-main household grocery shoppers. (See **Table 1**: Breakdown of focus group participants by demographic characteristics for more details on this.).

Each FG discussion was conducted in an informal but private venue in Quarter 1, 2013 and audio recorded. Each was facilitated by one of the researchers who conducted key informant interviews and a second researcher with specialist expertise in facilitating FG discussions. All the explanatory background information and stimulus materials used with key informants was made available to participants during the FG discussion. Stimulus materials were introduced to the group and made available for individuals to handle and examine as the discussions progressed. A copy of the

Table 1
Breakdown of focus group participants by demographic characteristics. (All groups included a mix of main and non-main grocery shoppers for their household).

Focus group identifier	Demographic details
1	Gender: 3 female, 1 male Age: 18–34 Social grade: C2D Small town/rural location
2	Gender: 2 female, 2 male Age: 35+ Social grade: BC1 Small town/rural location
3	Gender: 4 female, 2 male Age: 18–34 Social grade: BC1 City/urban location
4	Gender: 3 female, 3 male Age: 35+ Social grade: C2D City/urban location

discussion guide used by the FG facilitators is provided in **Box 2**: Outline of discussion guide for focus groups.

All key informants and FG participants were provided with summaries of the good practice guidelines the research adhered to and gave written consent to their participation. This included their consent for interviews/discussions to be audio-recorded and for extracts of responses to be included as anonymised quotes in reports of survey findings. Informed consent protocols were in accordance with the University of Stirling's Code of Good Research Practice. Ethics approval for the study was granted by the university's Ethics Committee (University of Stirling, 2009). Key informants received no monetary compensation for their participation. FG participants received a small sum of money to cover their costs.

2.3. Thematic analysis

Recordings of interviews and FG discussions were transcribed verbatim. Non-verbal responses were not recorded in the transcripts. The two researchers who conducted the key informant interviews and who each facilitated two of the four FG discussions used the qualitative data analysis software package Nvivo10 to analyse complete text transcripts. The two researchers also held regular discussions to share views on emergent themes and constructs and to reflectively discuss if and how these related/overlapped/were distinct from one another. The combination of documented coding and reflective discussions facilitated an iterative process of recursive coding and interpretation. Through this iterative process, the research team aimed to critically assess and identify universally policy-significant dominant themes, recurring patterns and constructs underpinning participants' responses.

2.4. Assessment of participants' interest in development of the standard and influence on process and outcomes

As a supplementary aid to the identification of future policy implications, an assessment of influence and interest levels of the participants relative to one another was also conducted. Specifically, the objectives were to assess individual participants' interest in the proposal to develop a standard and the whole sample's perceptions on which participating stakeholders' were likely to be

most influential in shaping development processes and outcomes. Interest and influence are the two characteristics most frequently used to typologise stakeholders when the aim is to evaluate the predictive significance of their responses to policy development proposals and/or discussions (Brugha & Varvasovszky, 2000; Eden & Ackermann, 1998; Reed et al., 2009). Interest is a descriptor of stakeholder's keenness to engage with, and contribute to, policy development goals and objectives. Influence is a descriptor of the power of a stakeholder to moderate policy processes and outcomes. Stakeholders with high levels of influence and interest are likely to be the stakeholders most critical to eventual policy development outcomes and their responses are therefore likely to be the most significant for policy planning and planning research purposes. The responses of stakeholders who are influential but have little interest in a policy initiative however are also important. This is because these are stakeholders who may intentionally or unintentionally block or slow progress. Their responses can provide insight on why and how multi-stakeholder policy initiatives can be modified and developed to increase impact. Stakeholders who have high levels of interest but little influence are unlikely to impact policy outcomes in the short term. However, over time this may change and their insights may have some predictive utility. Stakeholders who have low levels of interest or influence are unlikely to impact policy development progress and their responses therefore have little predictive value or significance in policy planning or planning research (Eden & Ackermann, 1998; Reed et al., 2009).

Because interest is an intra-personal characteristic, interest levels of respondents can be evaluated by analysing the *individual responses* of respondents against a framework of key factors contributing to overall interest. These are perceptions regarding: (1) the *urgency* of need for policy action in general; (2) the potential *effectiveness* of the proposed intervention; and (3) the *legitimacy* of the proposed intervention. The transcripts of individual interviews and FG discussions were therefore assessed against these three sub-factors to generate a provisional assessment of each key informant or FGs' overall interest level.

Because influence is a measure of inter-personal power relations, influence levels of a stakeholder group are more appropriately captured by evaluating the *comments of the whole sample collectively against a framework of three sub-indicators*. These are perceptions regarding: (1) the importance of the

Box 2. Outline of discussion guide for focus groups

(Guideline probe and follow up question for each of the discussion areas listed below not included)

Introductions, brief reprisal of purpose of study, stimulus materials, research protocol.

Warm up questions about personal food shopping experiences and habits.

Food marketing:

- historic experiences, knowledge and current attitudes/expectations;
- future expectations and preferences

Independent standards

- historic (generic) experiences, knowledge, attitudes, preferences;
- understanding of, attitudes to and preferences regarding responsible marketing standard initiative;
- attitudes and assumptions regarding Scottish Government and British Standards Institute roles as sponsors of a responsible marketing standard.

Wrap-up:

- invite to add any further comments or raise questions not covered in discussions so far;
- thanks and close interview.

stakeholder's participation in the policy development process to meaningful progress (*gatekeeping power*); (2) likely gains and/or losses to the stakeholder in the event that a policy proposal is successful in its goals (*vested interest*); and (3) the capacity of the stakeholder to mobilise and/or influence other stakeholders' contributions to the policy development process (*connectivity*) (Eden & Ackermann, 1998; Reed et al., 2009).

The transcripts of interviews and FG discussions were collectively assessed against these three sub-factors to generate a provisional assessment of the potential influence of each stakeholder type on policy processes and outcomes.

The aim of assessing stakeholder interest and influence levels relative to one another was to provide a means of provisionally weighting the significance of their responses for policy planning and research purposes. It was recognised that findings could only be considered provisional because they were based on secondary analysis. Nevertheless, the researchers found the systematic process of assessment and the provisional findings it generated useful to the critical analysis of overall survey findings. It facilitated differentiation between the views of stakeholder's expressing variable levels of interest and assessed as being highly, moderately or negligibly influential. The results of the interest and influence assessments are briefly reported in the results section. Their application as an additional tool in the qualitative interpretation of results for future policy and research planning is reflected in the discussion section.

3. Results

In total, sixty two potential key informants were identified and contacted at least once by email. Their status as recorded in the contact diary at the end of the survey in Quarter 2, 2013 was as follows-

- Agreed to participate and completed interview (n = 21).
- No response after two emails sent and therefore presumed to be unwilling/unable to participate (n = 15).
- Formally declined to participate (n = 5).
- Indicated willingness to participate but not interviewed or status unknown when quota targets had been met (n = 21).

Interviews were conducted in March-May 2013 and lasted from fifteen to sixty minutes. The final sample of twenty one key

informants met all of its quota targets. Respondents made very limited use or reference to the stimulus materials, indicating they felt they understood the concept of a responsible marketing standard without aides.

A breakdown of key informants typologies and abbreviations used to anonymously attribute verbatim quotes included in the discussion section for each is provided in Table 2: Breakdown of key informants by stakeholder typology and anonymised identifiers.

FG discussions were held in February 2013. The composition of the FGs also met all its quota targets. FG discussions lasted from sixty to ninety minutes. FG participants demonstrated a keen interest in the stimulus materials, handling them and making reference to them frequently throughout discussions.

Results of the thematic analysis and stakeholder interest influence assessment are reported in narrative form below. The source of the anonymised verbatim quotes used in this section, is indicated through the use of the identifier abbreviations presented in Table 2.

3.1. Stakeholder perceptions regarding the development and deployment of a responsible food marketing standard

3.1.1. Food marketing and reputational capital

Many key informants as well as consumers observed that food marketing is a challenging environment for a consumer 'to kind of navigate their way through' (QUANGO 2). The proposal for a standard was therefore welcomed by many, including at least one key informant from all sectors represented in the key informant sample. FG participants indicated they were strongly in favour of a standard that could reduce uncertainty regarding the veracity of marketing appeals: 'even then I don't know if I believe, it's taking their word for it' (member of FG 3 commenting on their efforts to interpret information on packaging). Comments from key informants representing public health interests suggested a benchmark standard represented an opportunity to address 'a lot of confusion and myths', for example 'in terms of what people understand from packaging.' . . . If there was consistency then it would be easier for people to understand' (PHP 2).

Some kind of nutrient profiling' (CA1) as a means to ensure scope and purpose of a responsible marketing standard was effective and credible was suggested by multiple respondents. Commercial sector respondents recognised the potential reputational value of

Table 2

Key Informant	Identifier
Retail catering services manager/executive	FI 1
Retail catering services manager/executive	FI 2
Food manufacturer/processor director/executive	FI 3
Food manufacturer/processor director/executive	FI 4
Trade Association executive/director	TA 1
Trade Association executive/director	TA 2
Marketing executive/consultant	MI 1
Marketing executive/consultant	MI 2
Retail grocery executive/director	FI 5
Retail grocery executive/director	FI 6
Consumer advocacy manager/executive	CA 1
Consumer advocacy manager/executive	CA 2
Independent expert in food standards	IE 1
Independent expert in dietary public health policy development	IE 2
Independent expert in public health marketing and public relations	IE 3
Public health policy maker	PHP 1
Public health policy maker	PHP 2
Public health policy maker	PHP 3
Public health policy maker	PHP 4
Quasi-autonomous non-government organisation manager/executive	QUANGO 1
Quasi-autonomous non-government organisation manager/executive	QUANGO 2

an independent standard: *'you would want some sort of recognition from the public that you know what it stands for. And then it's a positive because presumably it would all be built around being truthful and things like that wouldn't it rather than you know, making estate agent type claims'* (FI 2).

3.1.2. Standard scope

There was universal recognition that marketing comprises a broad range of activities. Many respondents suggested effectiveness would require *'a standard that works across all marketing platforms'* (PHP 1) and was comprehensive because *'if for example you say you are interested in looking at price promotions in leaflets, then businesses won't put out leaflets – they'll just put promotions online'* (FI 5). However, many key informants were also concerned that the intention of drafting a complete set of marketing standards was very ambitious because *'one size does not fit all'* (FI 1; MI 1) and *'it would be difficult to define responsible marketing'* (PHP1).

A number of key informants suggested that meaningful benchmarks for good practice would require significant expertise in food marketing strategy and techniques: *'having a baseline is tricky but not impossible'* (IE3). Price-based marketing and retail store marketing activities emerged as priority targets: *'the biggest impact is retail'* (FI 1), *'there are always offers in the aisles'* (FG 1).

Respondents drawn from multiple stakeholder sectors, but particularly consumers, felt that food marketing was strongly skewed towards the promotion of HFSS foods: *'It is mainly just rubbish food. You get the wee leaflets through the doors with offers on chocolates and juice and crisps and biscuits, there's not many offers on proper food'* (FG 1), and that rebalancing this in favour of more healthful dietary goals was desirable: *'I'd rather see offers on real food, –meals and stuff, rather than junk'* (FG 1); *'here you'd be talking about marketing things that you want people to have more of'* (PHP 1).

3.1.3. Multi-stakeholder participation

A heterogeneous mix of key informants expressed positive attitudes towards the proposal that development of the standard would involve the participation of multiple stakeholders. For example, one respondent suggested it facilitated the incorporation of *'whole community and social responsibility'* contributions to the development process and policy strategy (QUANGO 2). There was however clear recognition that multi-stakeholder participation also increased the risk that intervention design and/or application could be weakened by the vested interests of some stakeholders. Consequently, demonstrably independent oversight of standard parameters was perceived to be a critically important safeguard by a broad range of respondents.

When respondents used the term independence they were referring to a standard whose scope and aims were not undermined by profit motives. Multiple key informants representing not-for-profit stakeholder groups also perceived robust evidence to be an important determinant of its independent status: *'evaluate its merits based on the proposals that are presented. If it was another body then an important criteria would be the extent to which it was independent and autonomous from the industry because "he who pays the piper call the tune"'* (IE 2).

Key informants from public health policy making and advocacy backgrounds noted the possibility of knowledge gain, as well as increased probability of change in practice from multi-stakeholder development process: *"Some of their insight is very valuable, especially at customer survey level"* (IE 1 comments on experience of involving industry in development of standards). Many respondents however, also expressed reservation about the motives, expertise and likely influence of private sector stakeholders participating in the development process. The statement *'it has to be borne in mind that they are ultimately there to make money for*

their shareholders. And to make money for their shareholders there is an incentive to get people to eat greater amounts of foods that are often energy rich etc' (CA 2) exemplified these concerns.

Private sector key informants most common concern about other stakeholders was a perception that they lacked expertise and knowledge about contemporary marketing practice: *'someone who is not a retail expert telling us how we should market products to customers is not going to be welcomed'* (FI 6).

Multiple key informants suggested that effective implementation involving transparent and independent management could provide a focus for building relationships and a community of practice: *'sometimes they challenge you and they bring up points that are good to look at, or at least review what your process or criteria are, and whether you change them or not, that is a good point that they are bringing'* (IE 1).

3.1.4. Voluntary status

There was significant consensus that a voluntary standard validated by credible and independent third parties offered *'a bit of a half-way house between voluntary self-regulation and legislation'* (TA 1) had inherent limitations but also strengths. For example it was perceived as a more consistent and credible policy lever than self-regulation and more comprehensive and wide ranging than statutory options: *'Not creating a whole new raft of legislation, setting up an independent body that somebody is going to have to pay for in an economic climate when people can't afford to pay for it'* (FI 4) was viewed as a benefit.

On the other hand it was noted that the *'problem with voluntary approach is that it is not consistent. Some people will be focused on commercial gain'* (PHP 3) and without strong safeguards could be *'just window dressing'* (FI 1). Others commented that the standard could become a *'badge of honour' . . . we can prove what we claim . . . the potential for competitive advantage may incentivise companies to sign up to the standard'* (QUANGO 1).

Some form of binding requirement to comply, for example, co-regulatory status, was considered desirable or essential by a range of stakeholders: *'Either businesses need to be incentivised and pushed to sign up or there needs to be a legislative approach. Otherwise it will only be the businesses who want to engage, or want to be seen to be doing the right thing who sign up'* (PHP 3). There was also a prevailing view that where HFSS foods were core business *'you can't see the companies coming forward to apply'* (FG 1).

3.1.5. Communication strategies

Some respondents, including consumers, had difficulties in fully understanding how a marketing standard differed from a nutritional standard. Related to this was concern that as a result of *'endorsement creep'* (IE 3; PHP 1), a marketing standard may be vulnerable to being misused: *'There could be mixed messages . . . sometimes you will get advertising where just the brand itself is advertised and not particular products so you would have to look at ways to make sure you were not just endorsing a brand'*(CA 1). However, with conceptually clear and well targeted communications, a standard was perceived to be a potentially unique and valuable market signal that would allow consumers to *'catch out companies who try to portray their products as healthy when they are not'* (QUANGO 1). Conversely, some respondents expressed concerns that another quality marque could be counter-productive. For example by *'getting to the stage where it is difficult to fit everything in'* (MI 1), and/or *'everybody sees it now and basically you ignore it'* (FG 3).

Almost all consumer groups and many key informants stressed the importance of government backed validation: *'government and another body that was deemed autonomous then that would seem sensible'* (CA 2) as a means to communicate standard credibility and legitimacy: *'I would trust the . . .?Government. I think a sticker like*

that on food would make you believe it anyway cos it looks official' (FG 4). Many key informants and consumers commented that the most critical characteristic for success would be perceptions regarding the credibility and trustworthiness of the standard itself, and that this would in turn be determined by its effectiveness: 'Well if that wasn't doing what it says on the tin. If this was saying high in one thing that was unhealthy, well it wouldn't receive the logo surely' (FG 3).

3.1.6. Potential utility

Comments on anticipated effectiveness of the standard to substantively change commercial marketing practices were mixed: On the positive side: 'always good I think to try and capture and codify good practice . . . the industry stands or falls by its weakest link . . . a process that allows them to be independently audited you know and have the mirror held up to them . . . to have a level playing field . . . rather than just having sort of critics picking out individual companies or individual issues in a way which you know may or may not be seen to be being fair' (TA2). Also, respondents concerned with public health responsibilities were positive about its potential to bring about: 'change in the culture of food industry – they need to recognise and stop denying the impact of HFSS marketing on food behaviours' (PHP 4). Its capacity for comprehensive scope was also assessed to have the potential to result in 'standardisation of health messaging . . . reliable consistent information . . . useful for instilling confidence . . . enhancing knowledge' (PHP 4). On the other hand, respondents expressed concerns regarding private sector power and its capacity to weaken a standard's utility. For example, respondents suggested the private sector may 'try to make it simple to sign up and will dilute it down, this makes it less worthwhile' (FI 1, and that some products and brands would not be eligible and 'so the industry won't like it' (PHP 1).

There was significant consensus that a mix of substantive supporting strategic and operational factors needed to be in place for the standard to have a measurable, positive impact. Key informants with significant prior experience in standards and codes of practice provided particularly rich comment and perspective on this point. The most commonly mentioned priority for development after the need to build credibility was the need to build a critical mass of adopters. Respondents suggested that emphasising consumer demand, reputational benefits to companies adopting the standard, a strong programme of supporting communications and ensuring that the commercial sector felt they had been appropriately involved could help with this. Robust, "evidence –based criteria" and "retaining the option to develop statutory alternatives" (PHP 4) were also seen as important strategies to build trust in, and demand for, a responsible marketing standard.

3.1.7. Acceptability of the standard

Key informants suggested some 'forward looking companies would want to be certified' (PHP 1), because of the possibility of some, albeit limited competitive advantages such as increasing 'brand integrity' (QUANGO 1) and 'reputational benefits of participating in the standard' (FI 5). Some respondents expressed concerns that the proposed standard might duplicate or conflict with established institutions (such as Trading Standards) or undermine existing policy initiatives (such as the UK's traffic light labelling scheme) because of overlap in responsibilities for health and/or consumer protection. However, public health stakeholders also welcomed the potential for the initiative to improve 'industry and cross-policy recognition of the scale of the problem' (PHP 4) and to improve the 'marketing landscape' and 'pace of change' (PHP 1).

Other observations regarding the acceptability of the standard related to costs. For example, one of the retail respondents

commented 'companies that sign up may have to change their behaviour, and this may have an impact on their sales and profits' and that to be 'then be hit by a third party audit cost as well . . .' could act as a barrier to adoption (FI 6).

Regarding its acceptability to consumers, FG participants were very clear that they would welcome a standard that could make shopping and purchase decisions less ambiguous. In contrast to the cost concerns raised by key informants, the potential for changes in marketing to generate extra food purchase costs were not raised as a concern in any of the FG discussions.

Finally, neither consumers nor key informants commenting on likely consumer responses anticipated strong 'nanny state' based objections: 'There will always be an element of the media and the public which talk about the nanny state but again with something voluntary like this, then possibly not' (CA1).

3.2. Assessment of stakeholder's interest and influence levels

Relative interest in the proposed standard was highest amongst public health policy makers, consumers, consumer advocacy representatives and independent experts. Representatives from quasi-autonomous non-governmental organisations, the trade associations and the private catering sector expressed moderate to high levels of overall interest. Food manufacturers, grocery retailers and marketers expressed the lowest levels of interest. There was strongest, although not universal consensus across all stakeholder types that policy action was an urgent need. Views on the legitimacy of a standard was more mixed. Retailers and manufacturers were the most likely to query the legitimacy of developing and implementing a standard designed to moderate commercial marketing practices. Views on the third sub-dimension used to assess interest levels, that is expectations regarding its potential effectiveness were more heterogeneous. Marketing specialists and food manufacturers were the most likely to assess potential effectiveness of the standard as low. Representatives from the consumer advocacy sector and independent experts were most likely to assess potential effectiveness as high. But, overall views were highly variable with public health policy makers' expectations on effectiveness ranging from widely for example. Scepticism regarding the degree to which the private sector would change their marketing practice and accept independent oversight of those practices necessary were the main reasons, participants gave for low effectiveness expectations. For example, it was suggested they private sector would 'try to make it simple to sign up and will dilute it down, this makes it less worthwhile' (FI 1).

Assessment of influence levels found public health policy makers, grocery retailers and the trade associations were perceived to be the most influential stakeholders. The survey sample on the whole rated policy makers as relatively powerful, largely due to perceptions that this group were strongly motivated (i.e. had strong vested interests) to effect change. Trade associations and retailers were also considered relatively influential stakeholders, mainly because of a widespread perception amongst the respondent sample that these two stakeholder groups had high vested interest and connectivity levels. Consumers and private caterers were perceived overall, to be the next most influential groups of stakeholders. The respondent sample perceived these groups to have fairly low levels of connectivity with other members of the stakeholder community but moderate or high vested interest levels and gatekeeping power. Overall, food manufacturers, consumer advocacy representatives, independent experts and quasi-autonomous non-governmental organisations were assessed as the least influential groups of stakeholders. This was most typically due to perceptions that these stakeholder types had little gatekeeping power and the relatively few connections with other stakeholders.

4. Discussion

The stakeholder survey was primarily commissioned to provide normative support for the development of a responsible marketing standard. The critical appraisal of its findings, especially in light of the policy initiative's final outcome however, are also intended to provide insight and evidence that can inform and support future responsible marketing policy and research initiatives. Findings likely to be relevant to future initiatives along with comments and reflections on strengths and limitations of the research process are therefore presented below.

4.1. Key findings and policy implications

4.1.1. Widespread support for policy controls to be applied to all forms of food marketing

Variable but on the whole high levels of interest in the policy initiative were found across all stakeholder groups represented in the survey. This is unsurprising, given the sample was recruited purposively. It is nevertheless, an important finding. The collective responses indicate that the wide range of stakeholders represented in the study recognised the proposal to develop a responsible marketing standard as a genuinely innovative policy initiative. Its potential to complement prevailing voluntary and statutory controls was also widely and readily recognised by a wide mix of key informants.

Consumers who participated in the FGs expressed significant support for the proposed standard. One interesting finding was that consumers strongly recognised that food marketing is mediated through many more strategies and techniques than broadcast advertising and were in support of policy controls that would address techniques such as price-incentivised marketing. Key informants also expressed clear recognition that food marketing achieves its effects through a multifarious mix of marketing strategies and methods. These findings are significant for future policy strategy. Current policy controls focus almost exclusively on direct advertising. They do not address the impact of the highly integrated and immersive food marketing environment (Cairns, 2013; Chandon & Wansink, 2001; Hoy et al., 2012). The findings of this survey indicate consumers and other stakeholders' are in favour of policy scope being expanded to address the myriad forms of marketing used to promote HFSS foods. For example, participants expressed support for the proposal that the standard would restrict price incentivised marketing and impulse appeals for non-HFSS foods.

4.1.2. Strategic communications planning anticipated to be a critical success factor

Many key informants also recommended raising the public visibility of consumer demand for more responsible marketing across the whole range of marketing methods. They commented it would strengthen the mandate for policy makers to intervene and incentivise marketers to pursue more health supportive food marketing. Recent policy analyses have similarly concluded that greater use of public relations and marketing to raise awareness of, and nurture public opinion in favour of, food marketing control policies is currently an under-utilised public policy resource (Niederdeppe, Roh, & Shapiro, 2015; Brownell & Roberto, 2015; Bhate, 2007).

Respondents with prior experience of independent benchmark standards in good practice (and indeed some without prior experience) recommended communications planning should begin by first exploring the latent perceptions on food marketing in general and responsible food marketing in particular. They suggested this would help to ensure that design and development of the standard, as well as its own launch was fully informed by

target audience perceptions and assumptions. Furthermore, multiple respondents commented on the critical importance of strategic public relations planning to the successful adoption and diffusion of the standard. These respondents recognised that standard impact was contingent on it achieving critical mass and offered suggestions on how communications-based strategies such as media relations campaigns and publicity events could support this.

There was also widespread recognition that communications has an important role in maximising the reputational capital gains for food marketers adopting the standard. Participants also recognised that if the standard was perceived to be credible and trustworthy, this would, by default create disincentives for non-adopters to resist changing their marketing practices and consider the alternate strategy of pursuing accreditation.

4.1.3. Strong policy leadership is key to the effectiveness of multi-stakeholder policy initiatives

Almost all respondents commented on the critical importance of policy makers taking a strong leadership role. This view was closely linked to concerns regarding the voluntary nature of the standard and the potential adverse influence of stakeholders with commercial interests on intervention design and impact. This view was especially emphasised by respondents representing the public policy and consumer advocacy sectors. These views, along with the assessment that stakeholders from public health policy making, food retailing and trade associations are the most powerful stakeholders indicate close attention should be paid to their roles in future planning and research. The views of a broad-based mix of respondents that an independent standard should have co-regulatory status is also an important factor for future planning and research to explore.

Concerns about the role of private sector stakeholders in the development of the proposed standard echo an extensive discourse in the literature on the potentially adverse influences of profit motives on public health policy development (see Freedhoff, 2014; Moodie et al., 2013; Stuckler & Nestle 2012 for example). It is also noteworthy however, that respondents expressing such reservations often tempered these views with comments that multi-stakeholder participation could be used to strengthen the design of a responsible marketing standard, providing robust safeguards are put in place.

4.1.4. Mixed levels of support for a shared responsibilities approach to policy development

This recognition aligns with an emergent interest in developing policy strategies that focus less on retrospective proof of marketing's effects and more on shared responsibility for future mitigation and harm reduction approaches. This emergent interest advocates a shift in policy planning and research strategies from a retrospective, liabilities-based focus to more future solutions-oriented, collaborative approach to evidence-informed policy making (Gonzalez-Padron & Nason, 2009; Roberto et al., 2015). Advocates of this strategy argue it could help to end the prevailing hegemonic deadlock in multi-stakeholder food marketing policy development. They argue that shifting research and discourse from a focus on the locus or responsibility and effect sizes to how the capacity of a multi-stakeholder community of practice can be strengthened could contribute to policy innovation and the pace of development (ibid; Hill & Kelly, 2014; Schrempf, 2014).

This view however, was not shared by all respondents. In particular, the interest levels of some respondents were lowered by their preference for a liabilities-based approach to policy development. They considered the development of additional food marketing policy controls as urgent and legitimate. They were however, sceptical that shared responsibility approaches could be

managed robustly enough to protect dietary health public interest from the powerful influences of the private sector. Hence, these respondents were more likely to express the view that only statutory controls could provide the necessary public interest protections.

Many respondents were positive about the independent status of the proposed standard. It was perceived to provide stronger public interest protection than self-regulatory regimes. Unequivocal and transparent evidence-based standard criteria was emphasised by a broad-based mix of key informants as fundamental to protecting its independence from vested interests and unequal power relations.

A small number of respondents with knowledge of good practice standards also commented on the potential for standardisation to provide a comprehensive and unambiguous set of indicators of good practice. These respondents also recognised that the participation of multiple stakeholders strengthened the potential for a standard's protocol to be developed in a form that addressed key intervention targets. This is important in food marketing policy because a recognised weakness of current policy regimes is imprecision in their target objectives (Elliott et al., 2014; Swinburn et al., 2015).

4.15. Strong interest in progressing transnational governance options

Key informants drawn from the public health and consumer advocacy sectors expressed interest in the capacity of standards to strengthen transnational governance of food marketing. These respondents were keenly aware of the limitations of statutory intervention to constrain the reach and impacts of global food marketing activities and the significant negative implications for global public health. They also indicated a strong awareness of the need for active cross-border policy collaboration. Collaboration was perceived to be important to standard acceptability (and therefore its adoption and diffusion) – for example by boosting reputational capital, its adopters might gain cross-border trade advantages. It was also perceived to be important to impact and effectiveness – for example through international policy collaboration, standards could provide a means to address the increasingly globalised nature of marketing and its consequent erosion of geographically bounded legislative protections.

4.16. Strong interest in *e* policy controls with the capacity to be adaptive

Some not-for-profit stakeholder respondents also commented that a carefully designed standard could provide stronger governance than statutory controls. They reasoned their greater flexibility and comprehensiveness than legislative instruments reduced the risk of obsolescence of policy design in the face of rapid commercial marketing innovation. These views are supported by case evidence from other sector, including the MSC (Guler, Guillen, & Muir Macpherson, 2002; Henson, 2008; Thomas & Gostin, 2013). This evidence however, also strongly indicates that designing an effective 'future-proof' standard is contingent on deep understanding of the sector and substantive political will to take global public interests forwards (Gereffi, Humphrey, & Sturgeon, 2005; Henson, 2008; Thomas & Gostin, 2013).

4.17. Clear and widespread recognition that a standard must be underpinned by a credible evidence base

The factor most consistently identified as critical to the standard's future effectiveness was public perceptions regarding its credibility and trustworthiness. Survey participants who commented on this, also suggested that credibility and trustworthiness would ultimately be determined by the robustness of the evidence-based assessment criteria and the consistency with which they were applied. The application of

evidence in standard design and implementation was most strongly emphasised by respondents recruited into the survey because of their activities and engagement with public health and/or consumer advocacy.

Demonstrable government support for the standard was also identified as an important credit and trust enhancing asset. It was a factor particularly emphasised by FG participants and private sector representatives. Respondent perceptions that the effectiveness of a responsible marketing standard is contingent on public confidence in its credibility, probity and utility is strongly supported by evaluative evidence from other sectors (Albersmeier, Schulze, Jahn, & Spiller, 2009; Ingenbleek & Immink, 2010; Jahn, Schramm, & Spiller, 2005; Miles & Munilla, 2004).

4.2. Strengths and limitations of research design and conduct

The food manufacturer and processor respondents included in the survey were all drawn from small and medium sized enterprises and were not therefore a representative sample of the food manufacturing sector. There is evidence that trade association interests tend to reflect those of their largest (in economic and power terms) members (Bailey & Rupp, 2006; Barnett, 2013). It is also pertinent that trade associations and large member companies share similar influence characteristics: extensive stakeholder network connections, similar market gain/loss possibilities as a result of intervention impact and significant gatekeeping power. The perceptions expressed by trade association respondents perhaps offer an alternate source of insights on the likely responses of large food manufacturing and processing firms, although clearly this is a less reliable source of evidence than their direct inputs into the survey.

Another limitation is that the assessment of stakeholder interest and influence levels was based only on the researchers' assessment of the sample's responses. A more thorough analysis would include consultation with key informants and FG participants. This was not possible because of time limitations. Its findings should therefore be viewed as provisional because although the assessment aimed to be systematic, it was not cross-checked by its subjects.

On the other hand, the extensive literature on the reliability and validity of applied policy research in support of intervention development suggest that the purpose and design of this study has the capacity to contribute useful and original evidence. Its collation and critical appraisal of a broad base of stakeholder perspectives on the planning and development of a policy intervention fits with emergent recommendations for public policy research. These have emphasised that public health research needs to place more emphasis on capturing the secondary and indirect impacts of intervention as well as its intended, primary effects. They suggest this requires the scope of research to include evidence and insight from multiple stakeholders/sectors (see for example, Pettigrew & Roberts, 2011; Smith & Pettigrew, 2010).

The translational food marketing policy evidence base is an area of research that is recognised to be currently underdeveloped (Butland et al., 2007; Moodie et al., 2013). The evidence generated by this study makes a direct contribution to this evidence base. It is the first investigation to independently evaluate stakeholder responses to the innovative policy option of an independent benchmark standard for responsible food marketing. It has also captured the perceptions of a broad mix of stakeholders. In view of continuing public policy commitment to multi-stakeholder participation in food marketing policy controls, this is an important topic of research for future policy planning (Bryden et al., 2013; Golan et al., 2001; Sharma et al., 2010).

4.3. Lessons learned: retrospective reflections on the policy-research process

The research was originally commissioned to provide normative support for the development process. It was conducted contemporaneously with the first phase of the development process and results were presented in their descriptive form. However, the insights generated as a result of the thematic analysis and assessment of stakeholder interest and influence levels were not available to policy makers and other stakeholders during the active phase of the standard's development. Some of its findings are highly relevant to managing multi-stakeholder participation in policy development and deployment. Early knowledge of its findings might have supported a more effective stakeholder management strategy. For example, it could have raised policy makers' awareness of the critical need to ensure there were strong incentives for private sector stakeholders to remain engaged in the development (and implementation) process. Similarly, if the Scottish Government had been more aware of key informant suggestions that the standard should be designed to have co-regulatory powers, perhaps they would have considered including this option in the development brief. This is likely to have increased incentives for private sector development group members to remain engaged with the development process. Also, if there had been greater awareness of key informant views that raising awareness of strong public demand was critical to establishing a legitimate mandate, perhaps policy makers would have considered investing more heavily in public communications at the outset of the standard's development. A focused media campaign for instance, might have increased the potential reputational capital gains from participation as well as losses/risks associated with non-participation.

5. Conclusion

There is considerable support amongst the food marketing stakeholder constituency for a set of independent benchmark standards for responsible food marketing. A broad based mix of stakeholders' anticipate that their engagement and collaboration in the development of a standard could produce an effective and innovative adjunct to prevailing voluntary and statutory policy regimes.

Strong policy leadership in the planning and development of the set of standards and co-regulatory status was recommended by a heterogeneous mix of stakeholders. This approach is particularly recommended as a strategy to reduce the risk of multi-stakeholder participation diminishing design efficacy and/or effectiveness. Conceptually clear public communications on their purpose and scope are also assessed to be critical to driving its acceptability, adoption and diffusions, utility and ultimately therefore impact.

The substantive evidence base available to inform their design and implementation of a responsible marketing standard was recognised to be an important policy resource. Evidence can strengthen policy planning, robustness of the standard and its credibility and trustworthiness. The generation of more evidence of public demand for a standard was also identified as an important and currently under-utilised policy resource.

Future policy planning and research priorities should include investigations on how a community of practice might be best developed and how power relations amongst such a community can be managed in the public interest. Also, further research is required to identify and test which marketing components and associated performance criteria are critical to standard effectiveness and impact. Additionally developmental research on the objectives and content of a communications strategy are recommended. Communications research can contribute to the content/

design of a standard, ensure conceptual clarity amongst stakeholders on its purpose and scope as well as advance its adoption and diffusion.

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8.2 News report ‘Scotland abandons responsible food marketing standard’



Breaking News on Food & Beverage Development - Europe

Scotland abandons responsible food marketing standard

By Caroline Scott-Thomas+, 11-Dec-2013

Related topics: Food labelling, Policy, Sugar, salt and fat reduction, Marketing

The Scottish government has shelved a standard for responsible food and drink marketing intended to tackle Scotland’s obesity problem, after food industry participants withdrew from discussions.

The government said in April that it would develop a third party certified publically available specification (PAS 2500) on responsible food and drink marketing in partnership with the British Standards Institute (BSI). A Steering Group was set up, consisting mainly of food industry and marketing associations *“to give the process credibility and to ensure engagement and industry buy-in.”*

However, in a letter addressed to Steering Group members seen by FoodNavigator, the BSI said that although there seemed to be agreement that the project should be attempted, *“it was apparent that there was considerable scepticism in respect of the validity of the objectives for the PAS, amongst some sections of the stakeholder community”.*

The industry ‘supports balance’

The standard was intended to provide a benchmark for the responsible marketing of food and drink to cut consumption of food high in fat, salt and sugar, but industry trade body, the Food and Drink Federation (FDF), says that it did not recognise that current approaches to food promotion already encourage balanced diets.

“By changing product recipes, creating new healthier options, investing in consumer education, providing clear labelling and promoting a wide range of products, the industry supports individuals to find the right balance,” said FDF director of communication Terry Jones.

“The PAS process did not recognise this context. It would restrict the information available to consumers and risk undermining one of Scotland’s most important industries and putting up prices for hard pressed consumers.”

No one from the FDF responded prior to publication to a query about which information would be restricted.

Government ‘could not continue without industry involvement’

The Scottish government said that it was now considering industry responses to [draft proposals on other voluntary measures](#) to encourage healthy choices, and aims to publish strategies for marketing and reformulation in April next year.

Referring to the shelved specification, a government spokesperson told this publication: *"Unfortunately it could not continue without the food industry's involvement. However, we welcome the assurance from all parties that they remain committed to constructive engagement on the issue of marketing of HFSS foods."*

Consumer watchdog organisation Which? urged the Scottish government to set out how it is now going to ensure action on more responsible marketing.

"People tell us that responsible marketing is one of the main areas they think Government should address to make it easier for people to eat healthily so it's disappointing that talks have ended because of the withdrawal of the main industry groups," a spokesperson said.

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Epilogue

Once we recognise the state of the art is a social product, we are free to look critically at the agenda of our science, its conceptual framework, and accepted methodologies, and to make conscious research choices'. (Krieger, 2001, citing Levins & Lewontin, 1987).

Summary of knowledge and evidence contributions of the thesis to responsible marketing policy development and scholarship

The aim of this thesis was to present a case for rethinking responsible marketing policy and research approaches. An overview of the case is given below. This is followed by a summary of its evidence and knowledge translation contributions, and concluding comments.

Overview of Case Presented:

Research Objective 1: Exploring how and why rethinking research can contribute to the responsible marketing policy evidence base.

Together, Chapters 2, 3, and 4 introduced the rationale for the research aim of the thesis. They highlighted how prevailing assumptions and preconceptions about food marketing's roles and impacts contribute to gaps in the responsible marketing policy research agenda. They highlighted how and why addressing this gap can support policy innovation and the development of stronger policy regimes. Collectively, they are intended to demonstrate there is an evidence-based case for the paradigms underpinning responsible marketing policy and research approaches to be critically reviewed and potentially reconfigured.

Chapter 2: Current status of responsible marketing policy and its underpinning research and evidence base, and **Appendices 1, 2 and 3** set the context for the research aims of the thesis. The paper that comprised Chapter 2 reported a systematic review of the international evidence on food marketing's impacts on food behaviours and health outcomes. It acknowledged that the evidence base on marketing's micro level impacts has been instrumental in establishing an evidence based mandate for policy intervention. The Appendices reported on primary quantitative evidence. Both highlighted that food marketing continues to undermine the food environment goals of responsible marketing policy.

Chapter 3: Rethinking responsible marketing policy research progressed the exploration of Chapter 2's provisional findings on the impact of food marketing on the food environment. It reported the first critically interpretive review and synthesis of evidence on food marketing's impacts on the sociocultural food environment. Its findings demonstrated the how rethinking research assumptions can support strategic and innovative policy development.

Chapter 4: Rethinking responsible marketing policy strategy reported on the results of policy analysis. The analysis applied a macro level interpretive lens to extant policies. It complemented Chapter 3's investigation of macro level impacts of commercial practice. Its findings demonstrated the potential for a critical re-appraisal of the assumptions and preconceptions underpinning policy approaches to strengthen future policy regimes.

Research Objective #2: Exploring research approach options

The purpose of Chapters 5 and 6 was to explore how research methodologies can facilitate rethinking and support its policy and research development objectives. Hence, they explored the capacity of select normative research strategies to critically re-appraise policy goals and assumptions, identify innovative policy options and contribute to the global evidence base.

Chapter 5: Planning policy-research collaboration comprised a paper and an extract from a government strategy document. The paper provided a conceptual outline of why and how social marketing provides a planning frame that can support iterative research and policy collaboration targeted to obesity prevention. The extract illustrated how the conceptual principles outlined in the paper were utilised to support a real world policy planning and development process.

Chapter 6: Implementing policy-research collaboration built on the research reported in Chapter 5. It reported how an iterative and collaborative research approach was used to support stakeholders' participation in the identification and development of an innovative

policy initiative. It presented evidence demonstrating the methodology supported policy development through its original evidence and knowledge translation contributions.

Research Objective # 3: Exploring how and why rethinking can support policy innovation

Chapters 7 and 8 progressed the findings presented in the preceding chapters on the rationale and implementation of reconfigured approaches to responsible marketing policy research. They reported the impact of the selected collaborative and iterative research approaches on policy development processes and outcomes. They also presented evidence and insights on the strengths and limitations of rethinking research approaches in support of responsible marketing policy development.

Chapter 7: An example of how rethinking research approaches can support the identification of innovative policy reported on a novel exploratory research approach. It demonstrated its utility as a source of provisional evidence on an innovative policy option.

Chapter 8: An example of how rethinking research approaches can support the development of innovative policy built on the research results of Chapters 6 and 7. It presented evidence on the capacity (and failure) of a reconfigured research approach to support the development of an innovative policy initiative to its successful completion. It also reported evidence demonstrating the potential for reconfigured research approaches to generate novel, globally relevant translational evidence.

Summary of research contributions

The research included in the thesis has identified a gap in the responsible marketing policy research agenda. It has identified that critically rethinking the preconceptions and assumptions that underpin food marketing policy and research approaches can help to address the gap. It explored and demonstrated the potential for normative research approaches to simultaneously progress policy development and critical rethinking. It presented evidence of their capacity to contribute to the global evidence base. It also

demonstrated that reconfigured strategies can support the identification and development of innovative policy options

Its global evidence contributions include:

- The identification of a fragmented but convergent pool of evidence indicating contemporary food and beverage marketing is an interactive, dynamic phenomenon.
- The identification of a fragmented but convergent pool of evidence demonstrating it significantly impacts sociocultural determinants of food behaviours.
- The generation of evidence demonstrating a gap between the strategic aims of responsible marketing policy regimes and the inherent capacity of implemented interventions to constrain marketing's food environment impacts.
- The generation of evidence demonstrating that critical re-appraisal of food marketing policy research assumptions and preconceptions is a strategy supportive of policy innovation.
- The generation of evidence that research intended to support real world multi-stakeholder policy development processes requires additional skills to those established and recognised as central to high quality research. These include the ability to engage with dynamic and politicised policy processes and their public communications challenges.
- The generation of evidence that can inform future independent benchmark standard for responsible marketing development initiatives.
- The generation of evidence that can inform future research on designing and developing policy that is 'future proof' and targets marketing's sociocultural food environment impacts.

Its knowledge translation impacts include:

- Support for the WHO Set of Recommendations on the Marketing of Foods and Non-alcoholic Beverages to Children (formally endorsed at the 2010 World Health Assembly and the 2011 United Nations General Assembly).
- Participatory research contributions to the Scottish Government's responsible marketing standard development initiative (PAS2500).

- Supporting the planning and development of the Scottish Government's Supporting Healthy Choices Policy initiative.
- Knowledge exchange with policy makers and stakeholders engaged in a scoping and prioritisation initiative commissioned by the United Kingdom's Department of Health (An analysis of the regulatory and voluntary landscape concerning the marketing and promotion of food and drink to children).
- Supporting responsible marketing policy agendas targeted to the engagement of a broad mix of stakeholders in innovative policy development processes.
- Supporting policy makers' efforts to increase popular support for stronger, more effective responsible marketing policy controls.

Concluding comments

The thesis has aimed to present a case for responsible marketing policy and research to rethink approaches. It has aimed to demonstrate that opportunities to critically re-appraise their underpinning paradigms and identify innovative policy options are currently under-recognised. The thesis does not claim the alternate frames it advocates amount to a paradigm shift. Far more evidence would be required for this. Because, as Kuhn notes: *At the start a new candidate for paradigm may have few supporters, and on occasions, the supporters' motives may be suspect. Nevertheless, if they are competent, they will improve it, explore its possibilities, and show what it would be like to belong to the community guided by it. And as that goes on, if the paradigm is one destined to win its fight, the number and strength of the persuasive arguments in its favour will increase. More scientists will then be converted, and the exploration of the new paradigm will go on'* (Kuhn, 1962, p. 159).

However, by demonstrating that

- Rethinking responsible marketing policy and research approaches can contribute to the global evidence base,

And that

- Its research has increased policy stakeholder recognition and support for responsible marketing policy to explicitly address food marketing's inherently dynamic nature and its macro level environmental impacts:

It is hoped the thesis will contribute to the building of a revised research agenda.

Thesis findings indicate a revised research agenda can draw on the some of the emergent theory building and strategy planning increasingly apparent in marketing, public health and policy sciences. To date these emergent constructs and approaches have been largely absent in food marketing control policy research and development. For example, emergent recognitions in public health, marketing and the policy sciences of the critical role of systems level processes and relationships in determining outcomes provide a strong rationale for future policy to expand its scope from its current focus on micro level targets to explicitly include macro level variables. Similarly, increasing awareness of the need to target both structural/upstream determinants with the aim of creating enabling environments alongside individual level determinants that strengthen personal agency is also an emergent trend in the disciplinary bases that have informed and guided the research presented in the thesis. Additionally, recognition in the various disciplines used to inform the research that policy interventions generate unintended consequences and are inherently likely to be less comprehensive than its stakeholders would prefer (for example dealing with the impacts of global marketing activities at the national level) indicate a rationale for progressing the development of policy regime that uses a mix of mandatory and voluntary interventions.

The design of complex, multi-target, multi-strategy interventions is inevitably challenging. This is almost certainly one of the reasons policy makers have historically demonstrated a preference for the participation of multiple stakeholders in the development of policy. This thesis has explicitly sought to present a case for research to respond to this preference. It has aimed to demonstrate how and why research outputs can be strengthened by adopting a fully participatory and collaborative approach. It has also sought to demonstrate that such an approach can significantly increase knowledge exchange capacity and therefore research impact. It has however also sought to

explicitly address the risks and additional challenges arising as a consequence of unequal power relations amongst the food marketing control policy stakeholder community.

Hence the thesis has aimed to demonstrate why, and by what means, rethinking research approaches can be used to maximise the benefits of building a heterogeneous community of practice and manage the risks of vested interests and power inequalities.

The author of this thesis also hopes future research and policy development initiatives will use some of the data and insights the thesis has aimed to highlight to progress hitherto under-utilised normative research strategies and methods. She also recommends its insights and evidence contribute to the development of a bold and clearly articulated theory of change and/or logic model for responsible marketing policy. Its aims should be the generation of an innovative package of future-proof, comprehensive policy actions that constrain the negative impacts of food marketing and leverage its positive behaviour changing capacity.

In short therefore, it is hoped that the thesis has presented an evidence based case for the currently dominant paradigm on the nature of the food marketing emperor to be questioned and challenged. It has aimed to demonstrate that by so doing, responsible food marketing policy and research can develop more robust and innovative strategies and actions and consequently progress its core aim of building a health supportive food environment. If the thesis has done this, then it has achieved its twin purposes of making an original and useful contribution to food marketing control policy scholarship and supporting real world policy development.

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List of Abbreviations for Chapter 1 and Epilogue

CCT	Consumer culture theory
Foods HHSS	foods and drink high in fat, salt and/or sugar
NCDs	Non-communicable diseases
Responsible marketing	Responsible marketing of foods and drinks
Responsible marketing policy	Public policy targeted to public health supportive marketing of foods and drinks.
SG	Scottish Government
UK DoH	United Kingdom Department of Health
UN	United Nations
WHO	World Health Organisation

APPENDICES

Appendix A: The impact of food and drink marketing on Scotland's children and young people



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The Impact of Food and Drink Marketing on Scotland's Children and Young People

A report

**on the results of questions about exposure and purchase responses
included in IPSOS-Mori's 2014 Young People in Scotland Survey**

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ISM Institute *for* Social Marketing

A collaboration between the University of Stirling and The Open University

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1. EXECUTIVE SUMMARY

As well as increasing awareness and positive attitudes to promoted products, marketing also directly influences purchase. In 2014 the Scottish Government commissioned research to investigate the scale and nature of these effects on Scotland's youth. Questions on exposure as well as purchase responses to a range of currently prevalent food and drink marketing methods were administered to 2,285 school students aged 11-18 years.

Survey findings indicate that food and drink marketing is a substantively salient feature of the food environment in which Scotland's youth make their dietary choices: collectively, respondents reported seeing 4,426 food and drink marketing promotions and buying 1,897 products in response to a marketing promotion during the 7 days preceding their participation in the survey. Nearly two thirds (63.5%, n=1446) of survey respondents reported seeing 1 or more food and/or drink marketing promotion and nearly half (47%, n=1074) reported buying 1 or more food or drink in response to a marketing promotion during this 7 day period.

Price based promotions and advertising are the most salient forms of marketing for young people (respectively 36 and 21 percent of all reported observations were attributed to these 2 marketing methods). Respondents also reported high levels of awareness of sponsorship, social media marketing and outdoor/public space promotions.

The marketing landscape is dominated by promotions for foods and drinks targeted for reduction in the Scottish Government's Supporting Healthy Choices Framework because of high energy/fat/salt and/or free sugar content. Seventy four percent of classifiable marketing promotion observations were for these energy dense, low nutrition foods. The marketing of foods and drinks high in free sugars, such as sugar sweetened soft drinks and confectionery are particularly salient: 24 percent of classifiable observations were for sugar sweetened soft drinks and 21 percent were for chocolate and sugar based confectionery.

High fat, salt, sugar foods and drinks are also the products most frequently bought in response to marketing promotions. Sixty eight percent of classifiable purchases were for foods targeted for reduction or reformulation in the Scottish Government's Supporting Healthy Choices

Framework. Sugar sweetened soft drinks were especially dominant, with 23 percent of classifiable purchases attributed to this category. Other high sugar products are also frequently and effectively promoted: together, sugar based confectionery and chocolate were responsible for 22 percent of all classifiable marketing-prompted purchases for example.

Price promotions were by far the most frequently reported marketing method to prompt a food or drink purchase. Fifty four percent of all reported marketing-prompted purchases were attributed to some form of price promotion. Here too, high fat, salt, sugar foods and drinks are dominant - over half (57 percent) of all classifiable price incentivised purchases were for foods targeted for reduction in the Supporting Healthy Choices Framework. Sugar sweetened soft drinks are the most dominant category, responsible for nearly a quarter (24 percent) of all classifiable price-incentivised purchases. Other high sugar foods, especially chocolate and sugar based confectionery are also heavily promoted: together these 3 product categories accounted for 35 percent of all classifiable price-incentivised purchases.

High sugar foods are especially dominant in till-based marketing – sugar based confectionery, chocolate and sugar sweetened soft drinks accounted for 84 percent of all classifiable till-prompted purchases.

High salt and high fat foods were also found to be disproportionately salient in the food and marketing landscape. For example, just 1 high fat, high salt product category - savoury snacks - was responsible for 7 percent of all classifiable observations of marketing techniques, 8 percent of purchases in response to any form of marketing and 10 percent of price-incentivised purchases.

On the other hand, visibility of marketing promotions for foods and drinks that are positively supportive of dietary health and wellbeing is low. Less than 10 percent of classifiable marketing observations and reports of purchase were attributed to foods and drinks targeted for promotion in the Supporting Healthy Choices Framework.

In summary, survey results demonstrate there is a convincing, evidence-based case for the marketing focused objectives included in the Scottish Government's Supporting Healthy Choices Framework. They indicate there are substantive opportunities for food and drink marketers to rebalance the mix of food and drink promoted towards a more health supportive choice set. There are also significant opportunities for marketers to build on and strengthen their current corporate responsible marketing policies by reducing the volume of price incentives to purchase energy dense, high fat, salt, sugar products, and by reducing the volume and/or completely eliminating high sugar products from till-based promotions.

2. INTRODUCTION

A recent assessment of Scotland's dietary public health status concluded that the Scottish diet has 'failed for many years to achieve the dietary recommendations set out in the Scottish dietary goals' (FSAS & Scottish Government, 2014a). The continued excess consumption of foods and drinks high in energy, total and saturated fats, free sugars and salt (HFSS foods) is noted to be of particular concern, as are its effects on overweight and obesity: approximately 65 percent of adults in Scotland and 30 percent of young people aged 2-15 years are estimated to be at risk of overweight and obesity (Scottish Government, 2013).

Previous surveys of dietary habits have indicated that a substantive proportion of marketing encourages the consumption of energy dense and/or HFSS foods: for example a recent survey of Scottish purchases into the home, estimated that nearly 38 percent of all food energy (calories) and 41 percent of food energy derived from total and saturated fats were purchased in response to price promotions (FSAS & Scottish Government 2014a). Hence, one of the four key principles of the Scottish Government's Supporting Healthy Choices (SHC) Policy Framework is to *'rebalance promotional activities to significantly shift the balance towards healthier choices'* (FSAS & Scottish Government, 2014b); and one of the four key priority areas of the Government's long term obesity strategy is *'controlling exposure to, demand for, and consumption of, excessive quantities of high calorific foods and drinks'* (Scottish Government, 2010).

In 2014, the Scottish Government commissioned the market research company, Ipsos-MORI (I-M) to administer two sets of research questions aimed at generating evidence on exposure levels and purchase responses of Scotland's youth to a wide range of food and drink marketing methods. Questions were designed to examine the prevalence and salience¹ of food and drink marketing, which marketing methods were most salient and which were most effective in eliciting purchase amongst young people, and for what types of foods and drinks.

¹ Salience is used here to describe the conspicuousness of marketing promotions, relative to other elements present in the food environment. It is therefore an indicator of the impact of promotions in terms of visibility and/or perceived importance to the person(s) reporting awareness/observations of their presence or absence.

The questions were administered as part of the I-M's Young People in Scotland omnibus survey. Two thousand, two hundred and eight five young people aged 11-18 years participated in the survey. They were invited to answer questions included in the self-administered questionnaire based survey on their observations of, and responses to, a range of promotional activities for any and all foods and drinks. Closed questions were used to capture data on which marketing techniques respondents had observed and which had elicited a purchase response during the preceding 7 day period. Open questions were used to capture data on which food and drink products were observed to be marketed and/or were purchased in response. Descriptions of the food and drink products were sorted into 1 of 47 food categories and 1 of 3 dietary health based classification groups. A copy of the 47 food and drink category coding frame is included in this report as an Appendix and definitions for the 3 dietary health based group classifications are as follows:

- foods and drinks which can support a healthy diet and are targeted for promotion in the SHC Framework (SHC Promote);
- foods and drinks targeted for reduction or reformulation in the SHC Framework, plus other foods and drinks high in calories, fats, free sugars and/or salt in the diet in Scotland (HFSS);
- foods and drinks not targeted for promotion in the SHC Framework or are not classifiable without nutritional information (Unclassified).
-

The data was also critically appraised for implications regarding SHC Policy Commitments # 1, 4, 8 and 11 (FSAS & Scottish Government, 2014b):

- Commitment # 1: We invite retailers and out of home caterers to take pragmatic steps to remove confectionery and sugary drinks from till points, checkouts aisles and areas around checkouts.
- Commitment #4: We invite retailers to rebalance their food and drinks offering and promotions, both in-store and online to positively support consumers to make healthier choices.
- Commitment # 8: We invite the food industry and other relevant partners to work with the Scottish Government to build upon existing practice on the responsible

marketing of food and drink high in fat, salt and sugar to reduce children's exposure to messaging.

- Commitment # 11: We invite food industry businesses and other relevant partners to work in partnership with Scottish Government to implement our new healthy eating social marketing campaign.

This report is intended to contribute to the evidence base on the current Scottish food and drink marketing landscape and its impacts. It provides insights on the marketing landscape in which young people are making food choices and which marketing methods are most salient and/or effective in eliciting purchase. It provides quantitative data on Scottish youth's exposure to commercial food and drink marketing, the food and drinks being promoted and by what means, as well as the impact of marketing on their purchase choices. It also therefore provides a baseline against which the future progress of SHC's marketing related objectives can be monitored and evaluated.

Future surveys, along with other dietary public health evidence also provide a means through which changes in commercial marketing practice and their contribution to the nations' dietary public health and wellbeing can be monitored and evaluated. Additionally, evidence from this and future surveys can inform the design, development and implementation of future intervention planning aimed at reducing adverse impacts of marketing on the nation's dietary health and wellbeing.

3. METHODS

I-M were responsible for overall survey design and methodology. The research questions on food marketing were developed as a collaborative effort between the University of Stirling, Food Standards Scotland (FSS)² and the Scottish Government's along with helpful inputs on logistics and administration considerations from I-M.

The study was conducted September-November 2014 as part of I-M's school-based repeating omnibus Young People in Scotland Survey. The survey involved a representative sample of 2285 youth aged 11-18 years recruited from 50 state schools across Scotland. Schools were selected from the Scottish Government's school database using a sampling frame stratified by local authority, school size, and urban-rural classification. Two school years from each included school were selected through randomised allocation. Respondents participated in the survey during mixed ability class time (*e.g.* Personal and Social Education) through a confidential self-completion, paper-based questionnaire. Teachers were provided with written instructions on questionnaire administration. To ensure confidentiality each respondent was provided with a sealable envelope for their completed questionnaire.

I-M confirmed that all research activities were conducted in accordance with the Market Research Society's Code of Conduct for good practice (MRS, 2014). Information leaflets and opt-out forms were provided to respondents' parents and/or guardians. Students were provided with information leaflets explaining the purpose of the survey, how confidentiality was maintained and that they were free to accept or decline the invitation to participate and if they chose to participate to what extent they did so.

Two sets of closed and open-ended research questions were used to capture data on food and drink marketing impacts. Closed questions asking respondents to select a yes/no/don't

² On the 1st April 2015, Food Standards Scotland took on all of the functions previously carried out in Scotland by the Food Standards Agency.

know response were used to capture respondents' observations of, and purchase responses to, a range of specified food and drink marketing techniques during the past 7 days.

Respondents were asked if during the previous 7 days they had seen any for food and drink marketing involving the following techniques:

- A television or cinema advert (advert)
- In sponsorship of a programme or film on TV or online (sponsorship)
- In an advert on Facebook, Twitter, YouTube or on any other social media (social media)
- In a special offer or price promotion in a shop (price)
- In school (school)
- In a magazine, newspaper, leaflet or any other printed material (print)
- At a public event such as a football match or concert or an outdoor place such as a billboard or bus (outdoors)
- In a text or email message (digital)

Respondents were also asked if during the previous 7 days they had purchased any food and drink in response to the following food and drink marketing techniques:

- The chance to enter a competition, win a prize or receive a giveaway (prize)
- There was a special offer on the product (e.g. a meal deal, buy one get one free or a price reduction) (price)
- Because a celebrity or cartoon character advertises the product (endorsement)
- Because the product sponsors an event, personality or team that you like (sponsorship)
- Because you saw or heard an advert for the product (advert)
- Because the product was on display at the till point/cash desk and /or the checkout assistant suggested it (till prompt)

A copy of the two sets of questions is included in the Appendices.

Respondents who answered yes to any of the questions above were asked to write a short description of the food and/or drink for which they had observed a marketing promotion and / or bought in response to any of the specified marketing techniques.

A coding frame developed by FSS for the survey was provided to I-M to guide their translation of respondent's descriptions into 47 food and drink categories. A copy of the coding frame is included in the Appendices. I-M also noted and recorded all written responses which could not be coded for reasons of illegibility, insufficiency of information or were outside the scope of the study (e.g. alcoholic drinks).

As well as providing direction on the 47 food and drink categories, the coding frame facilitated the classification of responses into one of the following 3 dietary health based food and drink groups:

- foods and drinks which can support a healthy diet and are targeted for promotion in the SHC Framework for example fruit, vegetables and water(SHC Promote);
- foods and drinks targeted for reduction or reformulation in the SHC Framework, plus other foods and drinks high in calories, fats, free sugars and/or salt in the diet in Scotland for example sugar based confectionery, sugar sweetened soft drinks and savoury snacks (HFSS);
- foods and drinks not targeted for promotion in the SHC Framework or are not classifiable without nutritional information for example fruit juices and sandwiches (Unclassified).

Demographic data was recorded and case weightings for gender, year group, urban-rural classification and Scottish Index of Multiple Deprivation (SIMD) classification (Scottish Government, 2012) was computed and compiled by I-M.

I-M provided a complete fully anonymised, and coded dataset to the Scottish Government. The data was analysed on behalf of the Scottish Government by the University of Stirling, using IBM SPSS Version 21 software and Microsoft Excel 2010 was used to generate the graphs included in this report. The report was prepared by the University of Stirling.

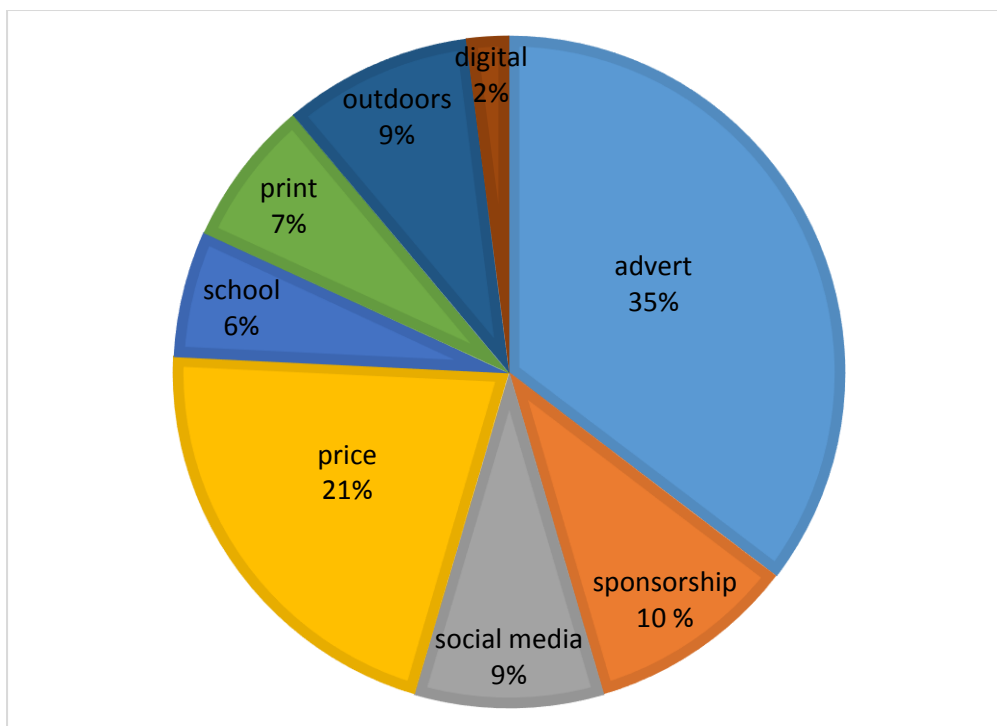
Descriptive statistics (frequency counts and percentages) were used to assess respondent's exposure and purchase responses to each of the specified marketing techniques and to food and drink marketing overall. The same methods were used to assess which food and drink product categories were most prominent to young people and were being bought in response to marketing. Frequency counts are reported in whole numbers and percentages to the nearest 0.5 percent. Chi-square (X^2) tests were used to investigate if respondent's awareness of marketing and marketing-prompted purchases were related to gender, deprivation levels as measured by SIMD classification and/or age as measured by school year. Statistically significant associations and trends identified from this analysis are presented in the body of the report and a more complete report on data computation and statistical testing is included in the Appendices.

4. RESULTS

4.1 Exposure to Food and Drink Marketing Promotions

The total number of observations of food and drink marketing promotions reported was 4,426. Observations of food and drink marketing promotions in order of decreasing frequency were: advertisements on TV or in the cinema (35%, n=1538), price promotions (21%, n=939), film or programme sponsorship (10%, n=463), on social media and in outdoor/public advertising spaces (9%, n=420 and n=397 respectively), in print media (7%, n=295), in school (6%, n=271) and in personalised digital forms such as text messaging (2%, n=103). A breakdown of marketing method observations is illustrated in Figure 1: Breakdown of food and drink marketing methods: all observations.

Figure 1: Breakdown of food and drink marketing methods: all observations

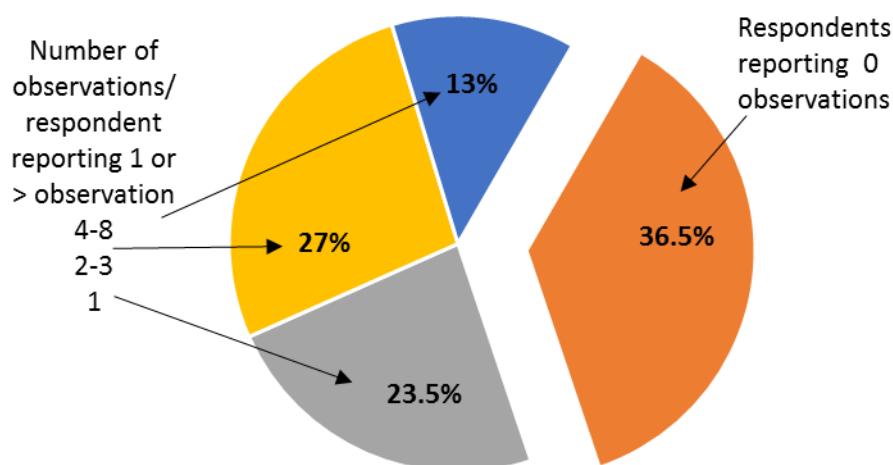


4.2 Differences in Awareness of Food and Drink Marketing

Breakdown and analysis of the characteristics of all respondents answering yes to one or more of the questions on observations of food and drink marketing found the following:

Nearly two thirds (63.5%, n=1446) of the whole respondent population (n=2285) reported 1 or more observation of a food or drink product promotion during the previous 7 days. A little over a third of the sample (36.5%, n=839) did not recall seeing any food or drink promotion during the previous 7 days. Nearly a quarter (23.5%, n=533) of the whole sample reported 1 observation, 27 percent (n=614) reported 2-3 observations and 13 percent (n=299) reported 4-8 observations. A breakdown of observations frequencies per respondents is presented in Figure 2: Frequency of reported awareness of marketing promotion: all respondents.

Figure 2: Frequency of marketing observations per respondent: all respondents



Breakdown and analysis of all marketing observations by gender found 62 percent (n=698) of male respondents and 65 percent (n=725) of females reported seeing 1 or more marketing promotion during the previous 7 days. χ^2 tests found no statistically significant differences in the observation frequencies of boys and girls.

More detailed breakdown and analysis of observations by gender and marketing methods found 49 percent (n=497) of observations of adverts were reported by boys and 51 percent (n=515) were reported by girls. Fifty six percent (n=235) of sponsorship promotions were observed by boys and 44 percent (n=188) by girls. Fifty two percent (n=198) of social media promotions were observed by boys and 48 percent (n=182) by girls. Fifty two percent (n=376) of price promotions were observed by boys and 48 percent (n=343) by girls. Forty eight percent (n=106) of in school promotions were observed by boys and 52 percent (n=115) by girls. Fifty percent (n=129) of print promotions were observed by boys and 50 percent (n=127) by girls. Sixty percent (n=202) of outdoors promotions were observed by boys and 40 percent (n=135) by girls. Forty six percent (n=44) of digital promotions were observed by boys and 54 percent (n=52) by girls.

χ^2 tests found the relatively more frequent reports of sponsorship based marketing and outdoor spaces/public events marketing by boys than girls were both statistically significant differences (sponsorship = $p < .02$ and outdoor = $p < .01$).

Breakdown and analysis of reported observations of all/any marketing by age/school year overall found 60.5 percent (n=240) of S1 respondents, 63.5 percent (n=262) of S2, 66.5 percent (n=272) of S3, 58 percent (n=241) of S4, 63.5 percent (n=240) of S5 and 70.5 percent (n=191) of S6 respondents reported seeing 1 or more marketing promotion during the previous 7 days. χ^2 tests found no significant relationship trend in observation frequencies across the 6 age/school year groups.

More detailed breakdown and analysis of observations by age/school year and marketing methods found the following:

Thirty and a half percent (n=156) of S1 marketing observations, 30 percent (n=187) of S2, 28 percent (n=210) of S3, 30.5 percent (n=174) of S4, 27 percent (n=167) of S5 and 31.5 percent (n=132) of S6 observations were for adverts. χ^2 tests found no significant relationship trend in observation frequencies across the 6 age groups.

Eleven and a half percent (n=59) of S1 marketing observations, 12.5 percent (n=78) of S2, 12 percent (n=91) of S3, 13 percent (n=73) of S4, 13 percent (n=79) of S5 and 11.5 percent (n=48) of S6 observations were for sponsorship promotions. χ^2 tests found no significant relationship trend in observation frequencies across the 6 age groups.

Ten and a half percent (n=53) of S1 marketing observations, 12 percent (n=75) of S2, 11.5 percent (n=86) of S3, 12 percent (n=67) of S4, 11 percent (n=68) of S5 and 8.5 percent (n=35) of S6 observations were for social media promotions. χ^2 tests found no significant relationship trend in observation frequencies across the 6 age groups.

Nineteen percent (n=97) of S1 marketing observations, 19 percent (n=117) of S2, 19.5 percent (n=146) of S3, 23 percent (n=129) of S4, 20.5 percent (n=127) of S5 and 26.5 percent (n=112) of S6 observations were for price promotions. χ^2 tests found the increasing frequency of observations of price promotions with increasing age/school year was statistically significant ($p < .01$).

Eight and a half percent (n=44) of S1 marketing observations, 5.5 percent (n=35) of S2, 7.5 percent (n=55) of S3, 5 percent (n=28) of S4, 7 percent (n=42) of S5 and 4.5 percent (n=19) of S6 were for in school promotions. χ^2 tests found no significant relationship trend in observation frequencies across the 6 age groups.

Seven percent (n=35) of S1 marketing observations, 7.5 percent (n=45) of S2, 8.5 percent (n=63) of S3, 7 percent (n=41) of S4, 9.5 percent (n=58) of S5 and 10.5 percent (n=16) of S6 marketing observations were for print promotions. χ^2 tests found no significant relationship trend in observation frequencies across the 6 age groups.

Ten and a half percent (n=54) of S1 marketing observations, 11.5 percent (n=71) of S2, 10 percent (n=77) of S3, 6.5 percent (n=37) of S4, 9.5 percent (n=58) of S5 and 10.5 percent (n=43) of S6 marketing observations were for outdoors promotions. χ^2 tests found no significant relationship trend in observation frequencies across the 6 age groups.

Two and a half percent (n=13) of S1 marketing observations, 2 percent (n=11) of S2, 3 percent (n=24) of S3, 3 percent (n=17) of S4, 3 percent (n=19) of S5 and 3.5 percent (n=14) of S6 marketing observations were for digital promotions. χ^2 tests found no significant relationship trend in observation frequencies across the 6 age groups.

Breakdown and analysis of reported observations by relative deprivation, as measured by SIMD status found 59 percent (n=267) of respondents classed as SIMD 1 (most deprived), 60.5 percent (n=261) classed as SIMD 2, 63 percent (n=275) classed as SIMD 3, 68 percent (n=331) classed as SIMD 4 and 65 percent (n=312) classed as SIMD 5 (least deprived) reported seeing 1 or more marketing observation during the previous 7 days. χ^2 tests found the increasing frequency of observations of any/all marketing methods as deprivation levels decreased was statistically significant ($p < .01$).

More detailed breakdown and analysis of observations by deprivation levels and marketing methods found the following:

Thirty one percent (n=198) of SIMD 1 observations, 29 percent (n=176) of SIMD 2, 31.5 percent (n=193) of SIMD 3, 29.5 percent (n=240) of SIMD 4 and 27.5 percent (n=219) of SIMD 5 observations were for adverts. χ^2 tests found no significant relationship trend in observation reports across the SIMD quintiles.

Thirteen percent (n=83) of SIMD 1 observations, 12.5 percent (n=77) of SIMD 2, 11.5 percent (n=71) of SIMD 3, 12 percent (n=98) of SIMD 4 and 12.5 percent (n=100) of SIMD 5 observations were for sponsorship promotions. χ^2 tests found no significant relationship trend in observation reports across the SIMD quintiles.

Ten and a half percent (n=69) of SIMD 1 observations, 11.5 percent (n=71) of SIMD 2, 12.5 percent (n=77) of SIMD 3, 10.5 percent (n=84) of SIMD 4 and 10.5 percent (n=83) of SIMD 5 observations were for social media promotions. χ^2 tests found no significant relationship trend in observation reports across the SIMD quintiles.

Seventeen and a half percent (n=113) of SIMD observations 1, 22.5 percent (n=136) of SIMD 2, 18.5 percent (n=114) of SIMD 3, 22.5 percent (n=184) of SIMD 4 and 23 percent (n=182) of SIMD 5 observations were for price promotions. χ^2 tests found the increasing frequency of observations for price-based promotions as deprivation levels decreased was statistically significant ($p < .01$).

Six and a half percent (n=42) of SIMD 1 observations, 6 percent (n=37) of SIMD 2, 5.5 percent (n=34) of SIMD 3, 7 percent (n=57) of SIMD 4 and 6.5 percent (n=52) of SIMD 5 observations were for in school promotions. χ^2 tests found no significant relationship trend in observation reports across the SIMD quintiles.

Seven and a half percent (n=47) of SIMD 1 observations, 7 percent (n=41) of SIMD 2, 8.5 percent (n=52) of SIMD 3, 7.5 percent (n=62) of SIMD 4 and 7 percent (n=56) of SIMD 5 observations were for print promotions. χ^2 tests found no significant relationship trend in observation reports across the SIMD quintiles.

Ten percent (n=65) of SIMD 1 observations 8.5 percent (n=53) of SIMD 2, 9 percent (n=55) of SIMD 3, 9 percent (n=75) of SIMD 4 and 11.5 percent (n=92) of SIMD 5 observations were for outdoor/public space promotions. χ^2 tests found the increasing frequency of observations for outdoor marketing as deprivation levels decreased was statistically significant ($p < .01$).

Four percent (n=25) of SIMD 1 observations, 3.5 percent (n=20) of SIMD 2, 3 percent (n=17) of SIMD 3, 2 percent (n=18) of SIMD 4 and 2 percent (n=18) of SIMD 5 observations were for digital promotions. χ^2 tests found no significant relationship trend in observation reports across the SIMD quintiles.

4.3 The Foods and Drinks That Young People Observe Promotions For

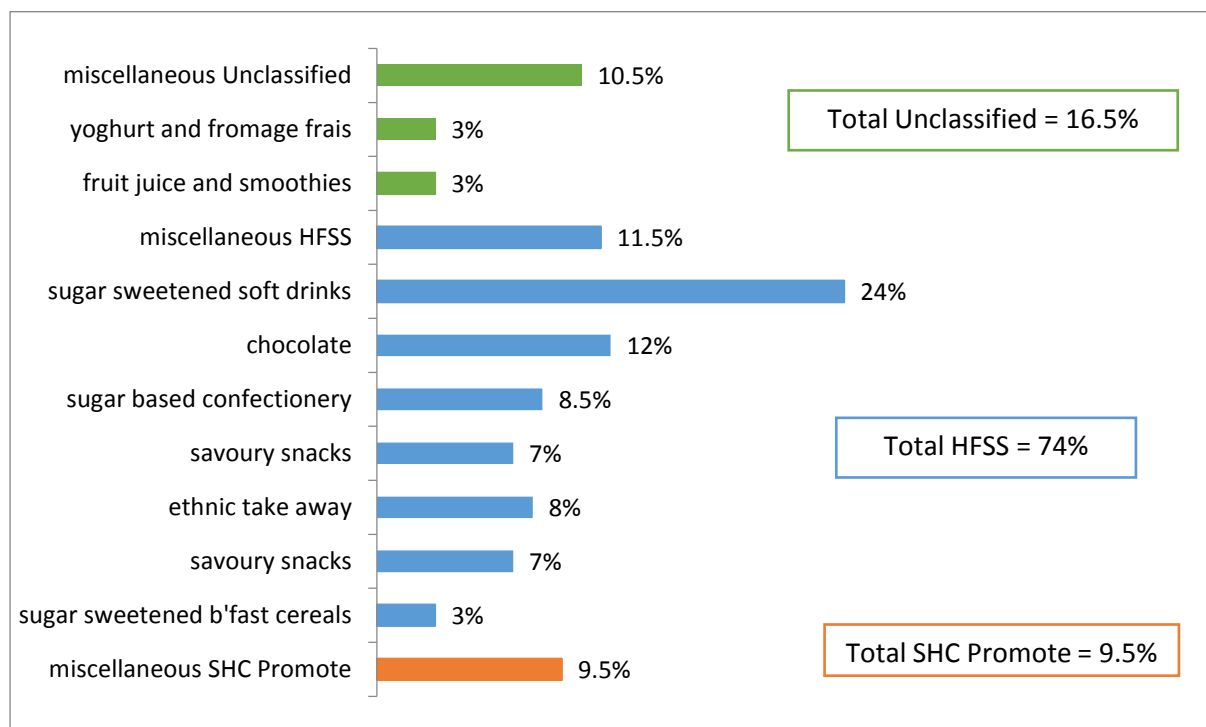
Sixty two percent (n=2734) of respondents' descriptions of exposure observations (reported by 1030 respondents) included sufficient information for answers to be coded and sorted into

1 of the 47 FSS-defined food and drink categories and therefore 1 of the 3 dietary-health based group classifications. This facilitated an assessment of which food and drink products young people most frequently observed promotions for, and the relative share of marketing promotions for HFSS, SHC Promote, Unclassified foods and drinks salient to young people. It also facilitated an evaluation of the implications of current marketing practice with regards to SHC Commitment #8 (reduce children's exposure to promotional messaging for HFSS products and increase responsible marketing practices).

Almost three quarters (73.5%, n=2,014) of reported marketing observations were for HFSS foods and drinks. Just under 17 percent (n=459) were for Unclassified foods and less than 1 in 10 (9.5%, n=261) were for foods and drinks included in the SHC Promote group.

In order to identify which specific food and drink categories were most frequently promoted, all product categories responsible for 3 percent or more of observations were identified. Six product categories included in the HFSS group were each responsible for 3 percent or more of respondents' food and drink marketing observations. In order of decreasing frequency, these were sugar sweetened soft drinks (24% n=648), chocolate (12% n=331), sugar based confectionery (9%, n=237), ethnic takeaway (8%, n=214), savoury snacks (7%, n=183) and sugar sweetened breakfast cereal (3%, n=82). Two Unclassified product categories were responsible for 3 percent or more of reported observations. These were yoghurt and fromage frais (3%, n=89) and fruit juice and smoothies (3%, n=82). No individual food or drink category included in the SHC Promote group accounted for 3 percent or more of reported observations. The breakdown of reported observations is illustrated in Figure 3: Exposure to marketing promotions: all classifiable responses.

Figure 3: Exposure to marketing promotions: all classifiable responses

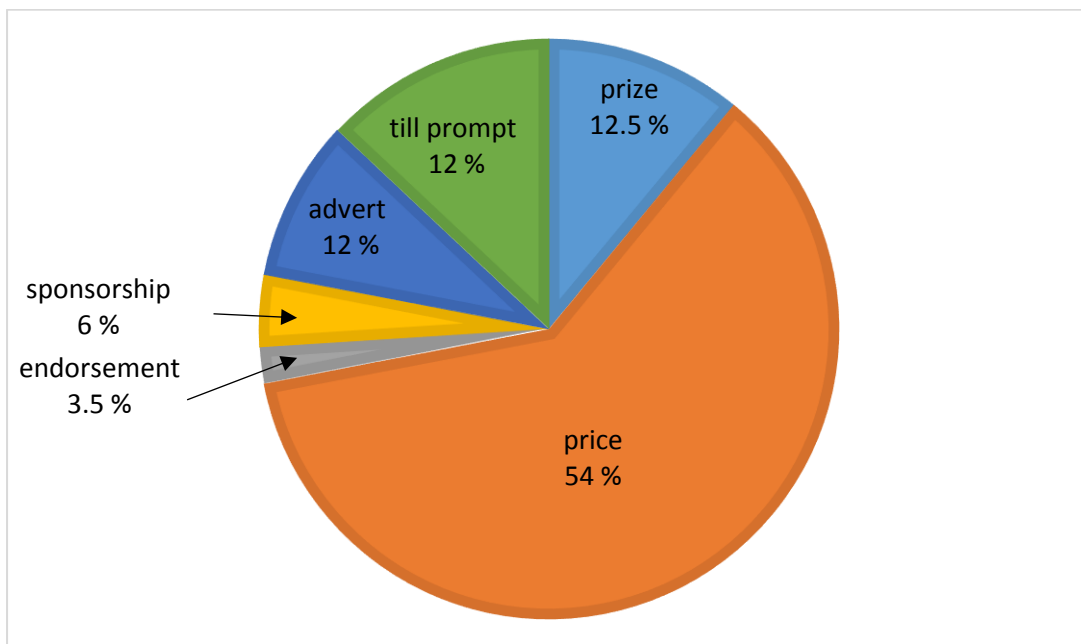


4.4 Purchase Responses to Food and Drink Marketing Promotions

Slightly less than half (47%, n=1,074) of all respondents reported at least one marketing-prompted purchase and just over half (53%, n=1,210) reported no purchases. In total 1,897 marketing-prompted food and drink purchases reports were reported.

Purchases were most frequently attributed to price promotions (54%, n=1,019), followed by competition and prize-based promotions (12.5%, n=238), till prompts (12%, n=235), adverts (12%, n=224), sponsorships (6%, n=114), and endorsements (3.5%, n=67). These results are presented in Figure 4: Breakdown of marketing methods prompting purchase: all reported purchases.

Figure 4: Breakdown of marketing methods prompting purchase: all reported purchases

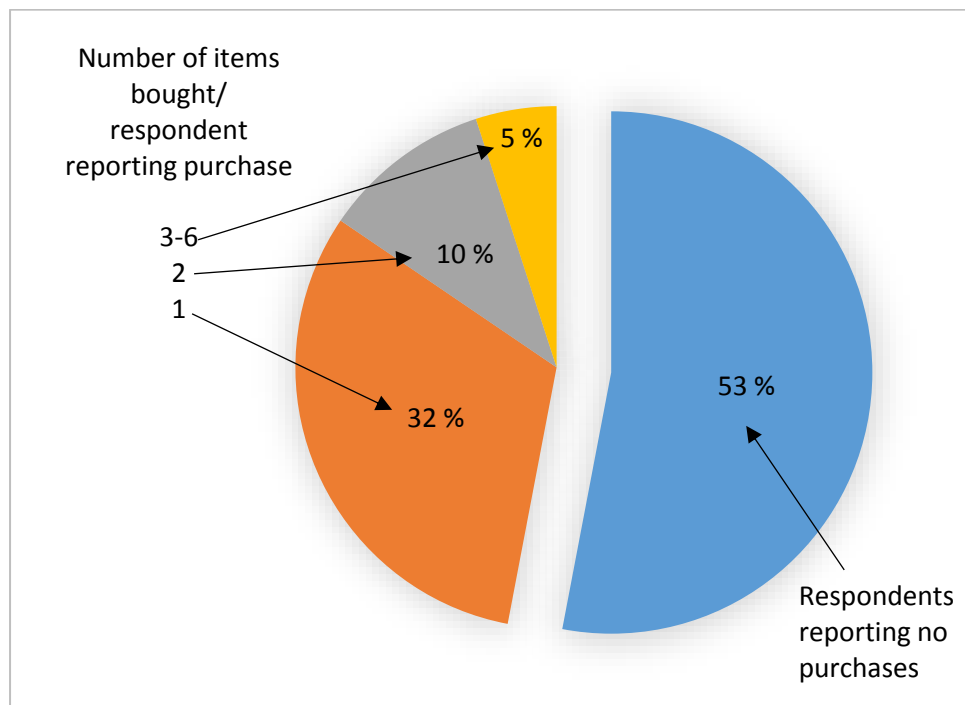


4.5 Differences in Purchase Responses to Food and Drink Marketing

Analysis on the characteristics of all respondents answering yes to one or more of the questions on awareness of food and drink marketing found the following:

Slightly less than half (47%, n=1,074) of all respondents reported at least one marketing-prompted purchase and just over half (53%, n=1,210) reported no purchases during the previous seven days. Thirty two percent (n=725) of respondents reported making only a single purchase, 10 percent (n=239) reported 2 purchases and 5 percent (n=111) reported 3-6 purchases resulting in a total of 1,897 reports of purchases. A breakdown of purchase frequencies per respondent is presented in Figure 5: Frequencies of marketing prompted purchases per respondent: all respondents.

Figure 5: Frequencies of marketing-prompted purchases per respondent: all respondents



Breakdown and analysis of purchases by gender found 46.5 percent (n=522) of male respondents and 48.5 percent (n=538) of female respondents reported they had made a marketing-prompted purchase during the previous 7 days. χ^2 tests found no significant differences in response rates for boys and girls.

More detailed breakdown and analysis of purchases by gender and marketing methods found the following:

Twelve and a half percent (n=99) of boys' purchases and 10.5 percent (n=81) of girls' purchases were in response to prize-incentivised marketing. Forty eight percent (n=382) of boys' purchases and 53 percent (n=407) of girls' purchases were in response to price-incentivised marketing. Four and half percent (n=37) of boys' purchases and 3.5 percent (n=26) of girls' purchases were in response to endorsements. Eight and a half percent (n=69) of boys' purchases and 5 percent (n=37) of girls' purchases were in response to sponsorship. Thirteen and a half percent (n=108) of boys' purchases and 13 percent (n=98) of girls' purchases were in response to adverts. Twelve and a half percent (n=101) of boys' purchases and 15.5 percent (n=118) of girls' purchases were in response to till-prompt marketing. χ^2

tests found the relatively more frequent reports of sponsorship prompted purchases by boys than girls was statistically significant ($p < .02$).

Analysis by age/school year found 47 percent (n=186) of S1 students, 49 percent (n=202) of S2, 46.5 percent (n= 190) of S3, 51.5 percent (n=213) of S4, 41 percent (n=156) of S5 and 48 percent (n=130) of S6 students reported making a purchase in response to a marketing promotion during the previous 7 days. χ^2 tests found no statistically significant relationship trend between overall purchase responses to all/any marketing methods and age/school year.

More detailed breakdown of observations by age/school year and marketing method results are as follows:

Sixteen and a half percent (n=48) of S1, 15 percent (n=45) of S2, 9.5 percent (n=29) of S3, 10.5 percent (n=31) of S4, 10 percent (n=21) of S5 and 7 percent (n=13) of S6 purchases were in response to prize incentivised marketing. χ^2 tests found the decreasing frequency of purchase in response to prize-based marketing with increasing school age was statistically significant ($p < .01$).

Thirty eight and a half percent (n=111) of S1, 46 percent (n=141) of S2, 49 percent (n=148) of S3, 57 percent (n=168) of S4, 56.5 percent (n=120) of S5 and 59.5 percent (n=112) of S6 purchases were in response to price incentivised marketing. χ^2 tests found the increasing frequency of purchase in response to price promotions and special offers with increasing school age was statistically significant ($p < .01$).

Three percent (n=8) of S1, 6 percent (n=18) of S2, 6.5 percent (n=19) of S3, 1.5 percent (n=5) of S4, 4 percent (n=9) of S5, and 3 percent (n=5) of S6 purchases were in response to endorsement marketing. χ^2 tests found no significant differences in purchase frequencies across the 6 age groups.

Ten and a half percent (n=30) of S1, 8.5 percent (n=26) of S2, 8.5 percent (n=26) of S3, 5 percent (n=14) of S4, 2 percent (n=4) of S5, and 5 percent (n=9) of S6 purchases were in

response to sponsorship marketing. χ^2 tests found the decreasing frequency of purchases with increasing age/ school year was statistically significant ($p < .01$).

Seventeen percent ($n=49$) of S1, 14 percent ($n=42$) of S2, 12.5 percent ($n=37$) of S3, 13.5 percent ($n=39$) of S4, 10 percent ($n=21$) of S5, and 11 percent ($n=21$) of S6 purchases were in response to advertisements. χ^2 tests found the decreasing frequency of purchases with increasing age/ school year was statistically significant ($p < .01$).

Fifteen percent ($n=43$) of S1, 11 percent ($n=33$) of S2, 14 percent ($n=42$) of S3, 12.5 percent ($n=37$) of S4, 17.5 percent ($n=37$) of S5, and 15 percent ($n=28$) of S6 purchases were in response to till-prompted marketing. χ^2 tests found no significant differences purchase frequencies across the 6 age groups.

Breakdown and analysis of purchase reports by relative deprivation, as measured by SIMD status found 47.5 percent ($n=215$) of respondents classed as SIMD 1 (most deprived) respondents, 44 percent ($n=189$) classed as SIMD 2, 44.5 percent ($n=194$) classed as SIMD 3, 47.5 percent ($n=231$) classed as SIMD 4 and 51.5 percent ($n=246$) classed as SIMD 5 (least deprived) reported making 1 or more marketing prompted purchase during the previous 7 days. χ^2 tests found no statistically significant relationship trend between overall purchase responses to all/any marketing methods and deprivation status.

More detailed breakdown and analysis of observations by deprivation levels and marketing methods found the following:

Seventeen percent ($n=54$) of SIMD 1 purchases, 11.5 percent ($n=33$) of SIMD 2, 13 percent ($n=37$) of SIMD 3, 10.5 percent ($n=36$) of SIMD 4 and 7.5 percent ($n=27$) of SIMD 5 purchases were in response to prize-incentivised marketing. χ^2 tests found the increasing frequency of purchase as deprivation levels increased was statistically significant ($p < .01$).

Forty seven and a half percent ($n=152$) of SIMD 1 purchases, 47 percent ($n=134$) of SIMD 2, 50 percent ($n=140$) of SIMD 3, 51 percent ($n=179$) of SIMD 4 and 54.5 percent ($n=194$) of SIMD

5 purchases were in response to price-incentivised marketing. X^2 tests found the increasing frequency of purchase as deprivation levels decreased was statistically significant ($p < .05$).

Six percent (n=19) of SIMD 1 purchases, 4 percent (n=12) of SIMD 2, 8 percent (n=7) of SIMD 3, 5.5 percent (n=13) of SIMD 4 and 7 percent (n=13) of SIMD 5 purchases were in response to endorsement marketing. X^2 tests found no significant relationship trend in purchasing across the SIMD quintiles.

Eight percent (n=26) of SIMD 1 purchases, 6.5 percent (n=19) of SIMD 2, 2.5 percent (n=22) of SIMD 3, 3.5 percent (n=19) of SIMD 4 and 3.5 percent (n=24) of SIMD 5 purchases were in response to sponsorship marketing. X^2 tests found no significant relationship trend in purchasing across the SIMD quintiles.

Nine and a half percent (n=30) of SIMD 1 purchases, 18.5 percent (n=53) of SIMD 2, 9.5 percent (n=27) of SIMD 3, 13.5 percent (n=48) of SIMD 4 and 14.5 percent (n=52) of SIMD 5 purchases were in response to advertisements. X^2 tests found no significant relationship trend in purchasing across the SIMD quintiles.

Twelve percent (n=38) of SIMD 1 purchases, 12 percent (n=34) of SIMD 2, 17 percent (n=47) of SIMD 3, 16 percent (n=56) of SIMD 4 and 12.5 percent (n=45) of SIMD 5 purchases were in response to till prompts. X^2 tests found no significant relationship trend in purchasing across the SIMD quintiles.

4.6 The Foods and Drinks Young People Buy in Response to Marketing

Seventy two and a half percent (n=1,377) of respondents' descriptions of purchases in response to marketing (provided by 812 respondents) included sufficient legible information for answers to be coded and sorted into 1 of the 47 FSS-defined food and drink categories and 1 of the 3 dietary-health based group classifications. This facilitated an assessment of which food and drink products young people most frequently bought and the relative share

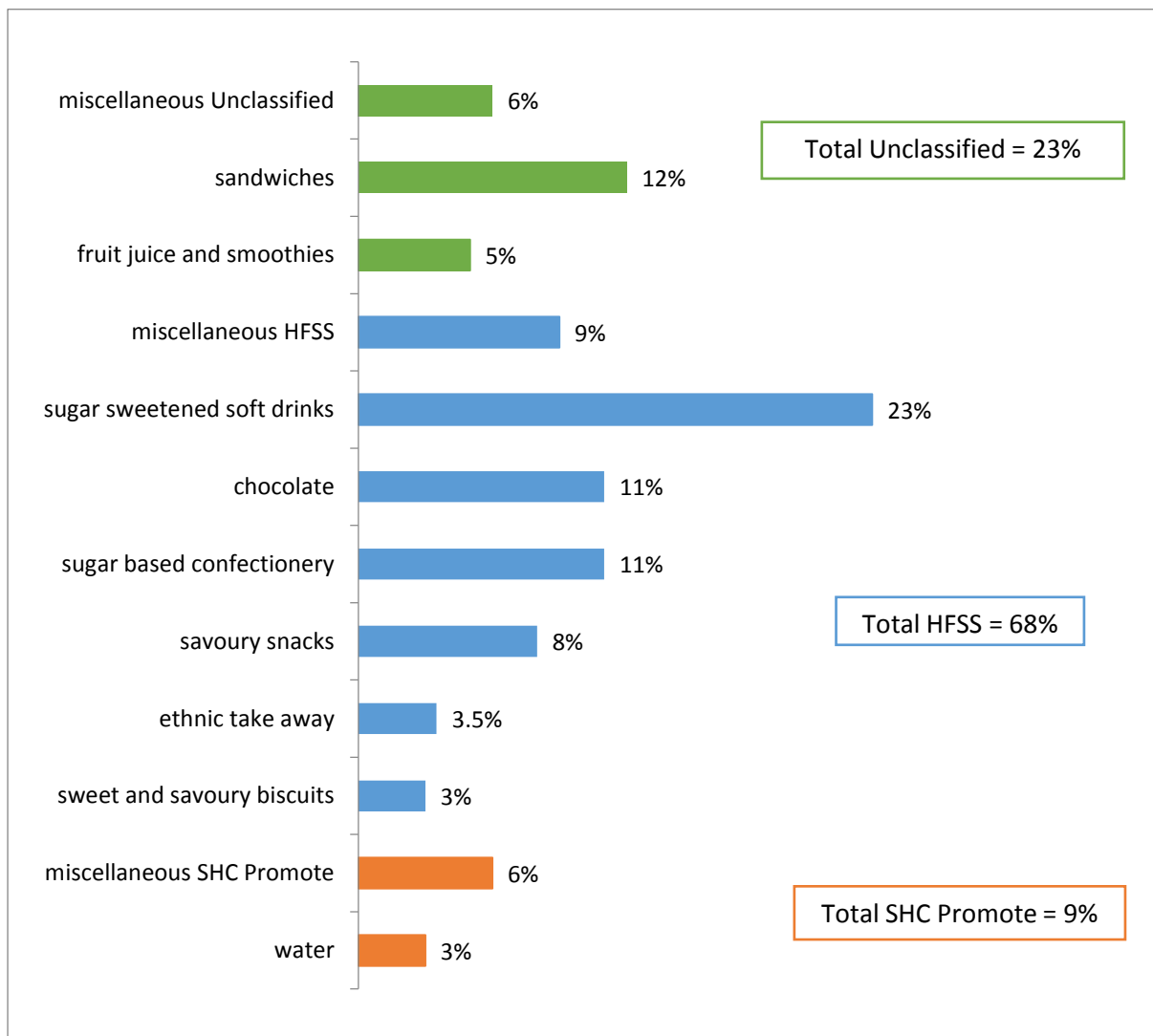
of HFSS, SHC Promote, and Unclassified food groups bought in response to marketing promotions. It also facilitated an assessment of the implications of current marketing practice with regards to SHC Commitment #1 (inviting retailers and out of home caterers to take pragmatic steps to remove confectionery and sugary drinks from till points, checkouts aisles and areas around checkouts) and Commitment #4 (inviting retailers to rebalance their food and drinks offering and promotions, both in-store and online to positively support consumers to make healthier choices).

Sixty eight percent (n=933) were for HFSS products, 9 percent (n=124) were SHC Promote products and 23 percent (n=320) were for food and drinks in the Unclassified group.

In order to identify which HFSS food and drink categories were most frequently bought in response to marketing, all product categories responsible for 3 percent or more of all categorised purchases were identified:

In order of decreasing frequency, sugar sweetened soft drinks (23%, n=318), chocolate (11%, n=155) and sugar based confectionery (11%, n=147), savoury snacks (8%, n=109), ethnic takeaway (3.5%, n=49) and sweet and savoury biscuits (3%, n=43) were all responsible for 3 percent or more of identifiable purchases. Two Unclassified product categories were responsible for 3 percent or more of marketing-prompted purchases. These were sandwiches (12%, n=165), and fruit juices and smoothies (5%, n=70). The only SHC Promote product category responsible for 3 percent or more of marketing-prompted sales was bottled water (3%, n=44). The breakdown of reported observations is also presented in Figure 6: Purchases in response to marketing: all classifiable responses.

Figure 6: Purchases in response to marketing: all classifiable responses

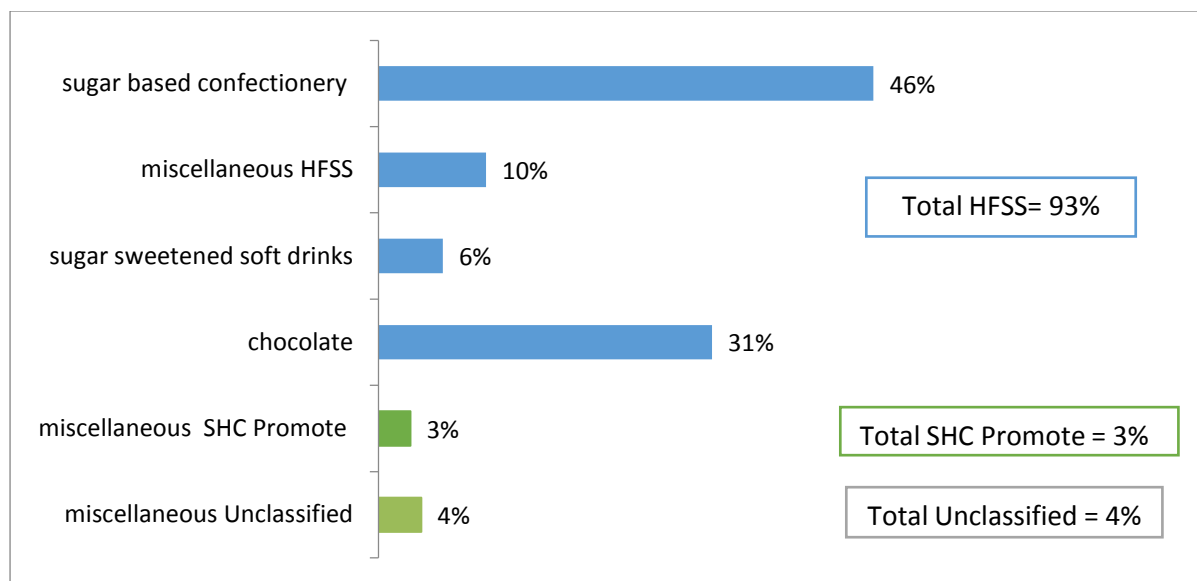


4.7 Purchases in Response to Till Displays and Prompts

To evaluate the implications of current till marketing effects on purchase behaviours with regard to Commitment # 1 (removing confectionery and sugary drinks from till and check out areas), frequency counts for all classifiable purchases in response to till/cash desk displays and prompts were performed. Ninety three percent were for HFSS products. Four percent of purchases were for Unclassified products and 3 percent were for SHC Promote products.

A search for individual food products responsible for 3 percent or more of till-prompted purchases identified 4 HFSS product categories. In order of decreasing frequency these were sugar based confectionery (46%, n=81), chocolate (31%, n=55), sugar sweetened soft drinks (6%, n=10) and savoury snacks (3%, n=6). Figure 7: Purchases in response to till displays and prompts: all classifiable responses provides an illustrative breakdown of purchases by product categories and dietary health based group classifications.

Figure 7: Purchases in response to till displays and prompts: all classifiable responses

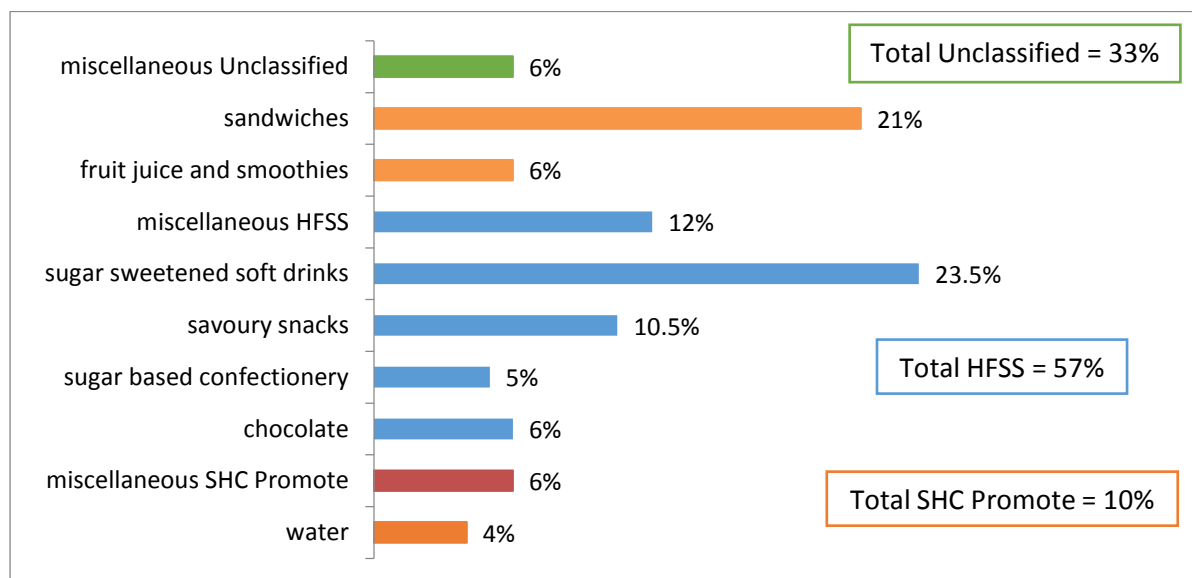


4.8 Purchases in Response to Price Promotions

Price incentivised forms of marketing such as meal deals, buy-one-get-one-free and money off future purchase offers was the marketing method most frequently reported to prompt purchase. Sixty percent (n=833) of all classifiable product purchases were bought in response to some form of price promotion. In order to evaluate implications of current marketing practice effects on purchase behaviours with regard to Commitment # 4 (rebalancing price promotions in favour of healthier choices), frequency counts for classifiable product purchases in response to price promotions were performed. Over half (57%, n=477) of purchases were for HFSS products, a third (33%, n=273) were for Unclassified products and just 10 percent (n=83) were for products included in the SHC Promote group.

A search for individual food products responsible for 3 percent or more of price incentivised purchases identified 4 HFSS product categories. In order of decreasing frequency these were sugar sweetened soft drinks (23.5%, n=196), savoury snacks (10.5%, n=87), chocolate (6%, n=50) and sugar based confectionery (5%, n=42). Two Unclassified product categories - sandwiches (21%, n=173) and fruit juice and smoothies (6%, n=50) - and just one SHC Promote product category – bottled water (4%, n=30) - were identified as product categories responsible for 3 percent or more of price incentivised purchases. A breakdown of these results is also presented in Figure 8: Purchases in response to price promotion: all classifiable responses.

Figure 8: Purchases in response to price promotions: all classifiable responses



5. DISCUSSION AND CONCLUSIONS

5.1 Exposure to Food and Drink Marketing

The results of this survey indicate food and drink marketing is a prominent feature of the food environment in which Scotland's youth make their dietary choices: a total of 4,426 observations in the 7 day period preceding the survey were reported by 63.5 percent of survey respondents.

Results also indicate the marketing landscape is dominated by promotions for foods and drinks high in energy, fat, salt and sugars: 73.5 percent of classifiable observations were of HFSS foods and drinks. Less than 10 percent of classifiable responses were for SHC Promote product categories, such as fruit, vegetables, water and bottled water.

Promotions for sugar-sweetened products are especially salient to young people. Just 4 product categories (sugar-based confectionery, sugar sweetened soft drinks, chocolate and sweetened breakfast cereal) collectively accounted for more than 50 percent of all classifiable observations. Promotions for sugar-sweetened soft drinks, which were responsible for the greatest proportion of classifiable observations (24 percent) is a category whose marketing particularly warrants continued monitoring and evaluation.

Survey results also indicate that a substantive proportion of marketing promotions salient to young people are for product categories targeted for reduction and/or reformulation in the SHC Framework because of relatively high fat and/or salt levels. Fifteen percent of classifiable observation were attributed to just 2 product categories classified as HFSS because of high fat and/or salt content. These were savoury snacks (7 percent) and traditionally prepared ethnic takeaway foods, such as Indian and Italian pre-prepared meals (8 percent).

Advertising and price based promotions are the most visible forms of marketing, together accounting for 57 percent of all reported observations, but sponsorship, social media and outdoor/public space promotions are also important.

Overall results on exposure levels indicate there is strong evidence to support of the inclusion in the SHC Framework of Commitment #8, which invites the food industry to build on and strengthen responsible marketing practices. Many, substantive opportunities to reduce young people's exposure to promotional messaging for HFSS foods and drinks are evident: for example by reducing the relative share of advertising and price promotions for these product categories.

Analysis of data against respondent age/school year also indicates that awareness of food and drink is high across all age groups. Further investigations on the potential benefits of increasing responsible marketing age thresholds and strengthening protective controls for younger children are clearly warranted.

5.2 Food and Drink Purchases in Response to Marketing Overall

The disproportionate dominance of marketing promotions for HFSS foods and drinks reported by survey respondents is similarly reflected in the balance of food and drinks purchased in response to marketing promotions: More than 50 percent of all classifiable purchase reports were for food and drink products high in free sugars. Soft drinks, confectionery, sweet baked goods and sweetened breakfast cereals for example accounted for 53 percent of classifiable purchases. Additionally, just over 15 percent of classifiable marketing-prompted purchases were for foods classified as HFSS because of high levels of salt and/or fat.

Better understanding of differential gender effects can contribute to understanding the impacts of food and drink marketing. For example, a possible explanation for the greater awareness of sponsorship and outdoor marketing and responsiveness to sponsorship-based cues to purchase amongst boys than girls may be higher levels of interest in sports. Further investigations would be required to confirm or refute this possibility and could help in understanding the affective impacts of marketing on food behaviours.

The mixed results with regard to the analysis of marketing impacts by relative deprivation are perhaps unsurprising. Marketing is just one of many factors that may moderate the impact of relative deprivation on food behaviours and dietary health outcomes. Statistical analysis of the survey results found the least deprived young people were most likely to be aware of all/any marketing promotions in general as well as price-based and outdoors/public event marketing methods specifically. Statistical analysis also found they were more likely to purchase products in response to price promotions and advertisements. On the other hand, statistical analysis also found the most deprived young people were the most likely to purchase a food or drink in response to prize/competition based marketing. These results indicate that factors contributing to differential impacts of marketing on young people according to relative deprivation status are complex and warrant further investigation.

5.3 The Nature and Effects of Till-based Promotions

Commitment # 1 in the SHC Policy Framework invites retailers to remove confectionery and sugar drinks from point of sale locations such as the areas around sales check out and till points.

Chocolate and sugar based confectionery along with sugar sweetened soft drinks accounted for 84 percent of till-prompted purchases. SHC Promote and Unclassified products accounted for just 11 percent of till-prompted purchases. These results clearly demonstrate there is much scope for change in retail practices in order that Commitment # 1 is fulfilled and till-based cues to impulse purchase high sugar foods are reduced and/or eliminated.

5.4 The Nature and Effects of Price Promotions

Many forms of price-led promotions can be used to promote food and drink purchases, including simple price discounts, money off next purchase vouchers, buy-one-get-one-free, and special offers for combination purchases, such as meal deals. The results of this survey

demonstrate that price-led promotions are very effective in eliciting purchase: price promotions were responsible for more purchases (54percent) than all other marketing promotions combined. In common with survey findings on exposure, the effects of price-based marketing on purchase are heavily skewed towards HFSS products with more than half (57 percent) of all classifiable purchases attributed to these often energy dense, low nutrition foods and drinks. High sugar products are especially dominant in purchases prompted by price promotions and special offers. More than a quarter (24 percent) of all classifiable price-incentivised purchases were attributed to sugar sweetened soft drinks. Furthermore, 35 percent of all classifiable price-incentivised purchase outcomes could be attributed to just 3 high sugar product categories, namely sugar sweetened soft drinks, chocolate and sugar based confectionery.

In contrast, only 10 percent of price-incentivised purchases were for SHC Promote products and the only SHC Promote product contributing significantly to this total was bottled water (4 percent). The most dominant Unclassified product category was sandwiches (12 percent of classifiable purchases). Readymade sandwiches ingredients are highly varied and without nutritional information it is not possible to differentiate between sandwiches high in salt or fat and therefore classifiable as HFSS, those whose nutrient composition is supportive of a healthy diet and therefore classifiable as SHC Promote, and those which would remain in the Unclassified dietary health based group because nutritional composition indicate no reason to target for reduction or promotion. In view of their significant contribution to marketing-prompted purchases further investigation into the marketing of sandwiches and their nutritional composition is warranted.

Overall, survey results indicate there is the potential for a great deal of change in retail practice in order for Commitment # 4 (for retailers to rebalance their food and drinks offering and promotions, both in-store and online to positively support consumers to make healthier choices), to be substantively realised.

5.5 Congruence of Commercial Food and Drink Marketing with SHC's Consumer and Community Healthier Choices Promotional Strategy

With regards to Commitment # 11 which invites the food industry and other stakeholders to support the Scottish Government's social marketing campaign 'Eat better, feel better', the results of this survey indicate current marketing practices are substantively incongruent with its priority objectives.

For example, objectives of the first phase of the campaign include increasing fruit and vegetable purchase and consumption, reducing barriers to healthful food behaviours and increasing positive attitudes towards healthful diet choices. Survey findings on classifiable exposure and purchase outcomes indicate current marketing practices provide little support for any of these objectives.

The campaign also aims to prioritise the most deprived population groups. The findings from this survey were mixed. As discussed above, socioeconomic barriers to healthful dietary behaviours are complex and marketing is only one of many factors determining these behaviours. Notwithstanding this caveat, it seems reasonable to conclude from the combination of the results of analysis by deprivation levels, as measured by SIMD status, and the dominance of HFSS foods in marketing observations and purchase outcomes that current marketing practices are making little or no contribution to the policy goal of targeted support for the most deprived.

In short, the results of this survey indicate there are substantial opportunities for food and drink marketers to modify current marketing practices and thus move towards the health supportive partnership with government approach advocated in Commitment # 11.

5.6 In Summary

Marketing makes a substantive and important contribution to the food environment from which Scotland's youth source their daily diet. The results of this survey demonstrate there is substantive potential to improve its contribution by closing the gap between current marketing practises and the vision of the SHC Framework's marketing focused objectives.

The results of this survey provide convincing evidence that the current marketing landscape confers high levels of salience, and a disproportionate balance of marketing cues and incentives, to purchase HFSS foods and drinks. The opportunities to adjust the marketing landscape and shift the balance towards greater visibility for a more enabling and supportive mix of food and drink products are therefore immense. Positive steps to reduce promotions for food and drinks high in free sugars appear to be the most urgent priority, but reductions in promotions for high fat and salt products are also important targets.

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Appendix 1: Food Standards Scotland foods and drinks classification

Food / drink category	Description	Group Classification		
		Unclassified	HFSS	SHC Promote
Fruit	All fresh, tinned or frozen, whole or pre- prepared fruit			✓
Vegetables	All fresh, tinned, frozen vegetables and pre-prepared plain salads			✓
Plain bread	Includes all plain breads, buns etc with no additions			✓
Plain starchy carbohydrates	Includes potatoes (eg. baked or boiled), pasta, noodles grains etc with no additions or sauces.			✓
Oil rich fish	Any, eg. tinned or fresh tuna, sardines, salmon (not in sandwiches)			✓
Baked beans				✓
Chocolate confectionery	Includes all chocolate based confectionary		✓	
Sweet confectionery	Includes sugar sweets and gum and dried fruit with additions (e.g. coated in yoghurt/chocolate, flakes)		✓	
Sugar-free confectionery	Includes chewing gum, mints, and sweets			✓
Biscuits	All sweet and savoury including cereal bars		✓	
Cakes and sweet pastries	Includes cheesecakes, croissants, cream cakes, fruit pies and cake bars		✓	
Savoury snacks	Includes crisps, popcorn, skips, quavers, mini cheddars etc		✓	
Savoury pies and pasties	Includes hot and cold sausage rolls, bacon rolls, meat pies, spring rolls, quiche etc.		✓	

Food / drink category	Description	Group Classification		
		Unclassified	HFSS	SHC Promote
Puddings and desserts	All puddings and desserts excluding yogurt and plain fruit		✓	
Morning goods	Scones, pancakes, hot cross buns, teacakes etc.	✓		
Yoghurt	Any type of yoghurt or fromage frais	✓		
Ice cream			✓	
Full sugar soft drink	(if known)		✓	
Diet soft drink	(if known)			✓
Other soft drink	Any soft drink (carbonated or still including squash)		✓	
Water	Include flavoured and carbonated water			✓
Milk	Only plain milk (does not include milkshakes)			✓
Fruit Juice and smoothies	Includes fruit juice drinks	✓		
Tea or coffee		✓		
Hot chocolate			✓	
Milk shakes	Includes flavoured milk and yoghurt drinks		✓	
Plain breakfast cereals	Plain breakfast cereals with low sugar and fat i.e. Weetabix, plain porridge oats, shredded wheat			✓
Other breakfast cereals	Includes cornflakes, rice crispies, muesli, coco pops and other sugar sweetened cereals etc		✓	
Sandwiches	Includes baguettes, wraps filled rolls	✓		
Ready meals	Purchased hot or cold, eg. curry, sweet and sour,	✓		

	macaroni cheese, oriental, Indian, traditional meals			
Salad or pasta pots	With dressings	✓		

Food / drink category	Description	Group Classification		
		Unclassified	HFSS	SHC Promote
Noodle pot		✓		
Soup		✓		
Fried Fish			✓	
Pizza			✓	
Burgers			✓	
Fried chicken			✓	
Other takeaway meat item e.g. white/black pudding, sausage, bacon, hotdog			✓	
Fried chips			✓	
Other takeaway	Includes, Oriental, Indian, Italian, traditional meals		✓	
Dried fruit	Plain dried fruit only i.e. raisin, sultanas, apricots etc			✓
Plain nuts and seeds	With no additions			✓
Roasted/salted nuts	Includes all nuts with additions e.g. salted, coated etc		✓	
Cold meat/cheese/ eggs	Not in sandwich	✓		
Condiments	Pickles/butter/jam/sauce etc	✓		
Sausages / hotdogs	Not takeaway		✓	
Burgers	Not takeaway		✓	

Appendix 2: Survey questions and response options

Q.1	How old are you?
	10
	11
	12
	13
	14
	15
	16
	17
	18
	17/18
	Not stated
Q.2	Are you male or female?
	Male
	Female
	Not stated
Q.3	What year are you now in at school?
	S1
	S2
	S3
	S4
	S5
	S6
Q.4	What is your ethnic group?
	White
	Scottish
	Other British
	Irish
	Polish
	Gypsy/Traveller
	Other white ethnic group
	Any mixed or multiple ethnic groups
	Pakistani, Pakistani Scottish or Pakistani British
	Indian, Indian Scottish or Indian British
	Bangladeshi, Bangladeshi Scottish or Bangladeshi British
	Chinese, Chinese Scottish or Chinese British
	Other
	African, African Scottish or African British
	Other
	Caribbean, Caribbean Scottish or Caribbean British
	Black, Black Scottish or Black British
	Other
	Arab Scottish or Arab British
	Other
	I don't know
	I prefer not to say
	Not stated

Q.27a	In the last 7 days, did you buy, or have someone else buy for you, any food or drinks items because...? It gave you the chance to enter a competition, win a prize or receive a giveaway
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks
Q.27b	In the last 7 days, did you buy, or have someone else buy for you, any food or drinks items because...? Because there was a special offer on the product? (E.g. a meal deal, buy one get one free offer or a price reduction)
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks
Q27c	In the last 7 days, did you buy, or have someone else buy for you, any food or drinks items because...? Because a celebrity or cartoon character advertises the product
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks
Q27d	In the last 7 days, did you buy, or have someone else buy for you, any food or drinks items because...? Because the product sponsors an event, personality or team that you like
	Yes/No/don't know/not stated
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks
Q27e	In the last 7 days, did you buy, or have someone else buy for you, any food or drinks items because...? Because you saw or heard an advert for the product
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks
Q27f	In the last 7 days, did you buy, or have someone else buy for you, any food or drinks items because...? Because the product was on display at the till point/cash desk and/or the check-out assistant suggested it
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks
Q.28a	In the last 7 days, have you seen a food or drink product promoted or advertised...? In a television or cinema advert
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks

Q.28b	In the last 7 days, have you seen a food or drink product promoted or advertised...? In a sponsorship of a programme or film on TV or online
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks
Q.28c	In the last 7 days, have you seen a food or drink product promoted or advertised...? In an advert on Facebook, Twitter, YouTube or on any other social media
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks
Q.28d	In the last 7 days, have you seen a food or drink product promoted or advertised...? In a special offer or price promotion in a shop
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks
Q.28e	In the last 7 days, have you seen a food or drink product promoted or advertised...? In school
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks
Q.28f	In the last 7 days, have you seen a food or drink product promoted or advertised...? In a magazine, newspaper, leaflet or any other printed material
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks
Q.28g	In the last 7 days, have you seen a food or drink product promoted or advertised...? At a public event such as a football match or concert, or an outdoor place such as a billboard or bus
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks
	Base size (all pupils):
Q.28h	In the last 7 days, have you seen a food or drink product promoted or advertised...? In a text or e-mail message
	Yes
	No
	Don't know
	If yes, please describe which foods and/or drinks

Appendix 3: Notes on computation of data and statistical analysis

Prevalence of specific food and drink marketing techniques and marketing overall

Because the purpose of collecting data on exposure and purchase responses to specified marketing methods was to map the marketing environment (*i.e.* no investigation of relations between variables), descriptive statistics were the most appropriate measurement method. Survey findings on the prevalence of individual marketing techniques and their cumulative impacts are expressed as frequency counts and percentages (to the nearest 0.5%).

Identification of factors moderating marketing impacts

Categorical data (yes/no/don't know) on responses to marketing was available for all 2285 respondents included in the survey sample. Basic demographic data (gender, age/school year, and relative deprivation as measured by SIMD status) for all 2285 respondents was also available. Because the objective of analysis of responses by demographic variables, was to investigate if the impacts of marketing interacted and/or were moderated by any of these variables, chi square tests (X^2) were performed. Because data on gender is nominal, Pearson's X^2 test for independence was used to examine if there was any relationship between responses to questions on marketing and gender of respondents (Agresti, 1996). Because data on age/school year and SIMD status is ordinal, the X^2 linear by linear association test was used to investigate if the distribution of responses to questions on marketing and each of these 2 demographic variables was due to chance or indicated a relationship trend, and where an association was detected, to identify the direction of the relationship trend (*ibid.*).

Food and drink marketing outcomes

Data on the types of foods and drinks marketing is promoting was only available from 'yes' responses to exposure and/or purchase response questions that also provided a classifiable description of the food and drink product involved. This resulted in datasets of 2734 responses derived from 1030 respondents on exposure and 1897 responses on purchase derived from 1074 respondents. Because these datasets do not include all responses collected in the survey and because some respondents provided multiple responses, and therefore data points on food and drink types cannot be assumed to be fully independent of one another, X^2 are not appropriate (*ibid.*). Instead, frequency counts are used to measure and describe survey findings on the nutritional quality of foods and drinks marketing is currently promoting. These findings are intended to provide a qualitative and quantitative

context through which implications of survey findings for the marketing focused objectives of the Supporting Healthy Choices Framework Policy could be assessed.

Details for χ^2 tests performed are presented below:

Q 28, Exposure: Pearson's χ^2 test of independence of responses against gender

Marketing method	No answer count (%); Yes answer count (%)	Male yes count (expected count)	Female yes count (expected count)	χ^2	<i>df</i>	Significance level (<i>p</i>)
Advert	1227 (54.8%); ‡ 1012 (45.2%)	497 (508.9)	515 (503.1)	1.03	1	.311
Sponsorship	1817 (81.1%); 423 (18.9%)	235 (212.8)	188 (210.2)	5.73	1	.017*
Social media	1861 (83.0%); ‡ 380 (17.0%)	198 (191.1)	182 (188.9)	0.60	1	.437
Price	1522 (67.9%); ‡ 719 (32.1%)	376 (361.6)	343 (357.4)	1.70	1	.192
In school	2019 (90.1%); 221 (9.9%)	106 (111.2)	115 (109.8)	0.54	1	.462
Print	1985 (88.6%); ‡ 256 (11.4%)	129 (128.7)	127 (127.3)	0.00	1	.973
Outdoors	1903 (85.0%); 337 (15.0%)	202 (169.6)	135 (167.4)	14.71	1	.000*
Digital	2144 (95.7%); 96.0 (4.3%)	44 (48.3)	52 (47.7)	0.81	1	.370
All marketing	817 (36.5%); 1423 (63.5%)	698 (715.3)	725 (707.7)	2.31	1	.129

Key
 * = statistically significant
 ‡ = difference between count and computed *n* due to rounding of cell counts
df = degrees of freedom

Q 28, Exposure: X² linear by linear association analysis of all respondent's responses against SIMD/relative deprivation status

	SIMD 1-5 Totals	Weighted SIMD 1 (most deprived)	Weighted SIMD 2	Weighted SIMD 3	Weighted SIMD 4	SIMD 5 (least deprived)	X ²	df	Significance level (p)
Marketing method	No answer count (%); Yes answer count (%)	Yes answer count (expected count)	Yes answer count (expected count)	Yes answer count (expected count)	Yes answer count (expected count)	Yes answer count (expected count)			
Advert	1259 (55.1%); 1026 (44.9%)	198 (203.0)	176 (194.4)	193 (195.3)	240 (218.2)	219 (215.1)	2.93	1	.087
Sponsorship	1856 (81.2%); 429 (18.85)	83 (84.9)	77 (81.1)	71 (81.5)	98 (91.4)	100 (90.1)	1.65	1	.199
Social media	1899 (83.2%); ‡ 384 (16.8%)	69 (76.0)	71 (72.7)	77 (73.0)	84 (81.7)	83 (80.6)	0.80	1	.370
Price	1558 (68.1%); ‡ 729 (31.9%)	113 (144.1)	136 (138.0)	114 (138.7)	184 (155.2)	182 (153.0)	22.59	1	.000*
In school	2062 (90.3%); ‡ 222 (9.7%)	42 (43.9)	37 (42.1)	34 (42.2)	57 (47.2)	52 (46.6)	2.15	1	.142
Print	2027 (88.7%); ‡ 258 (11.3%)	47 (51.0)	41 (48.9)	52 (49.0)	62 (55.0)	56 (54.1)	1.55	1	.214
Outdoors	1945 (85.1%); ‡ 340 (14.9%)	65 (67.3)	53 (64.4)	55 (64.7)	75 (72.3)	92 (71.3)	6.14	1	.013*
Digital	2186 (95.7%); ‡ 98 (4.3%)	25 (19.4)	20 (18.5)	17 (18.6)	18 (20.9)	18 (20.6)	2.24	1	.134
All marketing	839 (36.7%); ‡ 1446 (63.3%)	267 (286)	261 (273.4)	275 (275.3)	331 (307.6)	312 (303.8)	7.57	1	.006*

Q 28, Exposure: X² linear by linear association analysis of all respondent's responses against age/ school year

		S1	S2	S3	S4	S5	S6	X ²	df	Significance level (p)
Marketing method	No answer count (%);									
	Yes answer count (%)	Answer yes count (expected count)	Answer yes count (expected count)	Answer yes count (expected count)	Answer yes count (expected count)	Answer yes count (expected count)	Answer yes count (expected count)			
Advert	1258 (55.1%); 1026 (44.9%)	156 (178.3)	187 (186.0)	210 (183.7)	174 (186.4)	167 (169.8)	132 (121.7)	2.11	1	.147
Sponsorship	1858 (81.3%); ‡ 428 (18.7%)	59 (74.5)	78 (77.5)	91 (76.6)	73 (77.7)	79 (71.0)	48 (50.7)	1.22	1	.269
Social media	1900 (83.2%); 384 (16.8%)	53 (66.7)	75 (69.6)	86 (68.8)	67 (69.8)	68 (63.6)	35 (45.6)	0.01	1	.906
Price	1556 (68.1%); 728 (31.9%)	97 (126.5)	117 (132.0)	146 (130.4)	129 (132.0)	127 (120.8)	112 (86.4)	19.38	1	.000*
In school	2062 (90.2%); ‡ 223 (9.8%)	44	35 (40.4)	55 (39.9)	28 (40.5)	42 (37.0)	19 (26.4)	1.67	1	.197
Print	2026 (88.7%); 258 (11.3%)	35 (44.8)	45 (46.8)	63 (46.2)	41 (46.8)	58 (42.8)	16 (30.6)	0.01	1	.928
Outdoors	1945 (85.1%); ‡ 340 (14.9%)	54 (59.1)	71 (61.6)	77 (60.9)	37 (61.8)	58 (56.4)	43 (40.3)	0.21	1	.646
Digital	2187 (95.7%); ‡ 98 (4.3%)	13 (17.0)	11 (17.8)	24 (17.6)	17 (17.8)	19 (16.3)	14 (11.6)	2.84	1	.092
All marketing	838 (36.7%); 1446 (63.3%)	240 (251.3)	262 (262.1)	272 (258.9)	241 (262.7)	240 (239.3)	191 (171.6)	2.60	1	.107

Q 27, Marketing-prompted purchases: Pearson's χ^2 test of independence for all respondent's responses against gender

Marketing method	No count (%); Yes count (%)	Male yes count (expected)	Female yes count (expected)	χ^2	<i>df</i>	Significance level (<i>p</i>)
Prize	2060 (92.0%); 180 (8.0%)	99 (90.6)	81 (89.4)	1.72	1	.190
Price	1451 (64.8%); 789 (35.2%)	382 (397)	407 (392)	1.75	1	.186
Endorsement	2178 (97.2%); ‡ 63 (2.8%)	37 (31.7)	26 (31.3)	1.85	1	.174
Sponsorship	2135 (95.3%); ‡ 106 (4.7%)	69 (53.3)	37 (52.7)	9.75	1	.002*
Advert	2034 (90.8%); ‡ 206 (9.2%)	108 (103.6)	98 (102.4)	0.42	1	.515
Till prompt	2021 (90.2%); ‡ 219 (9.8%)	101 (110.2)	118 (108.8)	1.71	1	.191
All marketing	1179 (52.7%); ‡ 1060 (47.3%)	522 (533.1)	538 (526.9)	0.88	1	.348

Q27, Marketing-prompted purchases: χ^2 linear by linear association analysis of all respondent's responses against SIMD/ relative deprivation status

	SIMD 1-5 Totals	Weighted SIMD 1 (most deprived)	Weighted SIMD 2	Weighted SIMD 3	Weighted SIMD 4	Weighted SIMD 5 (least deprived)	χ^2	<i>df</i>	Significance level (<i>p</i>)
Marketing method	No answer count (%); Yes answer count (%)	Answer yes count (expected count)	Answer yes count (expected count)	Answer yes count (expected count)	Answer yes count (expected count)	Answer yes count (expected count)			
Prize	2098 (91.8%); 187 (8.2%)	54 (37.0)	33 (35.4)	37 (8.5)	36 (39.8)	27 (39.3)	10.30	1	.001*
Price	1485 (65%); ‡ 799 (35%)	152 (158.1)	134 (151.5)	140 (151.8)	179 (170)	194 (167.6)	7.95	1	.005*
Endorsement	2221 (97.2%); ‡ 64 (2.8%)	19 (12.7)	12 (12.1)	7 (12.2)	13 (13.6)	13 (13.4)	1.58	1	.234
Sponsorship	2175 (95.2%); ‡ 110 (4.8%)	26 (21.8)	19 (20.8)	22 (20.9)	19 (23.4)	24 (23.1)	0.40	1	.526
Advert	2075 (90.8%); ‡ 210 (91.2%)	30 (41.5)	53 (39.8)	27 (40.0)	48 (44.7)	52 (44.0)	2.20	1	.138
Till prompt	2063 (90.45); ‡ 220 (9.6%)	38 (43.6)	34 (41.6)	47 (41.8)	56 (46.8)	45 (46.2)	1.62	1	.203
All marketing	1210 (53.0%); ‡ 1075 (47.0%)	215 (212.6)	189 (203.2)	194 (204.6)	231 (228.6)	246 (225.8)	2.36	1	.124

Q27 on Marketing-prompted purchases: X² linear by linear association analysis of all respondent's responses against age/ school year

	No answer count (%);	S1 Answer yes count (expected count)	S2 Answer yes count (expected count)	S3 Answer yes count (expected count)	S4 Answer yes count (expected count)	S5 Answer yes count (expected count)	S6 Answer yes count (expected count)	X ²	df	Significance level (p)
Marketing method	Yes answer count (%)									
Prize	2100 (91.8%); 187 (8.2%)	48 (32.5)	45 (33.9)	29 (33.4)	31 (33.9)	21 (31.0)	13 (22.2)	18.69	1	.000*
Price	1486 (65.0%); ‡ 800 (35.0%)	111 (139.3)	141 (144.9)	148 (143.1)	168 (145.2)	120 (132.3)	112 (95.2)	8.55	1	.003*
Endorsement	2221 (97.2%); ‡ 64 (2.8%)	8 (11.1)	18 (11.6)	19 (11.5)	5 (11.6)	9 (10.6)	5 (7.6)	1.90	1	.168
Sponsorship	2176 (95.2%); ‡ 109 (4.8%)	30 (18.9)	26 (19.7)	26 (19.5)	14 (19.8)	4 (18.1)	9 (12.9)	19.79	1	.000*
Advert	2075 (90.8%); ‡ 209 (9.2%)	49 (36.3)	42 (37.9)	37 (37.4)	39 (37.9)	21 (34.7)	21 (24.8)	8.87	1	.003*
Till prompt	2065 (90.4%); ‡ 220 (9.6%)	43 (38.3)	33 (39.9)	42 (39.4)	37 (39.9)	37 (36.4)	28 (26.2)	0.01	1	.956
All marketing	1210 (52.9%); ‡ 1077 (47.1%)	186 (187)	202 (195.4)	190 (192.6)	213 (195.4)	156 (178.5)	130 (128.1)	0.45	1	.500

Appendix B: Food and drink marketing impact on young people infographic (Scottish Govt)

FOOD AND DRINK MARKETING IMPACT ON YOUNG PEOPLE A SURVEY OF 11-18 YEAR OLDS IN SCOTLAND



63.5% SAW AT LEAST ONE FOOD OR DRINK MARKETING PROMOTION IN THE LAST 7 DAYS



74% OF OBSERVATIONS WERE FOR ENERGY DENSE, LOW NUTRITION FOODS



24% OF OBSERVATIONS WERE FOR SUGAR SWEETENED SOFT DRINKS AND 21% FOR CHOCOLATE AND SUGAR-BASED CONFECTIONERY



84% OF ALL TILL-PROMPTED PURCHASES WERE SUGAR-SWEETENED SOFT DRINKS, CHOCOLATE OR SUGAR BASED CONFECTIONERY



54% OF ALL MARKETING PROMPTED PURCHASES WERE RELATED TO A PRICE PROMOTION WITH OVER A THIRD OF THOSE (35%) SUGAR-SWEETENED SOFT DRINKS, CHOCOLATE OR SUGAR BASED CONFECTIONERY

68% OF PURCHASES WERE FOR FOODS TARGETED FOR REDUCTION OR REFORMULATION BY THE SCOTTISH GOVERNMENT*
(*IN SUPPORTING HEALTHY CHOICES)



47% OF ALL THOSE SURVEYED REPORTED MAKING AT LEAST ONE MARKETING-PROMPTED PURCHASE DURING THE PAST 7 DAYS



Appendix C: Mass media report on survey: Junk food dominates marketing landscape in Scotland: study (Burrows, 2015)



Breaking News on Food & Beverage Development - Europe

Junk food dominates marketing landscape in Scotland: study

By David Burrows, 12-Nov-2015

Related topics: Carbohydrates and fibres (sugar, starches), Chocolate and confectionery ingredients, Fats & oils, Policy, Marketing, Sugar and health, Bakery, Beverage, Confectionery, Snacks

Nearly three quarters of the food and drink marketing seen by children in Scotland is for junk food, according to new research that the Scottish Government will use to push for stricter UK-wide advertising rules.

The researchers also found less than 10% of marketing is for products deemed healthy under the Scottish government's Supporting Healthy Choices Framework.

Researchers at the University of Stirling quizzed 2,285 students aged between 11 and 18 years old, and said they were struck by how much of the marketing they had seen in the previous seven days was for foods high in fat, salt and sugar (HFSS), and what this meant for purchasing decisions.

Almost two thirds (63.5%) said they'd seen at least one food and drink marketing promotion and nearly half (47%) had been moved to buy something on the back of it. Over two thirds (68%) of purchases were for unhealthy products with sugary soft drinks making up 23% of all purchases, followed by confectionery and chocolate at 22%.

Power of promotions

Promotions, in particular, appear to be encouraging children to buy HFSS products. More than half (57%) the purchases from price promotions were for sugar-based confectionery, sugar-sweetened soft drinks, sweetened breakfast cereals and chocolate.

Given that 24% of all price promotions were for sugary soft drinks, the researchers said these products in particular warranted continued monitoring and evaluation.

Speaking to FoodNavigator, the report's author Georgina Cairns, a senior researcher in dietary public health and behaviour change at the University of Stirling, said the promotion of products at the till were on a scale she had not expected: 84% of all till-prompted purchases were for chocolate, sugar-based confectionery and sweetened soft drinks.

Scotland has one of the highest rates of child obesity in Europe, with 29% of two to 15-year olds at risk of being overweight and 16% at risk of obesity. Only 14% of children in the country eat five portions of fruit and vegetables a day.

This is not surprising, perhaps, given that just one in 10 price-incentivised purchases were for healthy products and this was dominated by bottled water (4%). Cairns said that reformulation and behaviour change takes time, but the opportunities to adjust the balance of marketing cues and incentives towards healthier products is immense.

Regulatory challenge

"Based on our findings, the majority of young people are aware of food marketing around them, they are far more aware of the marketing related to HFSS products and that marketing is increasing the propensity with which they buy those foods," Cairns said.

The **new research** prompted the Scottish Government to push for junk food advertising to be banned before 9pm. The UK's Committee on Advertising Practice will **soon launch a public consultation** to determine whether the regulations for non-broadcast media need updating as digital advertising spend continues to rise.

Last month **Public Health England recommended** that the UK government should *"significantly reduce opportunities to market and advertise high sugar food and drink products to children and adults across all media"*.



Cairns: "The food environment that young people are making choices in [lacks] cues for healthier foods and drinks."

Junk (food) TV?

Rules on junk food advertising to children are set in Westminster by the UK government. These were "tightened" back in 2007, according to the Broadcast Committee of Advertising Practice, after evidence showed TV to be the most powerful media but it has only a "moderate impact" (2%) on children's dietary preferences.

In a statement the committee, which is responsible for writing the UK's ad codes, said the rules have never been designed to stop children from seeing HFSS ads; rather they're designed to "reduce children's exposure to and the appeal of HFSS ads". A 9pm watershed restriction would be "disproportionate" it said.

But Cairns said her research suggests otherwise. *"I was struck by the clarity of the data our survey produced,"* she said. *"The findings very strongly demonstrate that the investment and expertise [amongst manufacturers] is skewed towards HFSS brands. The food environment that young people are making choices in [lacks] cues for healthier foods and drinks."*

Last year the UK retail food industry spent £256m promoting unhealthy foods. The British Soft Drinks Association said advertising spent on low- and no-calorie drinks increased 50% last year. However, a spokeswoman could not confirm the proportion of overall spend this now accounts for.

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