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## **Review of evidence on consumer food-related behaviours that impact on sustainability: Executive Summary EVO541**

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## **Disclaimer**

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## Executive Summary

The primary aims of this project were to conduct a 12 week Rapid Evidence Assessment (REA) to:

- 1) critically assess and summarise the existing evidence surrounding (non-food-specific) food-related consumer behaviours impacting on sustainability;
- 2) explore the opportunities for increasing consumer uptake of (more) sustainable food-related behaviours (and practices);
- 3) Identify evidence gaps where further research may be required to inform the creation of a robust and actionable roadmap and project recommendations.

This work was designed to draw upon existing Defra work, namely the Food Synthesis Review (2009)<sup>1</sup>, and the on-going work conducted by the Green Food Project<sup>2</sup> (GFP). Currently, parallel GFP activity includes workstreams covering both dietary choices and consumer behaviour patterns in relation to the overall sustainability of the food system.

### Report:

The principal purpose of this report is to detail the findings of the 12 week REA review process. Within the report we outline suggested routes towards the more detailed development and subsequent delivery of a comprehensive roadmap which might catalyse more sustainable food-related practices. Evidence gaps for further research are highlighted.

### Scope:

This evidence review specifically addresses the topic of non-food-specific food-related behaviours. The focus is therefore on behaviours, rather than food-specific dietary choices. Whereas a study into sustainable diets might be concerned with the impacts of 'dietary' choice, e.g. meat vs. vegetarian ingredients, this research focuses on the sustainability of the food practice in isolation. For example, this study reviewed the evidence documenting the relative (social, environmental and economic) sustainability merits or demerits pertaining to the practice of in-home from scratch meal preparation and the consumption of fast food or pre-prepared ready meals.

In order to create workable project boundaries the following exclusions were agreed in collaboration with the Defra and Best Foot Forward project team: dietary (food item or category specific) choices, food waste and energy use.

## Methodological Processes

The research for this project was conducted in two phases.

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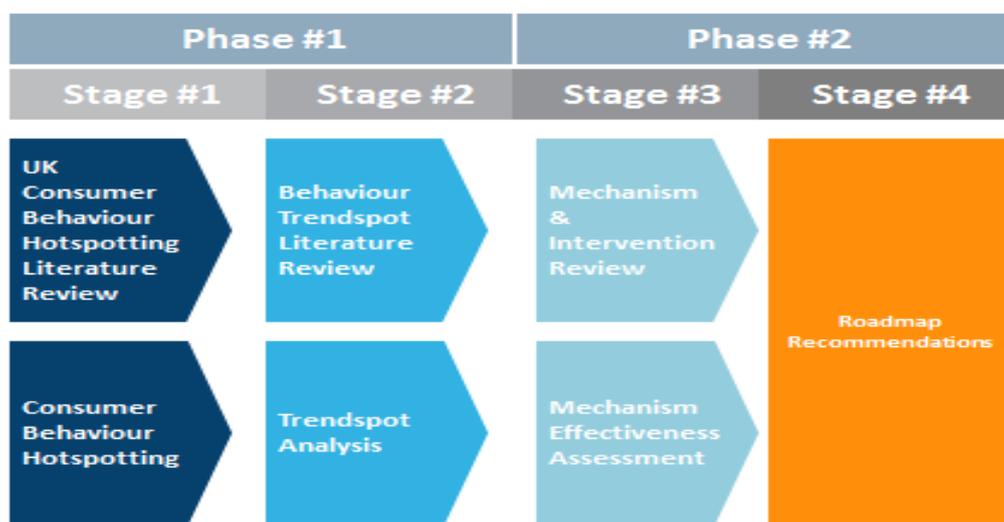
<sup>1</sup> This research builds on Defra's 2009 Food Synthesis Review which provides an overview of the factors driving consumer behaviours towards food. The project started from the basis of the Synthesis Review's finding that "food-related behaviour is very complex and requires an understanding of many different behaviours across all phases of consumption from purchase through to disposal. The generic evidence base on food choice is vast and stresses factors which interact and impact at individual, social, contextual and societal levels"

<sup>2</sup> The Green Food Project is a joint initiative between government and industry (food, farming and environmental) to find ways to increase food production while also improving the environment.

- **Phase one** provided an overview of the current consumer food behaviours landscape, the drivers for the current prevailing social norms, and the potential barriers to the mainstream adoption of ‘more’ sustainable food practices.
- **Phase two** assessed the practical tools and mechanisms for influencing behaviours and underlying barriers to change. Phase two produced an illustrative roadmap, designed to advance short-term mitigation strategies and longer-term consumer food behaviour, practice and attitudinal changes.

**Process and Theme identification:**

An initial systematic REA process was deployed over three phases in order to identify potential priority areas or themes for the project’s investigation. 296 sources were considered as priority literature sources within this process.



Based upon the results of Phase #1, i.e. the UK Consumer Behaviour Assessment Literature Review (and the noted project boundaries), six themes were identified for further research. Theme selection was determined firstly by the frequency of the theme occurrence, and secondly, (where applicable) via the Hotspotting<sup>3</sup> validation approach, which confirmed that the identified themes presented significant negative (a minimum of two or three impacts across social, environmental and/or economic criteria) impacts.

**Theme development**

The six themes highlighted in the initial literature review were categorised as either ‘macro’ or ‘key’ themes. Macro themes did not lend themselves to the hotspotting approach. However, they were selected on the basis of their primacy and frequency within the literature and for their evidenced cross-cut across and beyond (e.g. influence on waste) the key themes. These macro themes were:

<sup>3</sup> See Glossary of Terms

1. **Connection** - (or lack of) between consumers and food, in addition to food systems in general; and
2. **Value** - the dominant 'price and volume' lens through which food is valued.

The four key themes are:

1. Breakfast choices
2. Ready Meals (consumption patterns)
3. Fast Food (take-away and quick service restaurant (QSR) consumption patterns)
4. Cooking From Scratch (propensity<sup>4</sup>)

Defra's Food Synthesis Review concluded that food behaviour is often based upon irrational choice. Moreover, the food synthesis review concludes that individual food and food practice choices are also constrained by contextual factors, including what food is available, accessible and affordable, as well as what food and food practice is culturally perceived as 'normal' within society.

Following the theme selections, the Trendspots<sup>5</sup> methodological evaluation was deployed to identify the contextual factors and drivers which support the identified 'poor' behavioural norms. The behavioural drivers were assessed under the following criteria:

- **Access:** physical, psychological and financial drivers driving current behavioural trends and inhibitors to change.
- **Appeal:** prevailing, emerging or changing attitudes impacting current behavioural trends.
- **Awareness:** Education, knowledge and values/actions gaps concerning current behavioural trends.

### **Key Findings:**

There is a significant (and growing) body of evidence to suggest that UK consumer food behaviours are currently misaligned to the building and maintenance of a more sustainable food system. The prevailing trends show inter-connected social, health, environmental and economic challenges on both personal and national levels, with far-reaching implications.

Drivers for less sustainable behaviour range from physical systems of food provision and financial access, through to changing work and leisure patterns, education, evolved taste preferences and declining access to and celebration of food preparation and consumption. The commoditisation and de-prioritisation of food and food occasions mitigate against more sustainable UK food lifestyles, food practices, dietary choices and long-term food behaviours and attitudes.

### **Key findings by grouped themes**

#### **Connections and Value**

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<sup>4</sup> 'Cooking From Scratch' is defined as the preparation of food using raw ingredients either from existing knowledge, received wisdom or with the use of recipe books or cards.

<sup>5</sup> See Glossary of Terms

The research shows that the issues prevalent within the macro themes of Connections (discussed in Section three of the final report) and Value (discussed in section four of the final report) heavily interlink.

The evidence suggests that unless these macro themes shift, any changes in consumer food-related behaviours facilitated by changes to more tactical interventions around, for example, access and infrastructure, may fail to endure.

A consumer, who has come to value food solely or primarily on the basis of its cost and volume, will typically be less inclined to ask questions about, or make demands in relation to, food quality or wider sustainability credentials. Whilst a consumer might, under research conditions, consider themselves concerned with a narrow (e.g. human health and nutrition) or broad (environmental concern) sustainability criteria, their decision making frequently demonstrates a significant 'value/action gap' in respect of food practices and food choices (Kollmuss et al, 2002, Maio et al, 2007, Webster et al, 2006).

Supporting the current disconnection from and narrow lens of valuing food, sits a host of complex factors: These include increased urban living, changes from a land and manufacturing-based to a desk-based work economy, food retail norms around price and multi-buy product promotions, and the rise of alternative (to growing and cooking) leisure pursuits, such as multi-media and digital device leisure time prioritisation.

Increasing connections to and engagement with food, over time, typically lends itself to more discerning decision-making across multiple metrics. Choices made with consideration of physical and mental health benefits, local economy, and animal and environmental welfare are more likely to occur where a consumer views food beyond its role as a commodity purchase.

### **Barriers and approaches to change**

Barriers to change are considerable and any enduring change to social norms will take time to realise. However, the multiple levers of change (Govt, business and civil society), working together in pursuit of a shared goal can deliver significant short-term practice, longer-term behaviour and attitude change which can lead toward mainstream re-prioritisation of, and connection to food.

### **Breakfast:**

As a nation the UK ranks poorly (compared to EU counterparts) in the numbers of adults and children (35%) routinely skipping breakfast (Kraft, 2010). Of those who do consume a regular breakfast, the breakfast choices are often high impact across a range of environmental, social, health and economic parameters.

Poor or skipped breakfasts are evidenced to lead to a range of environmental impacts and significant impacts in the areas of mental and physical wellbeing, education and workplace productivity, and resultant social and economic mobility.

## **Barriers and approaches to change**

Barriers to change lie across all areas of physical, psychological and financial access in addition to the areas of awareness and appeal. Approaches to change would need to work towards improving the systems of provision through schools and workplace environments, as well as through the promotion of more 'positive' and convenient breakfast choice product offerings. The 'on-the-go' breakfast category represents a significant opportunity to deliver new product innovations designed to better meet the desired social, environmental and economic outcomes. The commercial sector, NGOs, charities and policy makers all have a role to play in removing the access barriers, improving awareness and generating appeal for a new and more sustainable breakfast norm.

## **Ready Meals, Fast Food and Cooking from Scratch**

The key findings across these grouped themes are 1) the rise in the purchase and consumption of pre-prepared meals and fast foods and 2) a decline in the number of UK adults skilled, willing and frequently cooking from scratch within the home, as evidenced by a selection of key statistics below:

- One in six people say that they cannot cook (Good Food, 2011).
- 57% say that they do not consider food important compared to other social and cultural activities they wish to engage in on a daily basis (Blythman, 2006).

A rise in the consumption of pre-prepared or fast foods and the decline in home cooking is not necessarily synonymous with poor health or high environmental impact. The pre-prepared foods category is capable of delivering favourable environmental and social outcomes e.g. food production standards; waste and portion control can be controlled within the value chain. However, the evidence suggests that a number of mainstream choices are still contributing to poor social (particularly health) wellbeing and significant environmental impacts. There are also potential knock-on economic impacts, including public health spending. Furthermore, softer measures of societal and wider wellbeing impacts, such as the demise in social eating, and cooking as a shared or solo pastime are frequently evidenced impacts.

## **Barriers and approaches to change**

Key barriers to more sustainable food practices with respect to the three themes of Ready Meals, Fast Food and Cooking from Scratch are evidenced across all areas of physical, psychological and financial access, as well as in the areas of awareness and appeal. A growing demand and expectation for the availability of low-cost convenience foods, and a demonstrable reluctance on the part of some mainstream food manufacturers and retailers to choice edit or choice limit beyond some very baseline targets combine to perpetuate the multiple high impacts of the pre-prepared meal sector.

Furthermore, perceptions of access to raw ingredients, the relative costs and difficulty of home cooking, coupled with the well-evidenced decline in basic cooking skills, all combine to reinforce a 'no cook' culture. This serves to perpetuate social norms which deliver a range of social, environmental and economic impacts that are incongruous to more sustainable food behaviours or supporting systems.

Approaches to change would need to consider ways in which to re-balance the typical UK food behaviour towards access to and appeal of a more 'blended social norm' that encompasses demand for, and supply of, more sustainable (social, environmental) pre-prepared meal choices AND advocacy and enablement of a return to basic cooking skills.

## **Interventions Review**

The Phase #2 evidence highlighted a wide body of interventions which may be considered and examined further to ascertain relative abilities to deliver, at scale, more sustainable food behaviours.

Many of the interventions reviewed displayed a linear view i.e. tackling breakfast in isolation from wider food practices. Furthermore, many lacked clear, coherent and consistent messages, and there was often a lack of standard evaluation criteria with which to assess their relative effectiveness.

Beyond a small number of strong examples such as the '5-a-day' campaign, there lies an array of complex and sometimes contradictory messaging as to what is 'good' or 'better'. A plethora of messages around food miles, local food, organic, Fairtrade etc. have generated a degree of market place confusion and consumer dissonance.

Whilst small scale targeted interventions can create important and often very immediate shifts in behaviour at a grass roots level, these smaller scale tactical interventions do not necessarily lead to widespread and sustained behaviour change.

## **Recommendations**

The macro themes of **Value** and **Connection** point towards a need to look in parallel at both tactical grass roots interventions by food practice and a longer-term cohesive map of cross-theme interventions designed to tackle multi-demographic, multi-food-practice attitudinal and behavioural shifts.

These interventions should seek to convene business, retail and NGO/charity partners to create 'joined-up' approaches with shared directions or visions of what 'good' might look like across social, environmental and economic long-term interest.

The Illustrative Roadmap provides a guide as to how further work might be undertaken in order to drive positive change and rebalance unsustainable food behaviours (see Section 9.3 of the final report for more information).

## **Evidence gaps, trade-offs and limitations of the study**

A number of evidence gaps have been detailed within the main report, with recommendations for further study. The study was limited by time and scope and the literature cannot be considered to be comprehensive in its analysis of behaviours, drivers or trends.

It is important that future work addresses these gaps and diversifies the scope of the food related behaviour topics in consideration. Currently food behaviours are viewed through a

relatively narrow lens, with limited context in respect of wider attitudinal dispositions, quantitative impacts, behavioural assessment models and systems thinking.

Further consideration should be given to the potential for unintended consequences or rebound effects which might result from the deployment of interventions.

In certain cases, personal, national, social, governmental, environmental and economic interests will be in conflict and the short, medium or long-term view taken will necessarily influence the degree to which any given party is deemed to be a beneficiary, or to suffer detriment.

For the project to fully and comprehensively meet the project aims it would be necessary to create and agree a **definitive vision** of what these 'more sustainable food-related behaviours' are. This was not possible within the 12 week time frame using a secondary evidence base.

To meaningfully achieve this definitive vision it would be necessary to develop and deploy universally agreed criteria for evaluation and weighting across sustainability metrics. Further weightings would need to be developed and applied for short vs. medium vs. long-term priority of each metric, relative to another.