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WORKING TO PROMOTE SUSTAINABLE FOOD

BROOKLYNDHURST

Conservation | Climate Change | Sustainability

Selling Sustainability?

In search of the retail business case for sustainable diets

About WWF-UK

WWF is the world's leading independent conservation organisation. And we're tackling the most serious conservation challenges facing the planet, building a future where people and nature thrive together.

One Planet Food is a groundbreaking initiative from WWF-UK, dedicated to achieving a sustainable, equitable and fair food system. We aim to reduce key global environmental impacts of the food we grow and eat whilst providing healthy, nutritious food for an expanding world population. Since 2009 we have been working with government, retailers and producers to understand and reduce the impacts of food consumption on the environment; here, we focus on the role of retailers.

For further information on the work of the One Planet Food programme visit our website: wwf.org.uk/food

About Brook Lyndhurst

Brook Lyndhurst is an independent research and strategy consultancy. We work on projects that are concerned with understanding, promoting and delivering sustainability. Since coming into being in 1999 we have worked for clients throughout the UK that share our commitment to the need to build a more sustainable society; and who understand, too, that the practical steps by which this can be achieved need to be based on robust evidence, creative insight and bold vision. Brook Lyndhurst's sophisticated research techniques, careful analysis and unrivalled experience give our clients genuine insight into what consumers think, feel and believe about food and why they make the choices that they do.

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Esmée Fairbairn FOUNDATION

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Foreword

This report presents the results of a research exercise commissioned by WWF and conducted by Brook Lyndhurst during the latter part of 2011 and early part of 2012. The research was designed to investigate the business case for retailers to further support and promote sustainable diets.

The work forms part of a larger programme of research, funded by the Esmee Fairbairn Foundation, to challenge the policy obstacles to sustainable food consumption and build an informed and constructive dialogue between industry, government and campaigners. In the context of these broader activities, this research focused on two areas in particular:

- **Existing action by retailers** – the research sought to identify examples of successful initiatives in the retail sector, which enable and encourage consumers to make more sustainable choices, as opposed to activities to address sustainability impacts associated with food production.
- **Business case for greater support of sustainable diets** – the research sought to identify opportunities for retailers to promote sustainable food consumption in the future and to articulate the business case for such action, in order to demonstrate the possibility of further positive change.

The findings from the research, which involved a desk-based literature review and consultation with selected retail representatives and academics, led to some challenging conclusions.

The research demonstrates that retailers are already undertaking numerous actions that could be said to broadly support more sustainable patterns of food consumption. It reveals why and how retailers are already undertaking activities to promote sustainable diets or foods and how the barriers to bolder action may be overcome.

Retailer activities to promote sustainable diets are piecemeal at present – occurring only in the presence of strong evidence of a commercial imperative to act. This evidence is built on a number of prerequisites, such as consensus among stakeholders that there's a suitable solution to a sustainability problem which is best addressed by retailers.

In this report, we review and discuss the complex issues that influence and affect retailers with respect to sustainable diets. The report then presents evidence on the current state of play by retailers, by highlighting some of the initiatives already under way to encourage and enable consumers to make more sustainable choices. And it explores the processes that retailers go through to implement such activities.

These real-world processes set the scene for the next section of the report, in which we explore four hypothetical case studies representing a series of distinctive initiatives that retailers could adopt in the future. The case studies are by no means exhaustive or definitive, as others could easily have been chosen to explore the complexities and challenges associated with retailers' support for sustainable diets.

Indeed, in a field as broad and complex as 'sustainable diets', there are innumerable issues – such as the role of new market entrants in catalysing change among the bigger retailers, the evolution of consumer sentiment towards environmental issues, the concept of 'ethical shopping', and the relationship between niche and mainstream models – that are potentially legitimate areas of enquiry but that have not been considered in this report.

Nevertheless, the case studies serve to highlight the types of challenges that must be overcome when implementing new sustainability initiatives and they point towards actions that are feasible in the near term. Furthermore, as a result of understanding the commercial barriers to retailers supporting and promoting sustainable diets in their totality, the final section of the report sets out recommendations to enable more widespread action via the retail sector.

The report ends on an optimistic note. Although the development and promotion of 'sustainable diets' represents an enormous challenge, it seems, firstly, there's a great deal of good will on which to build. For example, during our research we encountered no voices arguing that sustainable diets were a bad idea. Secondly, there is a range of feasible actions that can be taken by retailers, government and non-governmental organisations to enable us all to move forward.

Brook Lyndhurst, May 2012

Executive summary

The idea of 'sustainable diets' highlights the unsustainable nature of current consumption patterns.

In principle, a sustainable diet is one that minimises environmental damage, supports a resilient farming and food industry and ensures that people eat a healthy and nutritionally-balanced array of foods.

In practice, however, the complexities of defining a sustainable diet which captures temporal and spatial variance in the sustainability impacts of food production and consumption, while navigating through the trade-offs that exist between different sustainability indicators, are considerable. Moreover, actions that may be required to bring about widespread adoption of sustainable diets are manifold and distributed among multiple stakeholders.

Previous research has made important strides towards defining a sustainable diet and identifying actions to realise more sustainable patterns of food consumption. For example, WWF's 'Livewell Plate'[1] outlines guidance for achieving a varied and nutritionally-balanced diet up to 2020, which would also meet greenhouse gas emission targets set out in WWF's One Planet Food strategy.

Following on from this work, the results presented in this report are the product of research commissioned by WWF-UK and undertaken by Brook Lyndhurst, to explore the retail business case for supporting and promoting sustainable diets. This research forms part of a larger programme of work funded by the Esmee Fairbairn Foundation, which was designed to challenge the policy obstacles to sustainable food consumption and foster a constructive dialogue between stakeholders about delivering more sustainable patterns of food consumption.

Specifically the research undertaken by Brook Lyndhurst aimed to identify existing actions by retailers to encourage and enable consumers to adopt more sustainable diets, and to develop a convincing retail business case for further action.

A desk-based review and a series of interviews with senior retail representatives and academics revealed a surprising number of existing initiatives that could be said to broadly support more sustainable patterns of food consumption. Nonetheless, the findings showed that these activities are piecemeal – currently lacking support from overarching corporate policies or commitments that aim to address sustainable diets.

By understanding retail processes for identifying and developing new sustainability initiatives, it became clear that a number of key ingredients are required to underpin such action:

- Strong scientific evidence and political consensus that a problem exists because of the types of food people are eating.
- Availability of a clear solution to the problem that can be reasonably implemented by retailers.
- Stakeholder support for the chosen solution.
- Action by competitors to address the problem (either acting to pressurise some retailers to act, or encouraging others to seize first mover advantage by tackling the problem early on).
- Consumer understanding and interest in the issue to be addressed.

We developed four near-to-real-world case study examples, exploring a range of sustainability iniatives that could be implemented by retailers in the future. Through these, it was commonly

[1] WWF-UK (2011) *Livewell: A balance of healthy and sustainable food choices*. Produced in collaboration with the Rowett Institute of Nutrition and Health, University of Aberdeen.

identified that a priority area for development in the short term was the opportunity for collective action to drive the uptake of fruit and vegetables in a much wider range of meal formats and occasions.

Nevertheless, we identified key barriers that are currently preventing more widespread action on sustainable diets:

- Reputational risks associated with providing consumers with advice and information about sustainable diets in the absence of a universally agreed definition among stakeholders.

- Commercial disbenefits of shifting consumption patterns against the grain of consumer demand in the absence of policy requirements to act.

- Absence of market opportunities for developing more sustainable product lines because of limited consumer demand for such products.

- Danger of confusing or alienating consumers by engaging with them on the issue of sustainable diets too soon, in case there's a need to reframe the issue at a later date in the face of emerging scientific evidence or political position on the issue.

These barriers also meant that the exercise to develop a convincing business case for further action by retailers was unrealistic at the present time. These findings suggest that two challenges urgently need to be addressed by all stakeholders involved in dialogue about sustainable diets:

- To work quickly to establish a consensus-based definition of a sustainable diet.

- To accelerate any and all changes in consumer sentiment that would encourage and enable retailers to move forward quickly.

Retailers, government and non-governmental organisations (NGOs) are all implicated in these objectives. Specifically, government should:

- Lead the development of a clear definition of a sustainable diet as a priority, in conjunction with other stakeholders, and convert this definition into specific dietary guidance.

- Evaluate the full suite of policy tools available to facilitate changes in consumption patterns and use this insight to outline specific policy objectives that implicate the business sector (including retail and food service).

- Identify policy measures to buffer negative industry impacts that might arise from wholesale changes in diets as a result of action by retailers and food service businesses.

To support these actions, NGOs should work to build consensus between government, retailers and other stakeholders by:

- Mapping competing discourses on sustainable diets and developing appropriate engagement strategies for different interested parties.

- Formulating a clear position on sustainable diets and building a united front with other interested parties to lobby government and the retail sector more effectively.

- Working with retailers to identify commercially viable solutions to sustainability issues.

- Involving other components of the food sector (notably food service) in discussions about what actions should be taken to complement action by the retail sector.

- Building alliances with other food influencers, such as celebrity chefs and the media, to raise the profile of sustainable diets and reduce contradictory messaging.

Retailers also have a central role to play in:

- Monitoring and influencing consumer sentiment with respect to sustainable diets, and working with other stakeholders to do this.

- Actively participating in discussions about sustainable diet, rather than watching and waiting for others' views to emerge.

- Sharing their knowledge and experience of influencing consumption behaviours with respect to sustainability to inform the development of future policy interventions, including ones that will affect the commercial viability of different options.

- Stimulating the development of new sustainability initiatives internally by raising the profile of the agenda across the business.

- Encouraging innovation among suppliers to develop a wider range of more sustainable product offerings.

The issue of retailers influencing consumers is, perhaps, the most challenging. In broad policy terms, consumer sovereignty remains paramount – at national and international level. Retailers are acutely conscious of the fact that, unless they keep their customers 'happy', then market share, profits and reputation can all suffer. Incremental change is, from such a perspective, the best that can be hoped for.

Conversely, retailers are in a unique position to shape the consumer experience, to control what is and what is not made available, to sell not just products but lifestyles. Upon them rests a very considerable responsibility. Individual consumers may 'want' an environmentally friendly option; governments and NGOs may hope for the same; but it is, in the end, retailers who are at the heart of the UK's food system. There may not yet be a business case for sustainable diets that meets retailer requirements; but unless and until retailers make it straightforward for consumers to buy a sustainable diet, the prospects for radical change are limited.

In summary, the development and promotion of 'sustainable diets' represents a big challenge. Existing actions and dialogue on the issue, however, suggest there's a great deal of good will on which to build. By retailers, government and NGOs working synergistically we'll be able to build consensus and move forward.

Introduction to the issues

SCALE AND COMPLEXITY

It is widely understood that current patterns of food consumption in the UK are unsustainable across a broad range of measures. Adverse impacts generated by the food system on climate change, livelihoods, biodiversity and the water cycle have been well documented[2]. Meanwhile global population growth, increasing affluence and a propensity to consume more calories per capita are driving the need to produce more food for more people[3].

Poor diets are a key public health issue in the UK, despite food prices being relatively low in relation to household incomes[4], and consumers being offered a vast array of food products in supermarkets. As a population, we tend to consume insufficient quantities of fruit, vegetables and starchy foods, and too many foods that are high in sugar, salt and saturated fat. People also tend to derive too much of their protein from meat, and not enough from fish, pulses or vegetables[5]. These dietary choices are contributing to a growing epidemic in non-communicable diseases, such as obesity[6].

A review of corporate social responsibility (CSR) reports published by major food retailers in the UK reveals that numerous activities are under way to improve the sustainability of food production[7]. These actions include improvements in energy and water efficiency, waste reduction measures, and the implementation of sourcing standards that address sustainability issues for specific products, such as soya or palm oil. Nevertheless, previous research has demonstrated that these actions will not deliver a wholly sustainable food system in the absence of changes in the types and quantities of foods that people eat[8].

The complexity of sustainability impacts generated by food consumption patterns means that it is extremely difficult to ascertain what changes in diets are required and how best to implement them. There are many possible synergies between different sustainability indicators, but there are also many conflicts and tradeoffs. For example, reducing the incidence of obesity would have health benefits as well as acting to reduce greenhouse gas emissions per capita, yet implications for other axes of sustainability could only be determined by evaluating the specific combination of foods that remained in an individual's diet[9].

LACK OF CONSENSUS SURROUNDING A DEFINITION

In conjunction with a growing body of evidence about the relative impacts of different dietary choices[10], various attempts have been made to conceptualise a food system or a 'sustainable diet' based on sustainable patterns of food consumption. For example, the Sustainable Development Commission's report, *Looking back, looking forward,* outlines the need to eat 'more plant-

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[2] E.g.: Garnett, T. (2008) *Cooking up a storm: Food, greenhouse gas emissions and our changing climate.* The Food and Climate Research Network; Sustainable Development Commission (2011) *Looking back, Looking Forward: Sustainability and UK food policy 2000 – 2011*; Tukker, A. *et al.* (2009) *Environmental impacts of diet changes in the EU.* Report for the European Commission. Reference 23783 EN.

[3] Adas (2011) *Food 2020: How will the food system need to change?* A report for WWF-UK (unpublished).

[4] Defra (2011) *Food statistics pocketbook*. Published by the Department of Environment, Food and Rural Affairs.

[5] NDNS (2011) *National Diet and Nutrition Survey: Headline results from years 1 and 2 combined (2008/09 – 2009/10)* (accessed online: http://www.dh.gov.uk/en/MediaCentre/Pressreleases/DH_128610; accessed on 29 01 12).

[6] The Strategy Unit (2008) *Food Matters - Towards a Strategy for the 21st Century*. Cabinet Office.

[7] Tesco (2011) *Corporate responsibility report*; Walmart (2011) *Building the next generation of Walmart...responsibly*. Global sustainability report; The Co-operative (2011) *Join the revolution – corporate sustainability report*; Marks and Spencer (2011) *How we do business report;* Morrisons (2011) *Taking good care of tomorrow – Corporate sustainability review 2010/11;* Sainsbury's (2011) *Sainsbury's corporate sustainability report 2011*; John Lewis Partnership (2011) *A clear view – corporate social responsibility report*.

[8] Audsley, E. *et al.* (2009) *How low can we go? An assessment of greenhouse gas emissions from the UK food system and the scope to reduce them by 2050*. Report for WWF and the Food Climate Research Network, by Cranfield University, Murphy-Bokern Konzept and Ecometrica.

[9] Michaelow, A. & Dransfel, B. (2006) *The greenhouse gas benefits of fighting obesity*. HWWI Research. Paper 4-8. By the HWWI Research Programme, International Climate Policy.

[10] E.g. Berners-Lee, M. *et al.* (2012) *The relative greenhouse gas impacts of realistic dietary choice.* Energy Policy, volume 43, pages 183-190.

based foods, less meat and dairy and waste dramatically less'[11]. Meanwhile, Defra's recent evidence review on food summarises a range of factors previously identified as components of a sustainable diet. These factors include purchasing more organic food, certified fish products, and fruit and vegetables when in season. Eating less meat and dairy products and avoiding heavily processed foods are also found to have been widely cited in the literature[12].

More specifically, WWF recently collaborated with the Rowett Institute to develop dietary guidance that would satisfy nutritional needs, as well as greenhouse gas emission reduction targets set out in WWF's One Planet Food strategy[13]. While this study demonstrated that emission reduction targets could be met without needing to change healthy eating targets up to 2020, diets would need to comprise a much narrower range of food types, including fewer meat and dairy products, to meet emission reduction targets for 2050[14].

As evidence surrounding the impacts of different dietary configurations continues to build, representatives from industry, government, academia and NGOs are engaged in dialogue to define a commonly agreed notion of a sustainable diet. At the present time, there is broad agreement among stakeholders that official dietary guidelines should be updated to reflect a range of sustainability indicators in addition to health factors. Nevertheless, there's currently a lack of consensus around what these updated guidelines should include and to what extent consumer choice should be influenced or restricted to achieve sustainable levels of food consumption[15].

Additionally, many commentators have called for the government to evaluate policy measures that could expedite a transition towards more sustainable patterns of food consumption[16]. The previous government's food strategy, *Food 2030*, stated a need to achieve more sustainable consumption patterns and tentatively suggested a range of measures that would help to achieve this[17]. Since coming into office, the coalition government is yet to articulate a clear position with respect to sustainable diets or to identify specific policy objectives[18].

WHOSE RESPONSIBILITY IS IT TO CHANGE CONSUMPTION PATTERNS?

Multiple retailers are uniquely placed to drive changes in consumption patterns, accounting for the vast majority of food shopping in the UK. Retailers are able to influence purchasing decisions by altering the range of products they offer, by choosing to position and promote different products, and by providing information about how to prepare and enjoy different foods[19].

Retailers could potentially alter consumption patterns to address sustainability issues by providing more information about sustainability impacts of different food products, by providing and promoting more sustainable offerings or by restricting the provision of less sustainable options[20]. Nevertheless, since business decisions taken by retailers are heavily influenced by a desire to maximise profits, any actions to change consumption patterns for sustainability reasons would, necessarily, need be based on the same commercial principles[21].

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[11] Sustainable Development Commission (2011) *Looking back, looking forward – Sustainability and food policy 2000-2011* (page 5).

[12] Darnton, A. *et al.* (2009) *Food Synthesis Review*. A report to the Department for Environment, Food and Rural Affairs. The Social Marketing Practice *et al.* Defra, London.

[13] WWF-UK (2009) *One plant Food Strategy 2009-12* (accessed online: http://www.sustainableguernsey.info/blog/wp-content/uploads/2011/01/2009-to-2012-WWF-One-Planet-Food-programme.pdf; accessed 29 01 12).

[14] WWF-UK (2011) *Livewell: A balance of healthy and sustainable food choices*. Produced in collaboration with the Rowett Institute of Nutrition and Health, University of Aberdeen.

[15] Sustainable Development Commission (2009) *Setting the table: Advice to Government of priority actions for sustainable diets.*

[16] E.g. Jackson, B. *et al. (*2009) *Strategies for reducing the climate impacts of red meat and dairy consumption in the UK.* A report for WWF-UK.

[17] HM Government (2010) *Food 2030*. Published by the Department of Environment, Food and Rural Affairs.

[18] Sustainable Development Commission (2011) *Looking back, looking forward – Sustainability and food policy 2000-2011.*

[19] Jackson, B. *et al* (2009) *Retailer strategies for reducing the climate impacts of red meat and dairy consumption*. A report for WWF-UK.

[20] Singleton, S. (2010) *Mainstreaming sustainable food consumption through positive reinforcement in the retail environment*. A report for WWF-UK (unpublished).

[21] Retail interview insight (anonymous).

Encouragingly, the majority of consumers report that they are concerned about adverse impacts arising from the food system[22]. Many are also persuaded by the idea that retailers could enable them to make more sustainable choices[23].

To an extent, these positive attitudes are reflected in the growing number of sales in 'ethical' food and drink products in the UK, which represent £6.5 billion per year or 8% of total food and drink sales[24]. On the whole, however, sustainability issues lack salience in comparison with the core purchasing drivers of taste, price, health and quality. This presents a key barrier to greater uptake of more sustainable products[25].

Apart from offering consumers products with sustainability attributes, previous examples have demonstrated that it is possible to achieve widespread changes in purchasing behaviours across whole product categories, with the support of government campaigns and guidance[26].

However, while consumers are relatively open to messages about the health impacts of different foods, various studies have shown that the majority strongly reject the idea of altering their consumption habits for environmental reasons, if this means reducing or abstaining from certain foods such as meat products[27]. Furthermore, various studies have shown that providing consumers with information about the sustainability impacts of products has little traction in encouraging uptake[28], which suggests retailers will need to find more effective ways of encouraging consumers to make different choices[29].

Figure 1 represents the main stakeholders engaged in current dialogue about sustainable diets. The diagram shows that in the market place retailers' actions are steered by competitive pressures, while producers are keen to protect their commercial interests, and consumers are interested in sustainability but are not always willing or able to adopt more sustainable choices.

The diagram also represents the work the government is doing to establish its position on sustainable diets, where there's currently an absence of a clear policy position on the issue. Meanwhile, NGOs and academics are helping to improve understanding of the various issues related to sustainable diets and are involved in discussions about how best to proceed.

Other stakeholders, such as celebrity chefs, are also contributing public discourse in relation to sustainable diets, both positively and negatively, by influencing current diets and the prospect for altering consumption patterns in future.

The various discourses on sustainable diets, captured in figure 1, illustrate the multi-faceted nature of the issue, both in terms of determining what action should be taken and in agreeing who should be responsible for leading such action.

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[22] Defra (2011) *Attitudes and Behaviours around Sustainable Food Purchasing*. Report number (SERP 1011/10) and Asda (2011) Green is Normal – Asda sustainability study, undertaken by Futerra Communications for Asda.

[23] Ipsos Mori (2008) *Sustainability issues in the retail sector*. Ipsos Mori Reputation Centre.

[24] The Co-operative (2011) *Ethical consumerism report* (the term 'ethical' includes Fairtrade, organic, Rainforest Alliance, sustainable fish, free range eggs, farmers' markets, free range chicken, Freedom Foods, vegetarian products, food and drink boycotts).

[25] PwC (2007) *Sustainability: Are consumers buying it?* (accessed online: http://download.pwc.com/ie/pubs/sustainability_are_consumers_buying_it.pdf; accessed 29 01 12).

[26] Defra (2011) *UK Household Purchased Quantities of Food and Drink*. (accessed online: http://www.defra.gov.uk/statistics/foodfarm/food/familyfood/; accessed 10 02 12).

[27] Darnton, A. *et al.* (2009) *Food Synthesis Review Summary Report:* A report to the Department for Environment, Food and Rural Affairs. The Social Marketing Practice *et al.* Defra, London; and, Defra (2008) *A framework for pro-environmental behaviours.*

[28] E.g. Brook Lyndhurst (2010) *Are labels the answer? Barriers to purchasing higher animal welfare products.* A report to Defra.; Brook Lyndhurst (2010) *Consumer understanding of green terms.* A report for Defra.; IGD (2009) Portion size - A consumer perspective.

[29] Godfrey, R. & Donnan, A. (2011) *From Boardroom to Till: Selling Sustainability*. Concept paper. Professional Practice for Sustainable Development.

Figure 1 – Discourses on sustainable diets

Figure 1: Summary of current discourses on sustainable diets *(original insight based on literature review and interview insight with selected retailers and academic representatives).*

Research aims and approach

WWF commissioned Brook Lyndhurst to undertake a programme of research to explore the retail business case for supporting and promoting sustainable diets. The work forms part of a larger programme of research funded by the Esmee Fairbairn Foundation, which is seeking to engage NGOs, industry and government in an informed and constructive dialogue around sustainable food consumption.

The research questions to be addressed in this project were as follows:

1. What examples exist of successful interventions to promote or support sustainable diets in the retail sector?

2. What mechanisms could retailers adopt to further promote sustainable diets?

3. How might these initiatives be brought into the mainstream and what would be the retail business case for taking further action?

4. What are the key risks and opportunities associated with further action, including any supply chain barriers?

5. What policy recommendations are needed to support the adoption of sustainability initiatives in the retail sector?

A number of research challenges were identified at the outset of the project. The first of these was that the scale and complexity of sustainability issues in the food system makes it impossible to consider the business case for sustainable diets in its totality. Some prioritisation and selection is necessary.

Related to this challenge is the lack of a universally agreed definition of a sustainable diet. As a result, the researchers focused their attention on initiatives which broadly support aspects of sustainable diets proposed in previous research, such as WWF's Livewell Plate[30].

In building the business case for retailers to address sustainability issues, confidentiality of business information was a barrier to accessing detailed financial information on specific initiatives. Moreover, retailer competition prevented the researchers from uncovering forthcoming initiatives currently under development, for fear of losing competitive advantage.

With these challenges in mind, the research team explored the retail business case for increasing support and promotion of sustainable diets through the use of a series of near-to-real-world case study examples. Each case study illustrated a distinctive mechanism for creating a significant shift in dietary patterns.

It should be noted that, while the case studies selected all broadly support a notion of more sustainable food consumption according to previous research, the central purpose of the case studies was to investigate the commercial challenges and opportunities associated with developing new sustainability initiatives, rather than to collectively represent a vision of a sustainable diet: any combination of initiatives could have been selected to explore the research questions.

The research was undertaken using a combination of a desk-based evidence review and a series of interviews with selected academics and senior retail representatives[31]. A limited number of

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[30] WWF-UK (2011) *Livewell: A balance of healthy and sustainable food choices.* Produced in collaboration with the Rowett Institute of Nutrition and Health, University of Aberdeen.

[31] Interview insight presented in the findings are represented anonymously to protect the identity of interviewees.

in-store/online store visits were also undertaken to supplement the interviews and desk-based review[32].

Retail representatives from four major supermarkets were consulted to identify a range of existing sustainability initiatives that may influence consumption patterns, and to consider the challenges and opportunities associated with developing more initiatives of this kind.
While it was not within the scope of the research to quantify the sustainability implications of each case study, interviews with academics from the field of food policy and sustainability were conducted to consider broadly the possible outcomes for sustainability.

The research comprised three phases:

1. A rapid evidence review and initial interviews to identify examples of existing initiatives in the UK retail sector and to explore possibilities for scaling up these activities.

2. Development of four case study initiatives that retailers could adopt to increase the level of support and promotion of sustainable diets, through a series of follow-up interviews and desk-based analysis.

3. Analysis of insight generated through the case study development process, to evaluate the rationale for retailers to further promote sustainable diets and to identify policy recommendations to support such action.

[32] Five medium-sized multiple retail stores visited in west London on 17 11 11.

Current state of play

EXAMPLES OF SUCCESSFUL INITIATIVES

The research revealed a host of current activities under way in the retail sector, which could be said broadly to support more sustainable patterns of food consumption. These initiatives are distinct from activities to address sustainability impacts associated with food production (such as improving energy efficiency of farm-level production, logistics and refrigeration). The consumption-related initiatives identified were grouped into three categories:

1. Provision of food products with sustainability attributes.

2. Active promotion of more sustainable offerings.

3. Provision of information or advice about sustainable food consumption (and lifestyles).

An overview of these three types of initiatives is provided in table 1. The majority relate to the provision of food products with sustainability attributes. There are plenty of examples of retailers providing advice and information on healthy eating, but far fewer in relation to the sustainability impacts of different dietary choices. Few initiatives also currently exist to promote the uptake of more sustainable offerings, either by price discounting or enhancing the visibility of products in store.

Table 1: Current retailer initiatives that support or promote sustainable food consumption[33]

1. Provision of food products with sustainability attributes	
Initiative	**Nature and scale of current activity**
Fresh fruit and vegetables labelled as 'in season'	All retailers offer fresh fruit and vegetables labelled as 'in season', to a greater or lesser extent. However, the interview process confirmed that these activities are restricted to products grown in the UK. Limited in-store visits revealed that seasonal produce makes up less than 10% of shelf space dedicated to fresh fruit and vegetables, which appears to be further restricted in smaller/convenience stores. In-store visits also confirmed that retailers make no link between seasonal produce and sustainability attributes on product packaging. There's a lack of corporate commitment to supply specific volumes of seasonal fruit and vegetables in retailers' CSR reports.
Vegetarian meal ranges and ingredients	All retailers offer a small proportion of vegetarian meals and ingredients alongside meat-based products, though they do this to a greater or lesser extent. For example, in-store visits suggest that the proportion of vegetarian (main meal) ready meals offered across total ready meals ranges varies between 1% and 20%. No linkages are made with sustainability attributes and vegetarian meals on product packaging. CSR reports also lack corporate pledges to increase the proportion of vegetarian meal formats in the future. Nevertheless, interviews with selected retailers revealed that some recognise that the vegetarian meals market is growing and are currently "over-supplying" this market in anticipation of future growth.
British and/or local produce	All retailers offer British and/or local products across a wide range of product categories, though some do so more than others. CSR reports reveal that some retailers have made corporate commitments to increase the proportion of these products in the future and, in so doing, some have also made linkages between local/British products and sustainability benefits.

[33] In addition to specific references provided, information contained in this table was drawn from research insights generated by selected in-store visits and from interviews with selected retailers.

Higher animal welfare products	All retailers offer higher welfare products across branded and own-brand meat, dairy and egg products, though some have done so more than others. All retailers have also made corporate commitments to maintain or increase the application of higher welfare standards to these products in the future. Many use the RSPCA Freedom Foods accreditation scheme to endorse higher welfare claims, but others have adapted them to create their own standards.
Sustainably-sourced fish	All retailers have a sustainable sourcing policy in place for products containing fish. These policies may include the sourcing of key species from sustainable fish stocks and the provision of lesser-known species to reduce pressure on more common varieties. All retailers have made corporate pledges to maintain or increase the availability of sustainably-sourced fish products in the future. All major retailers have used the MSC certification scheme to underpin their activities.
Fairtrade products	All retailers offer Fairtrade-certified products, across branded and own-branded products, though some have done so more than others (notably the Co-operative and Sainsbury's). Additionally, several retailers have outlined targets to increase the proportion of Fairtrade products available in the future.
Organic products	All retailers offer a proportion of organic products across a wide range of branded and own-branded products. Some have outlined targets to increase the proportion of these products in CSR reports. Many use the Soil Association accreditation scheme to underpin claims.
Low carbon products	A very small number of products available in retail stores are labelled as 'low carbon'. One such example is the Respectful Eggs brand[34] offered in selected Asda stores. Nevertheless, the interview process revealed that many retailers are working to reduce the carbon intensity of selected own-branded products (notably meat and dairy) though they are not labelled as being lower carbon.
'Green' product ranges	Several retailers offer a limited range of 'green' products, often in the non-food domain. An example of this would be Tesco's 'Greener Living' product range[35]. These products include energy-efficient electrical items or light bulbs, environmentally-sensitive cleaning products, and books on adoption of pro-environmental lifestyles.
Healthy product ranges	All retailers offer a selection of 'healthy' product ranges, including ready meals and snacking products. A review of retailer CSR reports reveals widespread commitments to increase the proportion of healthy products offered in the future. Additionally, all of the largest multiple retailers have committed to reduce salt and remove trans-fats contained in own-branded products, as signatories to the Department of Health's Public Health Responsibility Deal[36].
2. Active promotion of more sustainable offerings	
Initiative	**Nature and scale of current activity**
Promotion of healthier choices	Several retailers, including Morrisons, Co-operative and Marks and Spencer, have set minimum thresholds for the provision and/or promotion of 'healthy' products in CSR reports.
Seasonal fruit and vegetables	Limited in-store visits suggest that all major retailers offer price promotions on certain fruit and vegetables when in season, though this tends to be restricted to larger stores where seasonal fruit and vegetables are more commonly offered. In addition, some have opted to increase visibility of seasonal produce in store by providing signposting and shelf space dedicated to seasonal fruit and vegetables.
Promotion of sustainable fish	Certain retailers have undertaken price promotions and communications campaigns to promote sustainable fish products (e.g. Marks and Spencer's 'Forever Fish' campaign) or to increase uptake of lesser-known fish species (e.g. Sainsbury's 'Switch the Fish' campaign)[37].

[34] Respectful Eggs website (accessed online: http://www.respectful.co.uk/; accessed 29 01 12).

[35] Tesco greener living products (accessed online: http://www.tesco.com/greenerliving/products/landing.page; accessed 29 01 12).

[36] Department of Health - Public Health Responsibility Deal (accessed online: http://www.dh.gov.uk/en/Publichealth/Publichealthresponsibilitydeal/index.htm; accessed 29 01 12).

[37] The Guardian '*Supermarkets bid to get shoppers to switch to sustainable fish*' 13 06 11 (accessed online: http://www.guardian.co.uk/business/2011/jun/13/supermarkets-bid-shoppers-sustainable-fish; accessed 29 01 12).

3. Provision of information or advice about sustainable food consumption	
Initiative	**Nature and scale of current activity**
Nutritional information and healthy eating advice	All retailers provide nutritional information on pack and online. The advice given is closely aligned with guidance provided in the Eatwell Plate[38] and by public health campaigns, such as Change for Life[39]. Many retailers also offer advice about healthy eating and some offer 'pay for' services to facilitate adoption of healthier choices (e.g. Tesco Diets)[40]. Some retailers specify in CSR reports that they are working towards integrating healthy eating advice with social and environmental sustainability messages[41].
Carbon labelling	There has been some activity among retailers to provide consumers with information about the carbon intensity of products on packaging. But where Tesco launched a carbon labelling scheme in 2008 with the aim of rolling out the initiative across all 70,000 product lines, it has recently announced its withdrawal of the product labelling scheme due to the cost and lengthy timeframe to implement it across all categories. However, the measurement of carbon footprints of products looks likely to continue.
Seasonal eating advice	Some retailers provide information on the availability of seasonal produce and inspiration or advice on how to use seasonal produce when cooking from scratch. Most of this information is provided online or in in-store magazines, such as the Co-operative's 'Taste the Seasons' webpages[42], or Marks and Spencer's 'Seasonal calendar'[43].
Encouraging and enabling sustainable behaviours, including diets	Several retailers provide consumers with advice or suggestions for sustainable living (both food and non-food), online or via in in-store magazines. This advice ranges from tips for reducing food waste[44], to reducing the amount of meat eaten for environmental reasons[45], or making use of more sustainable travel options[46]. Many retailers also offer facilities to make sustainable actions easier for consumers (e.g. in-store recycling facilities) or offer incentives to encourage pro-environmental behaviours (e.g. loyalty card points for carrier bag reuse)[47]. Others, such as Waitrose and Asda, provide online forums or blogs on sustainability[48].

Apart from specific initiatives that were identified through the research, several retailers have pledged to help promote sustainable choices more broadly in the future[49], and others have stated an intention to promote more sustainable diets more specifically by helping consumers reduce their carbon footprints[50]. Nevertheless, in doing so, some retailers are also keen to emphasise the importance of not compromising consumer choice in tackling sustainability issues[51].

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[38] The Eatwell Plate – NHS website (http://www.nhs.uk/Livewell/Goodfood/Pages/eatwell-plate.aspx; accessed 19 02 12).

[39] E.g. 'Creating a healthy balance', Sainsbury's website (http://www2.sainsburys.co.uk/food/healthylifestyle/healthy_balance/eat_a_healthy_balance/balance1.htm, accessed 29 01 12); Tesco Change4Life partners (http://www.nhs.uk/Change4Life/Pages/national-partners-tesco.aspx; accessed 29 01 12).

[40] Tesco Diets (http://www.tescodiets.com/index.cfm?code=350261&gclid=CNqsh-iQpa4CFSgntAod9m4oSA, accessed 29 01 12).

[41] E.g. Marks and Spencer (2011) *How we do business report*. Corporate sustainability report.

[42] The Co-operative website – 'Taste the Seasons' (http://www.co-operative.coop/food/food-and-drink/food/Taste-the-seasons/february/; accessed 29 01 12).

[43] Seasonal Calendar – M&S online (http://health.marksandspencer.com/healthy-eating/5-a-day/seasonal-calendar; accessed 29 01 12).

[44] E.g. Great taste less waste, Morrisons (http://www.morrisons.co.uk/food-and-drink/GreatTasteLessWaste/; accessed 29 01 12).

[45] E.g. Health Matters – Asda online (http://health.asda.com/nutrition/food/meat.aspx; accessed 29 01 12).

[46] E.g. Tesco's Greener Living – Alternative travel options (http://www.tesco.com/greenerliving/go_greener/greener_travel/alternative_travel.page?; accessed 29 01 12).

[47] Sainsbury's carrier bags – Sainsburys online (http://www2.sainsburys.co.uk/aboutus/policies/recycling_energy_environment/bags.htm; accessed 29 01 12).

[48] Sustainability and environment forum, Waitrose online (http://www.waitrose.com/home/forum/sustainability_and_the_environment.html, accessed 20 01 12); Aisle Spy environment blog – Asda (http://your.asda.com/aislespy-environment; accessed 29 01 12).

[49] John Lewis Partnership (2011) *A clear view – corporate social responsibility report*.

[50] Tesco (2011) *Corporate responsibility report*.

[51] Morrisons (2011) *Today – Taking good care for tomorrow. Corporate responsibility review 2010/11.*

BRINGING NEW INITIATIVES TO MARKET

In exploring the potential for expanding existing initiatives that promote sustainable food consumption, or developing new ones from scratch, it was necessary for the researchers to understand the process of product development and implementation in the retail sector.

Through the interview process, retail representatives described a rigorous process that every new product must pass through before it makes it onto the shelves. A generic representation of the process is summarised in figure 2. It demonstrates that in looking to identify new product opportunities, retailers are continually scouring the globe for emerging trends in cooking and eating, evaluating competitor offerings, listening to stakeholders' concerns and reviewing the performance of existing product lines.

Once a potential opportunity is identified, a business case is developed to demonstrate that there is sufficient consumer demand for the product and that sales of the product would generate financial value for the business. Potential products then go through an involved process of further development, evaluation and selection until a small number of lines are finally selected for implementation and launch in store. Once a new product reaches the shelves, it is monitored against its expected rate of sales and, if necessary, the product is revised or removed from sale.

The length of time taken to progress through the product development and implementation process depends on the scale and complexity of the initiative in question. The normal course of business is to plan 18 months to two years ahead, but some initiatives may take considerably longer. This is particularly true of changes in product ranges or product formats due to the introduction of a corporate policy – a process that can take up to 15 years. This is partly because of additional due diligence that is required to ensure that corporate commitments can be met prior to roll out.

Figure 2 – Bringing new products to market

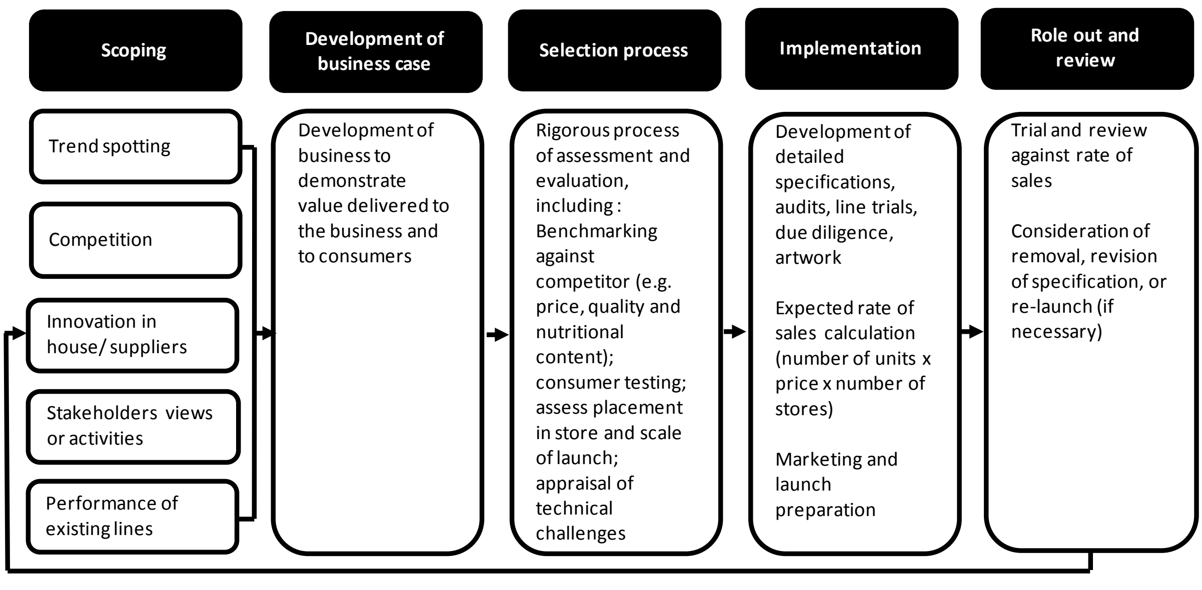

Figure 2: Illustration of how new products are identified, selected and developed in the retail sector *(original insight based on literature review and interview insight with selected retailers and academic representatives)*

DEVELOPING SUSTAINABILITY INITIATIVES IN THE RETAIL SECTOR

The interview process revealed that the selection and implementation of new products that possess sustainability attributes follow much the same process as every other consumer-facing proposition, in that there has to be a clear business imperative to act.

An example of this is the emergence of products bearing the Fairtrade certification logo over the last two decades. The certification scheme was launched in the 1990s, primarily as a means of ensuring better labour standards for producers in developing countries. Nevertheless, the logo tended to be used to enhance the marketing potential of high quality products with provenance attributes. Fairtrade products proved popular with consumers and the brand became very well established. It now represents the fastest-growing range of ethical products in the UK[52].

However, it was only when the Fairtrade brand became well established that the sustainability attributes it brought to products were more prominently promoted, alongside core purchasing drivers of price, taste, quality and provenance[53].

More often, however, sustainability initiatives in the retail sector are born out of the need to find a solution to a particular problem, rather than through the emergence of new products or brands with sustainability attributes. In these cases, the initial scoping phase (shown in figure 2) can become more technocratic and protracted than would be the case for normal cycles of product development. Interviews revealed that this is because retailers need to thoroughly explore stakeholder views on the issue, understand scientific evidence and assess consumer interest, in order to identify the most appropriate way to respond.

As many sustainability initiatives do not emerge naturally through the market, according to the speed or scale of change that is required, a corporate policy is often required to underpin action: a publicly-binding commitment to make changes to product formats or ranges. And, as previously discussed, development of new sustainability policies can extend the initial development and implementation phases considerably as additional due diligence is conducted to ensure targets can be met.

As with all new initiatives, retail representatives emphasised that there must be a business imperative to take action on sustainability issues, but they would also require the following prerequisites to be satisfied:

- Strong scientific evidence and political consensus that a problem exists because of the type(s) of food that people are eating.
- Availability of a clear solution to the problem that can be reasonably implemented by retailers.
- Stakeholder support for the chosen solution.
- Action by competitors to address the problem (encouraging some retailers to claim first mover advantages by acting early, and others to follow their example in order to remain competitive).
- Consumer understanding and interest in the issue to be addressed.

Table 2 shows how these factors came in to place in relation to action taken by retailers to develop sustainable sourcing policies for fish. In this case, the cycle of problem definition, solution identification and implementation took a significant amount of time; anywhere between three and 15 years. Retail interviewees revealed that it took between three and 10 years to develop a sustainable sourcing policy, depending on how early they started to take action (tending to take longer to define the best solution if retailers began action soon after the issue came to light).

The implementation of the policy then took anywhere between two and five years to complete. Variability in timeframes for implementation tended to be due to differences in the number of product lines addressed and whether new supply chain infrastructure was needed to accommodate bycatch species or a larger supply of lesser-known species.

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52 Co-operative (2011) *Ethical Consumerism Report.*

53 Retailer insight (anonymous).

The interview process revealed how retailers worked with a wide range of stakeholders to inform the development of their sustainable sourcing policies. In this case, all retailers used the MSC certification scheme to underpin their claims in relation to the sustainability of fish products. This point serves to illustrate the importance of working with stakeholders and external agencies to minimise the reputational risk of taking action on sustainability issues. As one retail representative explained: “We won’t call anything sustainable unless an independent third party says so.”[54]

Many retailers also chose to develop consumer-facing marketing and communication campaigns to promote their policies and influence consumer purchasing behaviours with respect to fish (such as Marks and Spencer’s ‘Forever Fish’ or Sainsbury’s ‘Switch the Fish’). These campaigns required significant investment in promotional activities and collaborations with key influencers, such as celebrity chefs and NGOs.

Sustainability initiatives – factors to be considered	**Example of sustainable sourcing policies for fish**
Strong evidence of a problem	Clear evidence that fish stocks are endangered, threatening security of future supply and increasing consumer and stakeholder pressure to address the issue
Clear solution to the problem	Development of sourcing policies that: - exclude severely depleted/endangered fish stocks - halt the decline of other stocks - source and promote lesser-known fish species Policies were relatively easily enforced because of transparent supply chains The Marine Stewardship Council (MSC) certification was used to directly support policies
Stakeholder support	Active campaign space by NGOs, the media and other food influencers, such as celebrity chefs Clear support for sustainable sourcing policies and use of MSC certification from stakeholders
Action by competitors	All retailers seen to be taking action on the issue
Consumer understanding and/or interest in the issue	Retailers identified consumer interest in the issue and a keenness for retailers to take action on their behalf. Furthermore, it was noted by retail representatives that other key opinion formers, such as celebrity chefs played a role in raising consumer awareness and interest in the issue)

Table 2: Factors underpinning the development of sustainable sourcing strategies for fish products *(original insights based on retailers' CSR reports, websites and interviews)*

While all major retailers now have sustainable sourcing policies in place, their CSR reports show that many are still striving to roll out policies across all product lines that contain fish. The researchers note that the lengthy timeframe for developing and implementing sustainable fishing policies illustrates the importance of taking early action to address other large-scale sustainability issues.

Nevertheless, the interview process also emphasised the importance of scientific and political consensus before retailers are willing to invest significant resources into the development of new sustainability initiatives. This finding has important implications for discourses on sustainable diets, as a common consensus on the issue is yet to be reached by key stakeholders. There was a strong concern among those interviewed that retailers may be commercially disadvantaged in

[54] Retail representative (anonymous).

the future if they take actions to address specific issues that are later contradicted by the emergence of new scientific evidence or a policy position.

Another barrier to further action confirmed by the interview process is a current lack of consumer willingness to adopt more sustainable patterns of food consumption, and a stretched ability to pay for more sustainable options in the current economic climate. Most interviewees perceived that it would be counter-productive to “have the conversation with consumers”[55] at the present time, until there’s a clear consensus among stakeholders about what constitutes a sustainable diet. Otherwise, retailers suggested, industry may be forced to back-track on messaging which would only serve to further undermine consumer willingness to change.

In summary, the preliminary research undertaken for this study demonstrated that retailers are currently undertaking a wide range of specific initiatives which could be said to support more sustainable patterns of food consumption. Nevertheless, by understanding the process of development and implementation of such initiatives, it became clear to the authors that there are a number of conditions that must be satisfied in order for retailers to dedicate time and resources to developing more iniatives on this kind of scale. At the current time, retailers are building understanding about sustainable diets internally, listening to stakeholder views and waiting for a clear policy steer on the issue before they would be willing to engage in more ambitious action to change dietary patterns.

[55] Retail representative (anonymous).

Assessing the feasibility of mainstreaming selected options

PURPOSE AND APPROACH TAKEN

The purpose of the second phase of the research was to consider the business case for developing a range of interventions, in the form of near-to-real-world case study examples that retailers could adopt to further promote and support sustainable diets. However, having better understood retailers' current position on sustainable diets and how the development of new initiatives fit into standard business practices, it became clear that it would be premature and unrealistic to develop a detailed business case for the selected interventions because:

- At the current time retailers believe it is too early to encourage consumers to adopt sustainable diets, until there's universal consensus on the components of a sustainable diet.

- Under normal circumstances, retailers would consider the broad drivers and challenges of potential opportunities before developing a detailed business case to prove the value of the proposition to the business.

Under these circumstances, the case study examples were used to explore some of the broad business challenges and opportunities associated with a range of different initiatives, to illustrate the types of factors retailers might consider when deciding which initiatives satisfy both sustainability concerns and business interests.

The researchers selected four potential initiatives for development into case studies. These were drawn from a broad list of indicators of a sustainable diet, identified in published literature (see chapter one). The case studies are by no means exhaustive or definitive, however, as others could easily have been chosen to explore the complexities and challenges associated with retailers' support for sustainable diets.

The four interventions selected for development into case studies are as follows:

- Increasing consumption of fresh fruit and vegetables when in season.

- Driving the uptake of vegetable-based meals.

- Reducing the amount of meat contained in ready meals.

- Reducing the volume of dairy products consumed.

The case studies were developed in discussion with selected retail representatives and academics and with WWF-UK. An overview of each case study is presented in turn below.

INCREASING CONSUMPTION OF FRESH FRUIT AND VEGETABLES IN SEASON

Retail sales of fresh fruit and vegetables were worth £9.52bn in 2010[56]. A total of 7.8 million tonnes of fruit and vegetables were supplied into the UK market in 2009. However, with a trade deficit of £6.5bn, the market is heavily dependent on imports. Volumes of fruit and vegetables available for sale in the retail sector are highly weather dependent, which means supply can be unpredictable[57].

Unfortunately neither market research reports reviewed by the authors nor retailer representatives who were interviewed provided information on the proportion of fruit and vegetables that are sold when in season. Nevertheless, limited in-store visits suggest that these

[56] Keynote (2011) Fruit and Vegetables. Market report.
[57] Keynote (2011) Fruit and Vegetables. Market report.

products account for a small proportion of shelf space dedicated to fresh produce (less than 10%) and tend to be more commonly found in larger retail outlets.

Additionally, some retailers have opted to increase the visibility of seasonal produce, by using signage and dedicated shelf space in store, which loosely resembles a farmers' market experience. A review of retailer websites reveals that many retailers are also helping to educate consumers about seasonality by providing advice about when to find seasonal items in store and ideas for preparing seasonal ingredients.

Interviews with retailers revealed that the current economic climate is driving down demand for fresh fruit and vegetables, as consumers' willingness to pay becomes more restricted. Instead, some consumers are opting for frozen fruit and vegetables as a cheaper alternative, but overall there's a declining trend in consumption in the retail sector[58]. Price inflation caused by adverse weather conditions has been suppressed by retailers in recent years, but market research suggests that this is unlikely to be maintained in the long-term – which may reinforce the current trend in reduced consumption[59].

Limited in-store visits and interviews with retail representatives confirmed that all major retailers currently offer and promote certain fruit and vegetables when they are in season. However, products presented as 'in season' are restricted to those grown in the UK. Interviewees revealed that this is because consumers' understanding of seasonality is restricted to the British seasons. Thus many more products grown outside of the UK are offered when in season (in the country of origin) but are not labelled as such.

Retailers described how promotions of fruit and vegetables in seasons is a helpful way of managing seasonal flushes in supply and satisfying consumer interest in seasonality[60]. Nevertheless, there's an absence in retailer CSR reports of corporate commitments to supply a certain proportion of seasonal produce[61]. Retail representatives explained that this is because of a lack of certainty about supply, due to variable weather conditions year-on-year, leading to diverse international sourcing strategies.

Outlook for increasing consumption of fresh fruit and vegetables when in season – focus on apples

This section considers the commercial opportunities and barriers associated with markedly increasing the availability of fresh fruit and vegetables when in season. Due to the large size and diversity of fresh produce categories, apples were chosen as a focus in discussion with retail and academic interviewees. Apples represent the largest share of the fresh fruit market (in value terms), but despite being commonly associated with British seasons the market is heavily reliant on imported apples which are currently not promoted when in season[62].

Retail representatives were asked to consider the commercial feasibility of increasing the proportion of fresh apples provided when in season to 100% by 2020. The interview process identified a number of commercial opportunities associated with this:

- Consumers are interested in seasonality, though some retail representatives felt this is commonly interwoven with an interest in local or British produce.

- Retail representatives agreed that seasonal promotions are a helpful way of managing natural peaks in the supply of apples.

58 Interview insight, retailers (anonymous).
59 Keynote (2011) Fruit and Vegetables. Market report.
60 Interview insight, retailers (anonymous).
61 Review of multiple CSR reports (see chapter 3).
62 Keynote (2011) Fruit and Vegetables. Market report.

Nevertheless some important challenges were also identified:

- Storing apples beyond the natural growing season currently provides a cost-effective way of stretching the supply window for British apples. Under a more constrained seasonal sourcing policy, supply peaks would be more pronounced, potentially resulting in product wastage at certain times of the year and shortages at other times. Furthermore, the capital cost of developing more flexible picking, packing and distribution systems could not be justified on the basis of a much shorter supply window.

- More important, all retailers interviewed agreed that the volume of apples required under a seasonal-only supply model could not be met by British apple production alone. Nevertheless, all those interviewed believed that it would not be possible to label internationally-sourced apples as in season because consumer understanding is restricted to the UK seasons. Moreover this message would become more complicated to communicate to consumers if a seasonal-only policy were rolled out across other product lines, because some tropical products (such as bananas) are not grown on a seasonal basis at all.

- Finally, retail representatives interviewed stated that they would not be willing to dramatically expand the scale of products provided when in season for sustainability reasons, because scientific evidence on the relative environmental impacts of seasonal produce, compared with produce provided 'out of season' is ambiguous. This argument was reinforced by academic representatives, who agreed that it would be very difficult to determine clear benefits of increasing the supply of seasonal apples from a sustainability perspective. Academics were keen to emphasise the importance of considering broad sustainability measures when looking at the supply of fresh fruit and vegetables, including biodiversity and water use, in addition to greenhouse gas emissions impacts.

Despite the challenges identified, the interviews revealed that some retailers have been working to increase the proportion of British grown fruit and vegetables offered when in season. Nevertheless, all agreed that it would be unfeasible to consider a seasonal-only supply model for apples due to infrastructural barriers and limited consumer understanding of sustainability. Furthermore, all those interviewed believed a seasonal-only model could not be justified on sustainability grounds: apart from an absence of justifiable environmental benefits, the negative health implications of supply shortages arising from a seasonal-only supply model were seen to be unacceptable.

As an alternative, all those interviewed agreed that it would be preferable to drive uptake in the proportion of fruit and vegetables eaten *in general*, to reverse the declining trend in consumption. Specific suggestions for achieving this are as follows:

- Increasing the provision of fresh fruit and vegetables in convenience stores, which have historically been poor, by overcoming infrastructural barriers including a lack of suitable storage space on site and prohibitive logistical costs.

- Increasing the proportion of fruit and vegetables contained in composite dishes, especially 'on the go' and snacking markets, which are growth areas.

- Drive the uptake of fruit and vegetables in a range of formats, including frozen and tinned.

DRIVING UPTAKE OF MEAT-FREE MEAL FORMATS

The number of vegetarians in the UK is estimated to be stable at around 8% of the population. Nevertheless, market research suggests that there are a growing number of 'meat-reducers' – a survey by Keynote in 2008 showed that 26% of those surveyed bought less meat than they had done 12 months before[63].

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63 Keynote (2009) Vegetarian foods. Market report.

Sales of vegetarian foods were worth £767.6 million in 2008/9, in the UK[64], of which chilled vegetarian ready meals accounted for £133.2 million. While the proportion of vegetarian ready meals is small in comparison to the value of sales in the conventional ready meals market (£1.74 billion[65]), market research suggests that this sector will grow strongly in the future, thanks to the growing number of people seeking to reduce the quantity of meat in their diet[66].

A review of retailer CSR reports and websites reveals that many major retailers have recently launched or expanded meat-free meal ranges. Examples include M&S's 'Lovely Vegetable' range, Tesco's 'Vegilicious' range and Sainsbury's 'Love Veg' range, or Morrison's 'M Kitchen Vegetarian Range'. Limited in-store searches suggest that these ranges account for 5-10% of the total shelf space dedicated to ready meals. Retailers also offer meat-free ready meals among conventional ready meal ranges (such as Chinese, Indian, British, Italian ranges). However, the proportion of meat-free main meal offerings within these ranges is very limited: in-store searches suggest they account for less than 10% of main meal formats.

Interviews revealed that some retailers have acknowledged a small but growing trend in the number of customers seeking meat-free meal formats and have responded by increasing the number of vegetarian offerings. Some have also subtly repositioned vegetarian meal ranges as being 'suitable for vegetarians'. Nevertheless, other retailers argued that future demand for such products would remain limited because the majority of consumers continue to express a strong preference for meat-based ready meals.

Outlook for driving the uptake of meat-free meal formats – focus on Asian meal ranges

This section assesses the feasibility of increasing the uptake of meat-free meal formats within conventional Asian ready meal ranges[67]. Though Asian cuisine does not represent the largest category in the ready meal sector, it is predicted to grow strongly in the short term and was seen by the researchers to offer the greatest potential for increasing the proportion of meat-free formats[68].

Retail representatives were asked to consider the commercial opportunities and barriers of increasing the proportion of meat-free Asian ready meals from an estimated current proportion of 5%, to 50% by 2020. A number of commercial opportunities were identified through the interview process as follows:

- Some retailers recognised the growing number of meat reducers in the UK as a commercial opportunity for delicious tasting, meat-free ready meals and are currently over-supplying the market in anticipation of future growth. Some of these individuals acknowledged that it would be possible to "push a little harder and faster" on this trend.

- As the ready meal market is characterised by high levels of new product development and product reformulation, all retailers interviewed agreed that there would be very few technical challenges associated with developing new meat-free meal formats, although some time would be required to develop protein substitutes that satisfied consumers' taste expectations.

Key barriers or challenges were identified as follows:

- All those interviewed largely disagreed that increasing the number of meat-free ready meal offerings would substantially act to alter social norms relating to typical meal formats, in the absence of support from other sectors (such as take-away restaurants and public sector catering establishments) and without the support of other food influencers (such as celebrity chefs or the media).

[64] Keynote (2009) Vegetarian foods. Market report.
[65] Keynote (2011) Ready Meals. Market Report Plus.
[66] Keynote (2009) Vegetarian foods. Market report.
[67] Includes Indian, Chinese, Oriental and Thai meal ranges.
[68] Keynote (2011) Ready Meals. Market Report Plus.

- Despite some retailers recognising growth potential in meat-free meal formats, all interviewees argued that a broad shift towards meat-free Asian meal offerings by 2020 would be unrealistic. The main reasons given to support this view are deeply entrenched consumer purchasing habits in the ready meals sector and the speed of changes in consumption patterns that can reasonably be expected. As one interviewee remarked: "We could stop selling chicken kormas, but the customer would simply go to [another retailer] rather than chose a meat-free alternative, because they wanted a chicken korma!"

- Another concern raised by retailers and academic representatives alike, was the risk that consumers would choose to increase the amount of meat they ate in other meal formats or occasions, such that there would be no overall reduction in the amount of meat consumed in the diet.

- Similarly, academics and retailers agreed that investment in extensive due diligence would be required to assess the relative sustainability impacts of different meat substitute products. For example, a possible switch from meat to cheese-based ready meals was commonly thought to have negative health consequences for consumers. Similarly the negative impacts of many meat substitutes, such as soya-based products, were cited as cautions against moving too quickly towards a wholesale shift in meat-free Asian ready meals.

- Finally, certain retailers argued that current discourse among stakeholders about the role of meat in diets would prevent retailers confidently investing in this intervention at the current time.

Overall, retail representatives agreed that there's a lack of evidence of a sufficient market opportunity to move towards widespread provision of meat-free meal formats at the present time. Furthermore, they argued that it would not be possible to achieve a large scale shift in purchasing habits within the five-year timeframe suggested by the researchers.

An alternative option revealed through the interview process would be to increase the use of under-utilised meat cuts in ready meals in order to improve carcass utilisation rates across the business (for example, using brown chicken thigh meat in ready meals, rather than breast meat).

REDUCING THE AMOUNT OF MEAT CONTAINED IN READY MEALS

Sales of ready meals in the UK (including Italian, Indian, English and Chinese cuisines) were worth £1.74 billion in 2010[69]. The market is characterised by high levels of new product development to produce new meal formats and product reformulation to reduce sugar, salt and trans-fats. Looking forward, the market for chilled ready meals is predicted to grow strongly as it competes with the dining out market. However, retailers may struggle to maintain price promotions, such as 'Dine in for£5', which consumers have become accustomed to[70].

A limited review of retailer website and in-store visits suggests that all retailers offer ready meal ranges at different price points, from value through to premium ranges. Many also offer healthier ranges or special diet ranges (e.g. gluten-free), to a greater or lesser extent. A limited review of ranges offered in selected stores suggests that the proportion of meat contained in a typical ready meal (a cottage pie) ranges from 16% to 35% of the ingredients (where prices range from £0.99 to £2.39)[71]. Retailer representatives explained that variance in meat content is a key indicator of quality (and therefore price point) of a given ready meal.

Outlook for reducing the proportion of meat contained in ready meals – the cottage pie

This section focuses on the feasibility of reducing the proportion of meat contained in ready meals to help shift social norms associated with recognised meal formats. The 'English' meal

[69] Keynote (2011) Ready meals. Market report plus.
[70] Keynote (2011) Ready meals. Market report plus.
[71] Based on a range of standard, own-branded ready meals (400g portions).

range is one of the largest sub-categories in the ready meal sector. It contains many meat-based options, including the cottage pie[72].

Retail representatives were asked to consider the commercial opportunities and barriers associated with reducing the proportion of minced beef contained in a cottage pie ready meal, from an estimated average of 25% to 12% by 2020. The following commercial opportunities were identified:

- Meat is the most expensive component of many ready meals. As such, retail representatives explained that they are continually striving to optimise the proportion of meat these meals contain. Nevertheless, they described it as a balancing act between the need to maximise margins and meet consumer expectations. Looking forward many retailers acknowledge the pressure to reduce amount of meat contained in ready meals, as the cost of meat increases and retail buyers seek to maintain profit margins. One retail representative remarked: "This is a classic area for research and development."

- Some retailers also saw the potential of ready meals with reduced meat content appealing to the growing number of meat reducers in the population.

- In addition, some identified possible health benefits of reducing the proportion of meat in ready meals, if replaced with vegetable-based ingredients. Nevertheless many disputed whether consumers would be willing to accept this change and some argued that health outcomes would be strongly dependent on the ingredients used in cottage pies to replace meat.

- Additionally, the researchers note that reduced meat content in ready meals may enable retailers to continue the current pattern of price discounting in the ready meal market to more effectively compete with the eating out market in future.

- Finally, retail representatives saw few supply chain barriers to the reformulation of ready meals containing less meat, as they explained how manufacturers and new product development teams were continually tweaking ready meal recipes. However, academic and retail representatives were keen to emphasise the importance of considering the implications of changes for carcass utilisation and assessing the broader sustainability impacts of substituting meat with other ingredients.

The following barriers or challenges were also identified:

- Key challenges associated with this intervention relate to both the scale and speed of change proposed from a consumer perspective, due to clearly defined consumer preferences and purchasing habits in this market. Retail representatives emphasised that there's currently very limited customer demand for, or acceptance of, ready meals containing less meat. A lack of trust in retailers to provide suitable portion sizes was felt to accentuate this challenge[73]. One interviewee explained that they had considered this option but they were prevented from progressing with the idea because "we have a duty to look at products that will sell – it would be nice to do but we wouldn't be able to prove the business case"[74].

- Thus, one retail representative described the initiative as "a long hard slog" to change behaviour that would be negatively perceived by consumers. The experience of salt reduction in ready meals was cited to support this view. When retailers set out to reduce the amount of salt contained in composite dishes consumers reacted very negatively. In the end a much longer process of reduction was required, spanning almost 15 years, when salt was slowly and incrementally reduced and replaced with substitute flavouring.

- Finally, a concern was raised by several interviewees that consumers would supplement meat in their diet on other meal occasions or formats, thus leading to no reduction in

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[72] Keynote (2011) Ready meals. Market report plus.

[73] IGD (2009) *Portion size: Understanding the consumer perspective.* Working group report.

[74] Retail interview insight (anonymous).

consumption overall. They stressed the need for widespread support and actions from other sectors to reinforce the acceleration of meat reduction in the diet.

In general, the scale and pace of change suggested by this initiative was not seen to be achievable by those interviewed. Despite there being few technical or supply chain barriers, consumer expectations and lack of trust of retailers in respect to portion sizes were thought to be insurmountable. The most feasible route forward was seen to be a very slow incremental decrease, but even so some retailers felt this action would risk loss of sales for retailers.

REDUCING THE VOLUME OF DAIRY PRODUCTS CONSUMED

Around 13,000 million litres of raw milk are consumed annually in the UK, almost 80% of which is consumed in the form of liquid milk or cheese (2007 figures) [75]. The volume of milk consumed has been falling by 0.59% CAGR since the 1990s[76] but, despite this, dairy products are frequently enjoyed by the majority of the population[77].

A review of retailer websites suggests that advice given by retailers about the proportion of dairy products customers should consume varies. For example, information provided on Asda's website suggests that customers should eat three servings of dairy products a day, which could include 'a large glass of milk (approx. 200ml serving), a small pot of yoghurt or a matchbox size piece of hard cheese'[78], whereas Marks and Spencer's website simply suggests '2 or 3 portions a day' of dairy products[79].

Furthermore a limited in-store search suggests that nutritional information provided on dairy products also varies. For example, Tesco provides nutritional information for milk products according to a 100ml serving, whereas Waitrose's milk products provide information according to a 200ml serving.

Outlook for reducing the proportion of dairy products consumed – focus on milk and cheese

This section explores the opportunities and barriers associated with retailers providing standardised information about the proportion of dairy products that should be consumed, and promoting this information on all dairy product packaging by 2020. Milk and cheese products were selected as a focus for discussion with retail representatives because they are pervasive, typically being enjoyed by the majority of people throughout the week.

The following commercial opportunities were identified:

- There would be no substantive technical issues associated with this initiative; steps to be taken would include the redesign of artwork for product labels and possibly the introduction of portion gauges on product packaging. It may also involve the development of associated communications campaigns and provision of information on retailer websites.

- Retail representatives suggested that the initiative would take only a matter of weeks to implement, although some suggested that the timing of packaging or labelling redesign is usually combined with broader product reformulations or launches.

- Some retailers suggested that it would be commercially positive to promote a 'three-a-day' dairy message to consumer groups (notably women) who are known to under-consume dairy products.

[75] MDC Datum. (2009) UK Milk Utilisation (online)

[76] MDC Datum. (2009) UK Milk Utilisation (online)

[77] Keynote (2008) Milk and Dairy Products.

[78] Milk and dairy products – Asda 'Health Matters' website http://health.asda.com/nutrition/food/milk-and-dairy-products.aspx; accessed 19 02 12).

[79] Balance of good health – Marks & Spencer website (http://health.marksandspencer.com/healthy-eating/balance-of-good-health; accessed 19 02 12).

Challenges and barriers were identified as follows:

- All interviewees agreed that government would need to provide clear portion-size guidance for dairy products before retailers could be expected to take steps to provide clear, standardised advice to customers.

- Some went further (both retail and academic representatives) by suggesting that latest scientific evidence suggests there are many health benefits of consuming dairy products which may be lost if this initiative resulted in consumers eating fewer dairy products. All those interviewed emphasised that the government should update dietary guidance for dairy products, based on the latest scientific evidence.

- All interviewees were cautious of the potential health issues related to a reduction in the amount of dairy products people consume. This is particularly an issue with respect to bone health among women and children.

- Many retail and academic representatives also emphasised that any action to reduce the amount of dairy products consumed would have a very detrimental impact on the economic sustainability of the dairy industry in the UK. Knock-on impacts for sustainability that were identified included negative impacts on biodiversity and landscape. Interviewees advised that strategies would need to be developed to minimise any adverse impacts on dairy producers and on the environment in the UK.

- Moreover, some of those interviewed suggested that a reduction in the consumption of dairy products may result in some consumers switching to substitute products, such as soya milk. They suggested that due diligence would be required to assess the sustainability impacts of this possible outcome.

- All retailers explained that their strategies for dairy are to maintain their market share in a slowly shrinking market. Therefore, they argued that it would not be in their interests to encourage consumers to eat fewer dairy products. Furthermore, a reduction in the proportion of dairy products consumed may also have a negative commercial impact on associated markets, such as breakfast cereals.

- Finally, many retail representatives emphasised that portion size labelling has been shown to be ineffective in the past as a means of changing consumption habits[80].

Overall, this initiative was not seen to be problematic from a technical point of view. However, a range of commercial disbenefits and broader sustainability concerns would prevent retailers taking action in the absence of a clear mandate from government on portion size guidance. An alternative approach, suggested by some retail representatives, would be for retailers to advocate a “better balance of dairy products”[81], rather than fewer dairy products overall. They explained that this would involve unilaterally encouraging consumers to eat more dairy products that are low in fat.

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[80] IGD (2009) *Portion size: Understanding the consumer perspective*. Working group report.

[81] Retail representative (anonymous).

The current quandary and proposed way forward

EXTENT OF CURRENT OPPORTUNITY FOR MAINSTREAMING INITIATIVES

This research has identified a range of current initiatives in the retail sector which broadly support the notion of more sustainable patterns of food consumption. Though quite limited at present, these initiatives demonstrate how future actions to promote sustainable diets might manifest themselves: either in the form of products with sustainability attributes; promotions of more sustainable choices; or the provision of information and advice for sustainable living.

Existing initiatives also serve to illustrate the rigorous process of problem definition and solution identification that retailers must undertake before sustainability initiatives can be launched in the marketplace – a process that can demand considerable time and investment above and beyond normal product development processes.

Current initiatives also act to demonstrate the importance of there being a convincing business case for retailers to act. Nevertheless the establishment of sustainable sourcing policies for fish has shown that when a shared vision for action can be identified between stakeholders – through the convergence of business needs, stakeholder interests and consumer preferences – significant changes in consumption patterns can be achieved through the retail sector.

In discussing the potential for developing a number of hypothetical initiatives with retail and academic representatives, a range of commercial opportunities and barriers were identified in considering the feasibility of taking them forward. All things considered, retail representatives argued that a number of barriers would currently prevent the development of all four case studies at the scale and in the timeframe suggested by the researchers.

Nevertheless, a broader opportunity for stakeholders to collectively drive the uptake of fruit and vegetables in a much wider range of meal formats and occasions was commonly identified as a priority area for focus by those consulted. More specifically, the following opportunities were uncovered:

- Promoting fruit and vegetables in a wider variety of formats, including frozen and tinned products.
- Increasing the provision of fresh fruit and vegetables in smaller/convenience stores.
- Increasing the proportion of fruit and vegetables contained in snacking/'on the go' products.
- Increasing the proportion of fruit and vegetables contained in composite dishes, such as ready meals.

Retail and academic representatives broadly agreed that a common agenda to drive uptake of fruit and vegetables in the retail sector would offer the following benefits:

- Commercial benefits for retailers and by acting to reverse the trend in declining fruit and vegetables consumption.
- Health benefits for consumers by boosting the proportion of fruit and vegetables eaten.
- Progression on an element of sustainable diets where there's widespread consensus between stakeholders of the benefits for people and the planet (albeit with concerns relating to the *type* of vegetables and *where* they are produced).
- No need to tell consumers that they *shouldn't* be eating certain food products.

Longer-term, however, the research has demonstrated that widespread action to promote and support sustainable diets in the retail sector is unlikely to be achieved in the absence of a universally agreed definition of a sustainable diet. In the absence of such consensus, one retail representative concluded that “there is no business case” for action.

All those consulted called for multi-party collaboration to navigate through the complex trade-offs between different axes of sustainability in defining a sustainable diet. In the meantime, retail representatives suggested that it would be unwise to engage consumers with the issue because “landed [on consumers] too soon and landed badly could set the debate back by years”[82].

WHAT SHOULD THE NEXT STEPS BE?

Much like the success of sustainable sourcing policies for fish, the authors argue that widespread action by retailers to increase consumption of fruit and vegetables is likely to be facilitated by the development of a collective vision and action plan. This plan could be embodied in the form of a multi-party responsibility deal, which could form an additional function of the Fruit and Vegetable Task Force, or sit alongside it, but which could form the basis of a panel or roadmap for promotion of sustainable diets in their totality in the future.

Ideally the action plan should be supported by government, by NGOs and by retailers alike – representing the full range of sustainability issues that would be addressed by influencing consumption behaviours with respect to fruit and vegetables. The plan could also be strengthened further by implicating the food service sector in the plan.

While any consumer-facing campaigns associated with action to increase consumption of fruit and vegetables need not focus directly on the sustainability implications of action, an initiative of this kind may provide ‘safe ground’ for introducing connections between health and other sustainability measures in the minds of consumers. Support from other food influencers, such as the media and celebrity chefs, could be sought to help raise the profile of the campaign.

RECOMMENDATIONS

The research findings strongly suggest that a number of barriers are preventing more widespread action by retailers to address sustainable diets at the current time:

- Reputational risks associated with providing consumers with advice and information about sustainable diets in the absence of a universal definition.

- Commercial disbenefits of shifting consumption patterns against the grain of consumer demand in the absence of policy requirements to act.

- Absence of market opportunities for developing more sustainable product lines because of limited consumer demand for such products.

- Danger of confusing or alienating consumers by engaging with them on the issue of sustainable diets too soon, in case there’s a need to reframe the issue at a later date in the face of emerging scientific evidence or political position on the issue.

Therefore, two challenges urgently need to be addressed by all stakeholders involved in dialogue about sustainable diets:

- To work quickly to establish a consensus-based definition of a sustainable diet.

- To accelerate any and all changes in consumer sentiment that would encourage and enable retailers to move forward quickly.

[82] Retail representative (anonymous).

Retailers, government, and non-governmental organisations are all implicated in these objectives. Specifically, the government should:

- Lead the development of a clear definition of a sustainable diet as a priority, in conjunction with other stakeholders, and convert it into specific dietary guidance.

- Evaluate the full suite of policy tools available to facilitate changes in consumption patterns and use this insight to outline specific policy objectives that implicate the business sector (including retail and food service).

- Identify policy measures to buffer negative industry impacts that might arise from wholesale changes in diets as a result of action by retailers and food service businesses.

To support these actions, NGOs should work to build consensus between government, retailers and other stakeholders by:

- Mapping competing discourses on sustainable diets and developing appropriate engagement strategies for different interested parties.

- Formulating a clear position on sustainable diets and building a united front with other interested parties to lobby government and the retail sector more effectively.

- Working with retailers to identify commercially viable solutions to sustainability issues.

- Involving other components of the food sector (notably food service) in discussions about what actions should be taken to relieve pressure on the retail sector.

- Building alliances with other food influencers, such as celebrity chefs and the media, to raise the profile of sustainable diets and reduce contradictory messaging.

Retailers also have a central role to play in:

- Monitoring and influencing consumer sentiment with respect to sustainable diets; and working with other stakeholders to do this.

- Actively participating in discussions about sustainable diet, rather than watching and waiting for others' views to emerge.

- Sharing their knowledge and experience of influencing consumption behaviours with respect to sustainability to inform the development of future policy interventions, including those that could affect the commercial viability of different options.

- Stimulating the development of new sustainability initiatives internally by raising the profile of the agenda across the business.

- Encouraging innovation among suppliers to develop a wider range of more sustainable product offerings.

The issue of retailers influencing consumers is, perhaps, the most challenging. In broad policy terms, consumer sovereignty remains paramount, at national and international level. Retailers are acutely conscious of the fact that, unless they keep their customers 'happy' then market share, profits and reputation can all suffer. Incremental change is, from such a perspective, the best that can be hoped for.

Conversely, retailers are in a unique position to shape the consumer experience, to control what is and what is not made available, to sell not just products but lifestyles. A very considerable responsibility rests on them. Individual consumers may 'want' an environmentally friendly option; governments and NGOs may hope for the same; but it is, in the end, retailers who are at the heart of the UK's food system. There may not yet be a 'business case' for sustainable diets that meets retailer requirements; but unless and until retailers make it straightforward for consumers to buy a sustainable diet, the prospects for radical change are limited.

Food in numbers

40%

of food planted worldwide is wasted, between harvest and kitchen

30%

of global biodiversity loss is attributable to livestock production, primarily through clearing land to grow animal feed

1/2

Half the world's population eat either too much or too little

30%

the proportion of UK greenhouse gas emissions generated by the food sector

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