

# Public Understanding of Sustainable Consumption of Food

A research report completed for the Department for Environment, Food and Rural Affairs by Opinion Leader

November 2007



# **Public Understanding of Sustainable Consumption of Food**

## **Final Report to the Department for Environment Food and Rural Affairs**

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## TABLE OF CONTENTS

<b>Executive Summary .....</b>	<b>i</b>
<b>1 Introduction .....</b>	<b>6</b>
Background .....	6
Objectives.....	7
<b>2 Methodology.....</b>	<b>10</b>
Approach .....	10
Sample .....	11
<b>3 Current influences on purchasing decisions .....</b>	<b>15</b>
Introduction.....	15
Current influences on purchasing decisions .....	16
Where participants shop .....	21
Spontaneous consideration of sustainability.....	22
<b>4 Aspirations around food.....</b>	<b>25</b>
Introduction.....	26
Food aspirations.....	26
Perceptions of 'good' food.....	29
<b>5 Sustainability relating to food.....</b>	<b>32</b>
Introduction.....	32
Comfortable with the concept.....	33
A limited interpretation .....	34
Struggling to engage .....	34
Location cuts across the segments.....	35
<b>6 Reactions to the behaviour goals.....</b>	<b>36</b>
Introduction.....	36
Switching to a diet with lower environmental impacts.....	38
Wasting less food.....	40
Switching to more seasonal and local food.....	42
Increase purchase of organic or certified / assured food and drink.....	44
Buy more certified / assured fish and fish products .....	46
Impact of information on behaviour.....	47
<b>7 Perceptions of responsibility .....</b>	<b>48</b>
Introduction.....	49
Personal responsibility .....	50
The role for business.....	53
The role for Government.....	58
<b>8 Conclusions and recommendations.....</b>	<b>60</b>
Switching to a diet with lower environmental and social impacts .....	60
Wasting less food in the home.....	61
Switching to more seasonal and local food.....	61
Increase purchase of organic or certified / assured food and drink.....	62
Buy more certified / assured fish and fish products .....	62
Recommendations for further research .....	63
<b>Annex A: Recruitment Questionnaire - Greens .....</b>	<b>i</b>
<b>Annex B: Discussion guide.....</b>	<b>vii</b>

<b>Annex C: Case studies and handouts .....</b>	<b>11</b>
<b>Annex D: Questionnaire for follow up telephone interviews.....</b>	<b>21</b>
<b>Annex E: Pre-task shopping diary .....</b>	<b>94</b>

## Glossary

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Defra	Department for Environment, Food and Rural Affairs
BME	Black and minority ethnic

# Executive Summary

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## Action list

Based on the findings from this research project we recommend that the immediate priorities for Defra should be to:

1. Intervene with businesses to ensure that sustainable food choices are available, realistic, options for consumers
2. Investigate further the existing levers in to sustainability which exist – primarily health and taste – and use these to achieve the desired behaviour changes
3. Develop unambiguous life-cycle analysis of products to help inform consumer choices

To see the full list of conclusions and recommendations please see Chapter 8 (pages 60-64).

## Introduction

Across the EU25, food and drink production and consumption is one of the highest contributors to environmental impact: about one third of households' total environmental impacts can be related to food and drink consumption (Danish EPA, 2002)<sup>1</sup>. However, the largest impact is indirect (i.e. not under the control of the consumer) as it is incurred during food production and processing. Direct negative environmental effects of food and drink consumption are on an upward trend (i.e. travel to shops, storing and cooking, waste) (EIPRO, 2005)<sup>2</sup>.

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<sup>1</sup> Danish Environmental Protection Agency (2002)

[www.mst.dk/default.asp?Sub=http://www.mst.dk/udgiv/publikationer/2002/87-7972-094-3/html/](http://www.mst.dk/default.asp?Sub=http://www.mst.dk/udgiv/publikationer/2002/87-7972-094-3/html/).

<sup>2</sup> European Environment Agency (2005), Household Consumption and the Environment. EEA Report No 11/2005. Available from [www.eea.eu/int/enquiries](http://www.eea.eu/int/enquiries)

One key element in a household's impact on climate change is food. In order to address this impact, Defra have identified five key behaviour goals:

- Switching to a diet with lower environmental and social impacts
- Wasting less food in the home
- Avoid fish from uncertified or unsustainable stocks; buy certified fish
- Switching to more seasonal and local food
- Increasing consumption of organic or certified / assured food and drink (including Fairtrade)

To help inform the development of a pro-environmental behaviour strategy, Defra commissioned a programme of qualitative research projects; this project about people's response to sustainable food consisted of 14 two hour group discussions and a series of follow up telephone interviews. The sample was segmented using Defra's environmental attitudes and values segmentation, overlaid with demographic criteria. The groups were conducted across seven locations around England, including both urban and rural locations.

The discussions were structured to enable broad discussion about food purchasing behaviour and aspirations before the topic of sustainable food was introduced. The behaviour goals were explored both directly and indirectly and participants were presented with information on product and consumption lifecycle impacts as part of the discussion.

## **Summary of main findings**

The way that participants purchase food is a complex process involving many influencing factors, including convenience, cost, health, habit, offers, taste and availability. Similarly, participants' aspirations are not straightforward and often contradictory, influenced by three key drivers: health, quality and indulgence.

Sustainable consumption and production of food are not the kinds of issues which participants think about. A small minority of the more environmentally aware participants actively consider issues such as seasonality and supporting local farmers. However, this is not necessarily driven by a desire to

consume food sustainably – some prefer to purchase seasonally for taste reasons. As a result, participants' food purchasing is a difficult area in which to intervene to encourage more sustainable behaviour.

However, there are some routes into more sustainable food purchasing and consumption provided by current purchasing criteria and participants' future aspirations. For most participants, eating healthily is the primary link to sustainable food consumption. Participants aspire to eat more fresh food, more fruit and vegetables and more quality produce. This ties in with the behaviour goal of eating a lower impact diet.

In some instances, cost is a link to leading a sustainable diet in that it is associated with goals around wasting less food. On the other hand, however, cost is also a major barrier to purchasing more organic, certified and assured food products.

It emerged from the focus groups that providing participants with more information has both positive and negative impacts. In some instances, additional information actually disempowers participants by confusing them even further; whilst in others, it is effective at broadening interest and encouraging engagement. Effective information must provide a straight forward unambiguous message. It must not present the consumer with a series of debates and unanswered questions.

Of Defra's five behaviour goals, the options which receive the most positive response are those that require a change in purchasing habits rather than a change in people's diets. Participants are most open to changing their behaviour to waste less food and buy more seasonal and local food, immediately. There is also a willingness to buy more organic, certified or assured food and some commitment to increase the purchase of fish from certified stocks, but these have more niche appeal. Eating a lower impact diet is the least acceptable of the five goals.

There are some distinct differences between the different participant segments with regard to their ability and willingness to change their behaviour and their reactions to the behaviour goals. The participant segments most able and willing to change are 'Greens' and 'Consumers with a Conscience', whilst the 'Currently Constrained' participants although unable to change their behaviour, are highly willing and keen to do so. The least able and most

unwilling to change segments are 'Long Term Restricted' and 'Basic Contributors'. Whilst 'Wastage Focused' participants do have the means to alter their behaviour, but are unwilling to do so, apart from acting on the waste less food goal.

Geographical location also makes a difference to willingness to adopt more sustainable behaviour in terms of food. Participants in rural locations are more willing to consider changing their behaviour, and believe that they are more able to do so, than participants in urban and suburban locations. This could be due to more accessible local / seasonal food or simply being in closer touch with food production.

## **Implications and conclusions**

Based on the findings of this report we recommend:

- Using existing health and taste levers to achieve behaviour change
- Develop information based on life-cycle analysis (similar to the information contained in Annex C) to lay out all the impacts of wasting food
- Intervening with supermarkets to reduce offers which encourage increased purchasing
- Intervening with supermarkets to encourage them to prioritise stocking and promoting seasonal, local produce
- Intervening with supermarkets to make organic, certified and assured schemes clearly visible, accessible and cost-neutral
- Intervening with supermarkets to choice edit more thoroughly
- Intervening with supermarkets to promote quality meat and dairy products
  - focusing on quality over quantity
- Further supporting local outlets and markets for farm produce
- Accrediting organic, certified and assured schemes and promote them
- Considering means of improving the cost of certified options – or the provision of tax breaks

- Focusing on one certification scheme and explicitly promote this
- Intervening with suppliers / processors to ensure sustainable produce
- Promoting local fish
- Conducting further research with consumers to explore the individual behaviour goals in more depth, and in particular to develop and test possible communications messages or interventions, and explore the impact of the source of any messages e.g. directly from Government or indirectly from intermediaries such as supermarkets.

# 1 Introduction

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## Background

- 1.1 Across the EU25, food and drink production and consumption is one of the highest contributors to environmental impact: about one third of households' total environmental impacts can be related to food and drink consumption (Danish EPA, 2002)<sup>3</sup>.
- 1.2 The issue of food is therefore a critical one for Defra to address in order to achieve the commitment set out in the UK Sustainable Development Strategy to influence consumption patterns. It is clear that this area of consumption must be addressed in order to reduce consumption levels to what is required to achieve one planet living.
- 1.3 The Sustainable Consumption Roundtable was tasked by the government to provide advice on actions and policies to create a shift to more sustainable lifestyles. This was set out in their report, I Will If You Will. Using this report and evidence from the Sustainable Consumption and Production (SCP) evidence base, Defra have identified five potential goals:
  - Switching to a diet with lower environmental and social impacts
  - Wasting less food in the home
  - Avoid fish from uncertified or unsustainable stocks; buy certified fish
  - Switching to more seasonal and local food
  - Increasing consumption of organic or certified / assured food and drink (including Fairtrade)
- 1.4 The thinking on what action Defra should take is currently being developed, and will ultimately result in a considered pro-environment behaviour strategy covering five key areas, including food. In order to inform this strategy, Defra is putting together a robust and substantial evidence base. Defra commissioned Opinion Leader to carry out one of a programme of five

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<sup>3</sup> Danish Environmental Protection Agency (2002)

[www.mst.dk/default.asp?Sub=http://www.mst.dk/udgiv/publikationer/2002/87-7972-094-3/html/](http://www.mst.dk/default.asp?Sub=http://www.mst.dk/udgiv/publikationer/2002/87-7972-094-3/html/).

qualitative research projects into Public Understanding of Sustainable Food, which will form part of this evidence base. The other projects Defra is researching are:

- Public Understanding of Sustainable Transport
- Public Understanding of Sustainable Energy Use in the Home
- Public Understanding of Sustainable Finance and Investment
- Public Understanding of Sustainable Leisure and Tourism

1.5 Qualitative research was commissioned in order for Defra to understand where the public are now in relation to sustainable food, in terms of aspirations, expectations and understanding. Without this knowledge, there is a risk that behaviour change or communications initiatives could fail by making assumptions about what people know or are prepared to accept. Moreover, it is important for Defra to gather evidence on the impact of information and explicit discussion of behaviour change in order to understand the triggers and barriers which must be adopted or addressed.

1.6 This report summarises the key findings from the research project, with insights from the pre-task, discussion groups, and follow up phone calls.

## **Objectives**

1.7 The objectives of this research fell into two main areas: exploratory and reactive. Both between and within these areas, the order in which these objectives were addressed was important in order to ensure that spontaneous perceptions and aspirations were explored in detail before the introduction of sustainability as a focus for the discussion.

1.8 The exploratory objectives were:

- To unpack participant understanding of the concept of sustainable consumption and production of food (are any linkages made to One Planet Living; is there any understanding of different production methods?)
- To understand participant assumptions of 'good' food (Is sustainable food 'good' or are other issues more important; which issues determine what

people see as 'good' food, e.g. health, animal welfare, environmental impact of production?)

- To understand consumer aspirations with specific relationship to food (Given unlimited resources, what would they like to buy; how different is this from a 'picture of sustainable consumption and production of food'; is the environmental impact of production of importance to the public?)
- To understand consumer expectations of the role for government, retailers and producers in the supply of sustainable food
- To understand consumers' acceptance of the need, and ability, to consume in a sustainable way (what could they do; what would they be willing to do?)
- To identify possible differences in understanding, assumptions, aspirations and expectations according to varying demographics
- To inform future communication or behaviour change strategies

1.9 The reactive (or prompted) objectives were to understand:

- How participants respond to the idea of sustainable consumption of food, including levels of acceptability and barriers towards the five specific behaviour goals
- The impact of information
- Whether and how new information impacts on consumers
- Participants' views on whether and how the provision of information could influence food purchasing decisions, e.g. labelling schemes, provision of information on pack or elsewhere
- Responses to product-based case studies

1.10 There were also two overarching objectives which cut across the exploratory and responsive objectives:

- To identify differences in response amongst different groups, likely to be driven by Defra's segmentation
- To identify key insights which can inform communication and behaviour

change strategies

- 1.11 The structure of this report roughly follows the agenda that was followed during the discussion groups to address the above listed research questions
- Current influences on purchasing decisions
  - Aspirations around food
  - Understanding of sustainability in relation to food
  - Reactions to the behaviour goals
  - Perceptions of responsibility
- 1.12 Throughout this report we have drawn out any noticeable differences by audience type where they exist. Where differences are not highlighted this is because the views expressed are largely universal.

## 2 Methodology

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### Approach

- 2.1 To meet the stated objectives, Opinion Leader and Defra agreed that a two stage qualitative approach was most appropriate. For the first stage, 14 focus groups, each lasting for two hours, were conducted between 19 February and 5 March 2007. Before attending these groups, participants were asked to complete a shopping diary, noting the food items which they purchased over a seven day period leading up to the focus group, and the issues they consider when purchasing these items (see Annex E). The shopping diary was designed to encourage participants to think about their current food purchasing and consumption behaviours prior to the groups and ensured that participants' responses were grounded in the context of their current behaviour throughout discussions.
- 2.2 The groups were structured to explore participants' current shopping behaviour and food aspirations spontaneously before the topic of sustainable food was introduced. Participants discussed sustainable food spontaneously before being given some information on the lifecycle impacts of the production of some food types - milk, yogurt and tomatoes (see Annex C). This presented the impacts up to products arriving in store, and information on the impacts generated by consumption i.e. the impacts that occur from purchase to consumption and disposal. Defra's five behaviour goals around sustainable food were explored both implicitly through discussion of participants' food aspirations and explicitly during the discussion on sustainable food. Perceptions of responsibility for sustainable food consumption were also discussed. The full agenda and stimulus materials are included in Appendices B and C.
- 2.3 For the second stage, 82 'blind' follow up telephone interviews were made two weeks after the focus groups were conducted (see Annex D for details of questionnaire). These interviews were intended to assess how well participants had retained the information and ideas which they had been exposed to during the groups. The surprise element of these interviews avoided participants exaggerating their behaviour, which they might have

done during planned subsequent research. They also allowed for a closer understanding of real changes in perceptions or attitudes, as well as identifying the types of information participants had remembered and are likely to be trigger-type concerns.

- 2.4 Given the complexity of the data generated, the need to conduct analysis by segment, and the need to ensure comparability of data across the wider research programme, a grounded approach to the study was adopted. Extensive grid analysis from the transcripts of the groups was conducted to allow the development of themes across the different audience segments, whilst highlighting any differences between them.
- 2.5 It is important to note however that the findings presented are based on qualitative research and are therefore not intended to be representative of the population as a whole. Instead, they are designed to give valuable insight and understanding to the subject by the considered responses of members of the public. It should be remembered that qualitative research does not allow quantifiable conclusions to be drawn (e.g. about the extent to which something is happening or percentages of participants who have certain attitudes and opinions. Qualitative research is designed to be illustrative, rather than providing statistically representative data.

## **Sample**

- 2.6 The sample was based on Defra's environmental attitudes and values segmentation model. Six segments were covered:
- Greens
    - o Highly active and pro-active segment, but greater knowledge for certain behaviours would increase their range of activities as, unlike other segments, they are less likely to see a threshold to their green behaviours.
  - Consumers with a conscience
    - o This group has potential to be greener through the instigation of 'guilt' about their current contribution as they know that they exhibit both positive and negative behaviours.
  - Wastage focused

- This group has relatively high current activity in the areas they care about, i.e. waste (committed to recycling, etc). There is potential to increase their behaviour, but given their focus on value, much of it appears to be in areas of financial savings and benefits in the home.
- Currently constrained
  - An important group to target early as there is much warmth towards increasing green behaviour in the future and they consider it aspirational. However, as they change life stage and earn more money, they are also at high risk of reducing their overall contribution. Financial saving is a key motivator.
- Long term restricted
  - Given the restricted circumstances in which this group lives there is little opportunity amongst this group, but their relative contribution tends to be quite good by default as they live economically. Financial savings are the only real motivator to increasing behaviour further.
- Basic contributors
  - This group is less open to doing much more currently as they feel they are doing enough and what is required of them. However, sensitivity to social approval means that this level of activity is not sufficient relative to others is a possible approach for encouraging greener behaviour.

2.7 The 'Disinterested' segment was excluded on the basis that they are not the key audience for immediate Defra interventions or communications around sustainable food: a separate campaign and initiative will be developed to take on board the complex disconnect between these people's views and the environment.

2.8 The segments were defined using a series of attitudinal statements taken from previous qualitative research commissioned by Defra. Demographic criteria were overlaid based on feedback from the previous research. Details of how each group was defined and recruited are shown in table 1 below,

linked to segments, and an example recruitment questionnaire is appended to this document (see Annex A).

**Table1:**

	Greens	Consumers with a conscience	Wastage focused	Basic contributors	Currently constrained	Long-term restricted
<b>Age</b>	35+	35+	45+	30-50	Under 30	30-50
<b>Gender</b>	2-3 men	2-3 men	2-3 men	2-3 men	2-3 men	2-3 men
<b>SEG</b>	BC1C2	ABC1	BC1C2	C1C2D	ABC1 – to include at least 2 students	C2DE – to include at least 2 unemployed
<b>Tenure</b>	At least half home owners	At least half home owners	Not important	Not important	Rent / live with parents / in shared accommodation	Rent – half to rent from council or housing association
<b>Attitudes to environment</b>	Environmental issues are a day to day concern	Concerned about the environment and aspire to be more green	Avoid waste but this is driven by cost rather than environmentalism – environment not a top of mind concern	Environment is not a key concern	Environmental issues are a concern; aspire to be more green in future	Environment is not a key concern due to lack of awareness
<b>Perceptions of responsibility</b>	Feel individually responsible for their own impact on environment	Feel individually responsible but personal needs are more important	Sense of personal responsibility	Sceptical about the relative impact consumers have vs. business and government	Sense of personal responsibility	Little sense of personal responsibility
<b>Future focus</b>	Very concerned about long term global future	Some concern about long term global future	Lack of future focus – very traditionalist	Do not think about long term future of the planet	Currently focused in the present	Very focused in the present
<b>Ability to take action</b>	No barriers	Personal needs conflict with environmental aspirations	Lack of broader environmental awareness limits actions. Cost is a perceived barrier	Scepticism; perceived lack of opportunity to make a difference	Current circumstances are barrier to taking action	Time and money are constraints

2.9 The groups were conducted in seven locations around England, chosen to ensure a good geographical spread, and coverage of urban, suburban and rural locations. Locations were also checked to ensure that there was a

choice of supermarkets available and, in some areas, farmers markets.

2.10 The full sample breakdown can be seen below:

**Table 2:**

Segment	Number of groups	Location 1	Location 2	Location 3
'Greens'	2	Sutton Coldfield	North London	
'Consumers with a Conscience'	3	Nottingham	Farnham	Cheddar
'Wastage Focused'	3	York	Farnham	Cheddar
'Currently Constrained'	2	Leeds	Sutton Coldfield	
'Long-term Restricted'	2	York	Nottingham	
'Basic Contributors'	2	Leeds	North London	

2.11 Details of the supermarkets in each location are as follows:

**Table 3:**

Region	Location	Supermarket provision
North	Leeds (Alwoodley)	Sainsbury's, Asda, Tesco
	Nether Poppleton, Outside York	Sainsbury's, Morrisons, Tesco Farmers' market
Midlands	Birmingham (Sutton Coldfield)	Tesco, Sainsbury's, Waitrose, Asda
	Nottingham (Wollaton and Beeston)	Sainsbury's, Asda, Tesco, Co-op Farmers' market
South East	Farnham, Surrey	Sainsbury's, Waitrose, Tesco, Asda, M&S Farmers' market
	North London (Winchmore Hill)	Sainsbury's, Morrisons, Asda, M&S, Tesco, Waitrose
South West	Cheddar	Budgens, Tesco, Asda, Sainsbury's, Morrisons Farmers' market

N.B. Farmers markets taken from list of "certified farmers markets"; there may be others.

### 3 **Current influences on purchasing decisions**

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#### **Chapter summary**

This chapter summarises the findings from the initial discussion session in each of the focus groups. In this session participants' current shopping habits were discussed in order to uncover the range of existing influences on their purchasing decisions and the reasons why participants shop in particular outlets.

The structure of this chapter is as follows:

- Introduction
- Current influences on purchasing decisions
- Where participants shop
- Spontaneous consideration of sustainability
- Implications for Defra

The implications for Defra arising from this discussion session are:

- Participant purchasing habits are complex. Many different factors currently influence the way that food is purchased. Finding a way to tap into these existing set of influences is key to successful behaviour change.
- Health, taste and the desire to eat a varied diet provide the key links in
- Supporting local farmers resonates with some participants and provides a secondary link, as does fact that seasonal goods are often cheaper than goods which are out of season

## **Introduction**

- 3.1 This section documents the analyses of the findings from the focus groups covering all the main points of discussion (see Annex B for full discussion guide). Participants were invited to talk about what factors currently influence their purchasing decisions and then what sorts of food they aspire to eat. The discussion developed to explore participants' current understanding of the concept of sustainable food before the five behaviour goals were outlined and the viability of each debated. Finally, participants considered who it was that they saw as most responsible for bringing about the necessary change to facilitate more sustainable consumption of food.

## **Current influences on purchasing decisions**

- 3.2 A range of key factors influence the way participants currently buy food and provide the context for discussions around future behaviour. These factors influence both what participants choose to purchase, and where they go to purchase it.
- Convenience
  - Cost
  - Healthy Eating
  - Habit
  - Offers
  - Taste and pester power
  - Quality
  - Availability
  - Variety
  - Packaging

- Where food comes from
- Where consumers shop

### **Convenience**

- 3.3 Many participants favour the convenience of ready meals and easy-to-prepare foods which do not place demands on their time. This is the case across the segments and lifestages, especially for those in full time work and those with families who are often preparing meals for both adults and children in the household.

*“I cook differently at different times of the week, but during the week I tend to do quick things, pasta meals and not so much meat, I do more meat at the weekend and bigger meals I suppose more at the weekend as well.”*

Female, London, ‘Basic Contributors’

*“You don't always think about it at that time when you want to do something. You've had a long day and you just want to go home... it's easy to just either go and get something from the shop or somewhere else.”*

Male, London, ‘Greens’

### **Cost**

- 3.4 Cost is an influencing factor which emerged as a key theme for participants across all segments. However, participants from the ‘Basic Contributor’, ‘Long Term Restricted’ and ‘Currently Constrained’ segments say that affordability is one of their primary influences when purchasing food.

*“Money would dictate that if there was a difference in price then that would have a greater impact than the environment. Unfortunately, that is the truth. In an ideal world, it wouldn't, but it does.”*

Female, Birmingham, ‘Currently constrained’

### **Healthy eating**

- 3.5 Many participants are conscious of the need to eat and maintain a balanced diet, which leads to their purchasing more healthy options. Health is an

important aspiration - trying to be healthy when deciding what food to buy is mentioned by most of the audience segments. Many participants claim that health is foremost in their minds when purchasing food, yet others believe that whilst being healthy is important, it is cost which is their primary consideration. However, all participants are increasingly aware of the need to eat a balanced diet, and to this effect, initiatives such as the traffic light system of food labelling are seen as a helpful tool when purchasing given its simplicity and its place on the front of packaging. Eating healthily is a particular priority for parents across all segments who seek to ensure that their children have a balanced diet, including healthy options.

*“Although price is the main thing really, we do eat healthily – we eat an awful lot of vegetables.”*

Female, Cheddar, ‘Wastage Focused’

*“Health and quality, yeah, I think they go together really don’t they?”*

Female, Leeds, ‘Consumers with a Conscience’

### **Habit**

- 3.6 Some participants buy foods according to their routine eating of certain set meals, or see some foods which they buy as essentials which they always have in their homes. Supermarket shopping in particular often follows a routine and many participants buy similar products each time they do their main weekly, fortnightly or monthly shop.

*“More or less my shopping trolley's the same unless there's a special offer. I do miss out a lot because I don't go round the supermarket. I just know where to go.”*

Female, London, ‘Greens’

*“Because I just go up and down the aisles, I end up picking mainly the same stuff. There is that sort of brand loyalty and just stuff that you know you like – easy to get in and easy to prepare and all of those things.”*

Male, London, ‘Basic Contributors’

## **Offers**

- 3.7 Participants say that they are often heavily influenced by offers on food available in supermarkets. Buy one, get one free offers are especially attractive to those participants with less income to spare, but the appeal of foods on special offer or discount applies across all segments.

*“I shop around looking for bargains basically. If I hear someone saying at work someone has got a bargain on with three for two or a BOGOF on something I use then I’ll go there.”*

Female, York, ‘Long Term Restricted’

*“If there is a special offer...you normally wouldn’t have that unless it is on special offer, I’ll give it a go and if it’s promoted that week, I might have a go at that.”*

Male, London, ‘Basic Contributors’

## **Taste and pester power**

- 3.8 Taste is an important consideration for many participants, whose purchasing decisions are partly determined by what they and their family like and do not like to eat. Linked to taste, parents cite the pester power of children to buy certain foods as a major purchasing motivation. If children are present during the shop, they can exert direct influence over the foods that participants buy, but even if they are not physically present, parents are often considering the wants of their children when choosing what foods to buy.

*“Taste - if you tried it before and you like the taste of it you buy it.”*

Male, Nottingham, ‘Long Term Restricted’

*“Ease of knowing what to cook and what the children are going to eat and a bit of cost as well.”*

Female, Cheddar ‘Consumers with a conscience’

- 3.9 For some participants, a desire to buy the best tasting food can also lead to seasonal purchasing because of a perception that foods in season taste better.

*Female 1: "Things like runner beans I think you need to buy them in season because they're all sort of stringy otherwise, aren't they?"*

*Female 2: "That's right. I think they taste better."*

*Female 3: "I agree. It's good to choose it seasonally, really."*

London, 'Greens'

### **Quality**

- 3.10 Also linked to taste, the perceived quality of produce is a concern to some participants and influences their purchasing habits. This is a particular driver for the more affluent segments, particularly 'Consumers with a Conscience' who are more able and willing to spend more money on what they perceive to be higher quality food.

*"I go to the butchers sometimes and that always looked nicer... It is a bit more expensive but I just found I was spending less anyway because I wasn't getting so much rubbish food."*

Female, London, 'Greens'

### **Availability**

- 3.11 The availability of foods in local supermarkets and other shops is a further influencing factor to participants who respond to what is in stock in the places in which they shop. Participants in rural areas were more likely to have access to locally produced, seasonal foods through farmers shops and markets.

### **Variety**

- 3.12 The desire to eat a diet rich in a variety of produce is a further influencing factor for some participants, who like to ensure that they are not always eating the same sorts of foods. Supermarkets play a role in enabling participants to choose a variety of foods, and many actively use offers as a way of varying their shopping and diets. Some participants are also swayed by the novelty of trying, or experimenting, with new foods, but this is a relatively minor influencing factor.

*"I do change vegetables because I get bored with the same vegetables, like*

*for instance it's always carrots, broccoli and potatoes and this year we've just tried to change that a bit. So we're having more rice and noodles and just throwing in some more beans, you know, kidney beans and the cannellini beans and things like that."*

Female, London, 'Greens'

### **Packaging**

- 3.13 Packaging is not a major issue for participants, who say that they actively try to avoid heavily packaged food when shopping.

*"The amount of packaging influences my decision quite a bit, because they are in plastic, in plastic, in plastic. You know three times wrapped bananas or fruit and veg or whatever – that would influence me."*

Female, Cheddar, 'Wastage Focused'

### **Where food comes from**

- 3.14 The source of food is also a concern only for the more environmentally conscious participants, either bound up with supporting local farmers and the economy, desire to buy seasonal food for better taste, or a wish to minimise 'food miles'.

*"I bought a bottle of water from Canada the other day... it's not good, though, is it, when you can buy food and drink that's British?"*

Female, Farnham, 'Wastage Focused'

### **Where participants shop**

- 3.15 In most cases, participants carry out the bulk of their shopping in a supermarket supplemented by top-up excursions to local shops. Some participants have a loyalty to one supermarket, whereas others will shop at different ones; but mostly, participants go to their nearest. There are some exceptions to this, with some participants prepared to travel further for their preference, generally owing to price, although how participants rate that supermarket's food also plays a role.

*"I've found I tend to go to Aldi because I like the prices and the quality is quite good but I have found that like the fruit and veg at... is lovely and I'm eating*

*quite a healthy diet at the moment, so I've been going there but I go more or less everywhere."*

Female, York, 'Long Term Restricted'

- 3.16 Some participants segments shop at a range of different food retailers for specific or specialist produce. These segments are primarily 'Greens', 'Consumers with a Conscience' and participants living in rural areas where such outlets are more easily accessed. These other sources include farmers markets for meat, fish, fresh fruit, local and seasonal fare. Several participants visit butchers and fishmongers for quality cuts of fresh produce, and some participants take delivery of organic vegetable boxes. In terms of speciality shops, participants go to health food retailers, or Chinese or Indian supermarkets for more particular ingredients.

*"I use the local butcher – well I say, local, it's about a mile away, for a joint on Sunday. I mean, I get it on Saturday, sort of thing; and occasionally I pop in in the week depending on the time factor, really."*

Female, London, 'Greens'

*"Where I live we've got a fabulous butcher just up the road from here so all my meat mainly I get from there."*

Male, Farnham, 'Consumers with a Conscience'

*"I go to my specialist shop for Indian vegetables. It's a bit far, but I go once a week to do my Indian vegetables. The local vegetables I get from local Turkish shops and I go to Farmers' Market every Sunday to get my fish and fresh vegetables."*

Female, London, 'Greens'

### **Spontaneous consideration of sustainability**

- 3.17 Some participants are already purchasing and consuming food in a sustainable way. Some 'Greens' and 'Consumers with a Conscience' participants do aspects of this intentionally, with the main consideration being where food has come from.

*"What concerns me... is the fact that a lot of our food is coming from abroad and yes, I sort of feel very torn as to the fact that I want the quality and often*

*in this country you can't get the quality."*

Female, Leeds, 'Consumers with a Conscience'

*"I picked up some spring onions the other day – came from Egypt – and I thought, "do I really want to be doing that?"*

Female, London, 'Greens'

- 3.18 However, the current influences on participants purchasing decisions mean that others do this by accident, or unwittingly. Taste and variety provide the primary levers into sustainability; seasonal, fresh and local foods are seen as superior in terms of taste, and the need for variety links into the seasonality of certain foods.

### **Other routes to sustainable food consumption**

- 3.19 In terms of secondary routes to sustainability, supporting local farmers chimes are a priority for only a marginal number of participants; those conscious of supporting British agriculture and the economy. Again, this predominantly applies to 'Greens' and 'Consumers with a Conscience'. In addition, cost provides a further channel to sustainability, in that participants across all segments comment that it is cheaper to buy foods when they are in season.

*"It's cheaper when it's in season, I'm more likely to buy it."*

Female, Leeds, 'Currently Constrained'

### **Implications for Defra**

- 3.20 Participant purchasing habits are complex. Many different factors currently influence the way that food is purchased. Finding a way to tap into these existing set of influences is key to successful behaviour change.
- 3.21 Health, taste and the desire to eat a varied diet provide the key links in and drive participants towards adopting more sustainable practices in relation to food.
- 3.22 Supporting local farmers resonates with some participants and provides a

secondary link, as does the fact that seasonal goods are often cheaper than goods which are out of season.

- 3.23 Time, convenience, access, habit, offers, and availability are the main barriers to consumers adopting more sustainable practices in relation to food.

## 4 Aspirations around food

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### Chapter summary

This chapter summarises the findings from the discussion around participants' aspirations in relation to food held in each of the focus groups. In this session participants were asked to individually design an ideal menu of the food that they would ideally be eating assuming that time, money and accessibility were not an issue. The purpose of this exercise was to understand where sustainability currently lies as an issue for participants and the extent to which they aspire to consume more sustainable produce, and to provide an insight into the potential triggers to the adoption of more sustainable practices in relation to food. Participant perceptions of 'good' food were also explored in order to help further this understanding.

The structure of this chapter is as follows:

- Introduction
- Food aspirations
- Perceptions of 'good' food
- Implications for Defra

The implications for Defra arising from this discussion session are:

- In many ways participant aspirations drive them towards the adoption of more sustainable practices in relation to food. Defra must find a way to help participants realise these aspirations.
- Other participant aspirations drive participants away from the sustainable consumption of food. Defra must find a way to provide participants with information which causes them to reconsider their aspirations and priorities.

## **Introduction**

- 4.1 In order to explore what participants' aspirations were in relation to food, each was asked to design an ideal menu of the food that they would ideally be eating assuming that time, money and accessibility were not an issue. Participants were presented with a set of pictures of different foods; these images were purposely chosen to measure aspirations around the behaviour goals and included a wide range of choices including meat and dairy products, fruit and vegetables, ready meals, organic and other certified foods and fish, and information on the provenance of food.

## **Food aspirations**

- 4.2 A set of key aspirations around food emerge throughout the discussions around what people would ideally like to cook and eat if all barriers were removed.
- Health
  - Quality
  - Indulgence
  - Perceptions of 'good food'

These aspirations largely cut across segment, with a few exceptions, but the extent to which these aspirations are currently realised differs by segment.

- 4.3 Some aspirations compliment the sustainability agenda and provide a clear direction for how to link sustainable practices with aspirational behaviour, but others contradict the sustainability agenda and are obstacles to the adoption of more sustainable practices.

### ***Health***

- 4.4 Participants speak of their desire to eat more fruit, vegetables and fish due to their health benefits. In particular they would like more variety in their diet – which may contradict goals around seasonality and driving down food miles.

*“I am going with tuna steak with vegetables and pasta. I went for the tuna steak because I am quite lazy with fish and I would like to eat more fish but I just find it such an effort. I know I can get it cleaned but I am still lazy about it...so I would like to eat a lot more of it. I had some sweet corn with that – because I have sweet corn with anything and exotic fruit salad afterwards. I would like to eat more fruit.”*

Female, London, ‘Basic Contributors’

- 4.5 Several participants mention ‘superfoods’ and the health benefits of eating exotic fruit, again, both of which contradict goals around purchasing from local producers. Freshness is associated with health as well, and participants’ ‘ideal’ diet would include the freshest produce available. Organic produce is mentioned by some participants for its health benefits, but there is much confusion regarding the health benefits of going organic, highlighting an area which requires further clarification.

*“Blueberries, raspberries, strawberries and I absolutely adore raspberries so that would be my ideal which we actually eat quite a lot of.”*

Female, Leeds, ‘Consumers with a Conscience’

[Describing ideal menu] *“I have gone for the roast lamb with trimmings, asparagus, swede, carrots and then fruit.... strawberries, blueberries, exotic fruit.”*

Male, London, ‘Basic Contributors’

- 4.6 The current behaviour of ‘Consumers with a Conscience’ and ‘Greens’ is close to their ideal in terms of health, which they prioritise as a purchasing motivation. Moreover, these segments are those most able to afford a varied diet, with high quantities of fresh produce. The primary barrier for ‘Currently Constrained’ participants seeking to buy and eat healthily is cost, despite their good intentions. The same is true for the other segments, coupled with a lack of real will to abide by a healthy diet.

*Moderator: "So is your ideal quite close to what you have now, by the sounds of things?"*

*Male: "Yes. Lots of the time. Probably 75% of the time. Lots of fresh vegetables. Fresh meat. And always porridge in the mornings."*

Male, London, 'Greens'

### **Quality**

- 4.7 A key aspiration for participants is the consumption of what they regard as quality produce. This is particularly the case with respect to meat products, where participants claim that they wish to eat better quality cuts and selections, but also true in terms of the freshness of ingredients used.

*"I went to the farmers market, because it's on once a month not far from here and it must have been about three weeks ago it was on so it must be due again and I got some fresh meat and all fresh vegetables and like I say you could see it was a typical farmer who looked like he'd dug the veg up the day before and he just chucked it straight in to a bag and it was lovely stuff and you just can tell the difference."*

Female, York, 'Long Term Restricted'

- 4.8 'Greens', 'Consumers with a Conscience' and 'Currently Constrained' aspire to eat more organic produce because they believe that organic food offers better quality of taste, and are more likely to be aware of the environmental benefits of organic produce. Again, cost and access are the chief barrier for participants who aspire to eat quality produce, as well as limited access or means to buy these types of food.

### **Indulgence**

- 4.9 Although eating healthily is an aspiration for most participants, so too is the temptation to indulge in more tasty or 'naughty' treats, such as puddings, cheese boards and red meat. The latter, cheese and red meat, contradict the behaviour goals around eating a low impact diet, underlining the challenge faced in trying to convert participants to this.

*"I have been on a real health kick for the last 6 months and lost some weight*

*and stuff so, I try and avoid [puddings] but in an ideal world I would have ice-cream or cheesecake or chocolate cake.”*

Female, London, ‘Basic Contributors’

*“It would be brie and cheese and crusty bread. I do eat a lot of veg and fruit anyway but yes – the brie would probably be just a treat really.”*

Female, London, ‘Basic Contributors’

## **Luxury convenience**

Some participants, when designing their ideal menu, include luxury convenience foods – typically, high quality pre-packaged meals – which are seen as the ultimate indulgence in terms of time, cost and convenience. The extent to which participants purchase these foods is, however, limited by their aspirations to eat healthily and cost implications.

*“I think if money was no object I’d have a Chinese every night.”*

Female, Leeds, ‘Basic Contributors’

## **Perceptions of ‘good’ food**

Participants were asked for their spontaneous suggestions as to what they considered ‘good’ and ‘bad’ food to be, or mean in order to tap further into their aspirations.

- 4.10 A common theme for participants, across all segments, is the equation of ‘good food’ with eating healthily, evidence that message and campaigns such as ‘five-a-day’ and reducing salt intake have been received and taken on board.

*Moderator: "So on your list what would you say is good?"*

*Male: "Well, obviously, the Fruitful I think is very good, just the shredded wheat altogether with a handful of that stuff. What also is good is [chuckles] kiwi fruit; yes, kiwi fruit. I think the salmon. Salmon's sort of healthy. I think lamb is actually quite healthy. I mean red meat, I know it's not always good for you but if you have it in moderation, then yes. And then the tomatoes, obviously, and the broccoli. And that's it, basically."*

Male, London, 'Greens'

- 4.11 A minor issue for participants is 'good food', that which is in season or comes from local sources, and this sort of produce is seen as of a better quality and in support of British suppliers. Typically, this kind of sentiment is expressed by 'Greens', 'Consumers with a Conscience' and 'Currently Constrained' participants, and also those who live in rural locations.

*Female: "Lamb; brown bread; carrots and there's swede. And dessert I like dark berries with yoghurt and honey because I don't have a huge appetite."*

*Moderator: "Out of that, what you would say was good food?"*

*Female: "I actually think it's all good, which isn't typical of my everyday food. Yes, because the vegetables would be what's in season, and the berries, hopefully. But if it was the winter then probably they would have been flown in from somewhere."*

Female, London, 'Greens'

## **Implications for Defra**

- 4.12 In many ways participant aspirations drive them towards the adoption of more sustainable practices in relation to food. Defra must find a way to help participants realise these aspirations.
- 4.13 Health provides a link to driving up consumption of organic produce and encouraging participants to lower their consumption of processed food products, as does the desire to eat more quality produce. Within this it is important to recognise that further evidence is required to understand any

actual health benefits associated with choosing organic food.

- 4.14 Cost considerations and indulgence are the key barriers. Defra must work with business to make sustainable choices more realistic financial options, and find a way to provide participants with information which causes them to reconsider their aspirations around indulgence.

## 5 Understanding of sustainability in relation to food

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### Chapter summary

This chapter summarises the findings from the discussion session with participants around their understanding of sustainability in relation to food. Following discussions around participant aspirations in relation to food, Defra was introduced as the client and participants were given some background information about the scale of the challenge Defra faces in tackling consumer consumption patterns (see Annex B for the discussion guide). Participants were then asked to what extent they were aware of the issue of sustainability in relation to food and their responses were explored. In addition, any references that had been made to the concept of sustainability in relation to food in the preceding discussions around current influences on purchasing decisions and participant aspirations around food were discussed explicitly at this stage.

The structure of this chapter is as follows:

- Introduction
- Comfortable with the concept
- A limited interpretation
- Struggling to engage
- Location cuts across segment

### Introduction

- 5.1 A range of different levels of understanding about sustainable consumption and production of food are evident amongst participants by segment. Some are comfortable with and have some understanding of the concept, whilst others find it difficult to understand the wider environmental, social and

economic implications of food production and consumption. Across all segments, most participants have only a partial knowledge and understanding of what sustainability entails.

## **Comfortable with the concept**

- 5.2 'Greens', 'Consumers with a Conscience' and 'Currently Constrained' are the participants with the best understanding of the concept of sustainability, although it is not a top of mind concern for most in relation to food. However, this group of participants are able to apply the concept to food, to some extent.
- 5.3 When pushed for their interpretations, these participants suggest that foremost, it means buying British produce and food in season to bolster native farming and the economy. Food with a minimal amount of packaging is also cited as being more sustainable, and from this the link is made to wasting less food and composting leftovers or cut-offs. These participants are also able to relate the concept more widely to movements such as Fair Trade and animal welfare and are conscious of the distance, or food miles, that some products travel.

*"I actually do have an interest in animals, like for example with eggs, I always buy free range because I think they have a better life. Meat as well, outdoor reared or organic meat because I think it's important that they get treated right and if you're buying cheap meat and cheap stuff like that, you're putting money in to people who are treating them badly. I would rather go to the other side."*

Female, Leeds, 'Currently Constrained'

*"I think the packaging they could cut down on a bit. You know. Particularly M&S, I mean they pack four apples in a container."*

Female, London, 'Greens'

*"I think the importing of so many different things from different countries because there's such a wide choice now whereas years ago we just have fruit and veg from our own country, really, before it was flown in and I think of the*

*fuel costs of the aeroplanes and all the transportation and everything, I guess that's an issue. But then people aren't going to be prepared to not have what we've been used to I think now."*

Female, London, 'Greens'

## **A limited interpretation**

5.4 'Wastage Focused' participants have a narrow holistic knowledge of sustainability as a concept. They identify that it has something to do with the environment, but in general, they are more comfortable with the consumption angle of sustainability rather than the associations it has with production.

5.5 The main spontaneous interpretations of sustainable food amongst 'Wastage Focused' participants revolve around buying food with less packaging and consideration of how food is disposed of and how to avoid waste.

*"I just think packaging is ridiculous... we're doing all this recycling and everything and we also recycle cardboard and that is the thing that I find absolutely appalling, the amount of cardboard is outrageous and again that's all the outside packaging, we don't need hundreds and thousand of layers of packaging on everything."*

Female, Farnham, 'Wastage Focused'

## **Struggling to engage**

5.6 'Basic Contributors' have only a slight or no knowledge of sustainability and its relation to food. Even when the concept is spelled out to them, many of these participants are apathetic to or do not fully grasp the idea – although the issues around packaging are the most easy to understand and relate to, and some spontaneously raise food packaging as an issue.

*"I am aware of some things but it doesn't really affect my shopping, not in terms of effect on the environment."*

Female, London, 'Basic Contributors'

- 5.7 Long Term Restricted' also display a lack of knowledge about the meaning of sustainability and food. They are less interested in the concept overall than other segments and are reluctant to acknowledge any personal responsibility to engage with and address the concept.

*"I didn't even realise half of that information, I didn't even take into account what it took"*

Female, Nottingham, 'Long Term Restricted'

### **Location cuts across the segments**

- 5.8 Geography has a real impact on levels of understanding about sustainability and food. Rural participants generally have more developed understandings of the concept and its implications than their urban or suburban counterparts – and this applies across all segments. They talk spontaneously about buying locally, and seasonally – as opposed to just buying British – to support the local economy, especially in terms of fruit, vegetables and meat. Rural based participants are also most likely to be attuned to the various animal welfare issues and actively consider these when making their purchasing decisions.

## 6 Reactions to the behaviour goals

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### Chapter summary

This chapter summarises the findings from both direct and indirect discussions with participants around Defra's behaviour goals. The five behaviour goals were considered indirectly through the discussion on aspirational food, and directly after the concept of sustainability was introduced.

The structure of this chapter is as follows:

- Introduction
- Switching to a diet with lower environmental impacts
- Wasting less food
- Switching to more seasonal and local food
- Increase purchase of organic or certified / assured food and drink
- Buy more certified / assured fish and fish products
- Impact of information on behaviour
- Implications for Defra

The implications for Defra arising from this discussion session are:

- Intervene with supermarkets in a range of areas to aid participants in realising behaviour change goals
- Focus on health and taste levers to achieve goals
- Develop information based on life-cycle analysis (similar to the information contained in Annex C) to lay out all the impacts of wasting food
- Further support local outlets and markets for farm produce

- Accredit organic, certified and assured schemes and promote them
- Consider means of improving the cost of certified options – or the provision of tax breaks
- Focus on one certification scheme and explicitly promote this

## **Introduction**

- 6.1 Defra's five key behaviour goals around sustainable food were considered both indirectly through the discussion on aspirational food, and directly after the concept of sustainable food was introduced. To assist with the prompted discussion, participants were given information about product lifecycle impacts and consumption impacts (see Annex C). The follow up telephone interviews with 73% of participants also explored to what extent participants had considered and acted upon any of the behaviour goals after the initial group discussions (see Annex D).
- 6.2 The five behaviour goals are:
- Switching to a diet with lower environmental impacts
  - Wasting less food
  - Switching to more seasonal and local food
  - Increase purchase of organic or certified / assured food and drink
  - Avoid fish from uncertified or unsustainable stocks; buy certified fish
- 6.3 The summary of willingness to adopt these goals can be seen below.

**Table 4**

	Lower impact diet	Wasting less food	Buy more certified fish	More local and seasonal	More organic / certified food
'Greens'	✓	✓	✓	✓	✓
'Consumers with a Conscience'	x	✓	✓	✓	✓
'Wastage Focused'	x	✓	x	x	x
'Currently Constrained'	✓	✓	x	✓	x
'Basic Contributors'	x	✓	x	x	x
'Long Term Restricted'	x	✓	x	x	x
Rural	x	✓	x	✓	x

### Switching to a diet with lower environmental impacts

- 6.4 Participants' aspirations both push them towards and pull them away from this goal. The health aspirations of participants attract many towards changing to a diet with lower environmental and social impacts. For example, the five-a-day initiative is a good platform for eating a balanced diet as many aspire to eat more fruit and vegetables, and the desire to eat quality meat provides a hook for some, with others willing to trade quantity for quality in terms of their meat consumption.
- 6.5 However, as discussed previously, habit, indulgence and taste are all barriers to change. The crux of the problem is how deeply embedded meat and dairy products are in participants' eating habits. For example, it is important for growing children to drink a lot of milk and meat and vegetables are both staples of the British diet.

*Male: "[Dairy products] are your staple diet, I mean your meat, your two veg, glass or pint of milk a day or whatever."*

*Male: "Sunday roast is part of the culture isn't it?"*

London, 'Basic Contributors'

*"I think switching to a diet with lower environmental .....obviously the majority of people would consider that but it's whether it's easy for you to do that, you shouldn't have to change your diet to do that. It should be made available that you've got the choice to buy something."*

Female, Leeds, 'Currently Constrained'

- 6.6 Meat and dairy feature prominently in participants' ideal menus, are favoured for their taste and are both foods on which participants are reluctant to compromise. As a result, when reducing consumption of meat and dairy products is discussed explicitly, most participants are resistant to this goal. Many participants believe that the goal is interventionist and counter-cultural and the information provided to participants during the group discussions (see Annex C) does not aid acceptance as lower impact options are not highlighted.

*"I think that diet with a lower environmental and social impact thing is absolute nonsense, we'd all have to be vegetarian, that is nanny state."*

Female, Nottingham, 'Long Term Restricted'

- 6.7 Whilst participants recognise their ability to adopt a lower impact diet, there is lack of willingness to do so, as most struggle to recognise any personal benefit of adoption. 'Greens' are the most open to the concept – although even then only in terms of less meat not less dairy, and some 'Currently Constrained' can see the cost benefit of switching to this diet. A few participants across the segments would be willing to reduce the overall volume of meat consumed opting for quality over quantity for health benefits, however most say they would not be willing to change their eating habits in this way.

*"If [the Government] said to us that you want people to eat less dairy product and meat, why doesn't that message go across not only it's good for the environment, it's good for your health as well?"*

Female, London, 'Greens'

*“I think to be honest with my husband would struggle without the meat thing, but I certainly could, I think perhaps the generation is coming now where they would be happier with less meat in their diet.”*

Female, Cheddar, ‘Consumers with a Conscience’

## **Wasting less food**

6.8 Participants were presented with a series of handouts documenting the life-cycle analysis of various products (see Annex C). One of these handouts documented the impact that consumer handling of food has on the overall impact of food production and consumption. Included in this handout were statistics about consumer wastage of food which provided the background information to inform this discussion around ‘wasting less food’.

6.9 Fundamentally, this goal does not contradict any of the participants’ aspirations. Participants admit that they are able to alter their behaviour in this way, and indeed, identify the potential cost savings this might bring.

*“I would definitely be prepared to waste less food.”*

Female, Leeds, ‘Currently Constrained’

6.10 Across all of the segments, wasting less is flagged as a priority for behaviour change, however the reasons for this vary. ‘Long Term Restricted’, ‘Basic Contributors’ and ‘Wastage Focused’ are encouraged by the potential cost saving benefit; whilst ‘Greens’, ‘Consumers with a Conscience’ and ‘Currently Constrained’ are driven by the ‘double-win’ of saving money and tackling the issue.

6.11 However, despite this, there are two main barriers to adoption mentioned by participants. Firstly, best before dates are seen as a trigger for unnecessary wastage. Many participants say they will follow the dates rather than assessing for themselves the freshness of the food, but suspect that food may well be edible beyond the date shown on the packaging.

*“I find myself going through my fridge “That’s off, that’s off” and I buy like the veg and stuff with good intentions and then I never cook it.”*

Female, Leeds, 'Currently Constrained'

- 6.12 Secondly, supermarket offers, especially Buy One Get One Free Offers, are seen as ploys which increase the volume in which participants buy produce – and participants confess that much of what they purchase in this way ultimately goes to waste.

*"It's buy one get one free, so you always, if you don't want to buy, still you buy three and it goes to waste half the time."*

Female, London, 'Basic Contributors'

*"Also thinking about the... "buy one, get one free" doesn't help the public. If you're tempted into buying two you might buy one and the other one might get past its date."*

Female, London, 'Greens'

- 6.13 Wasting less food is the only behaviour goal where the information given to participants has a direct impact on their willingness to change (see Annex C). The statistics around wastage are regarded as quite shocking and alarming highlighting how participants waste the entire life cycle of products when throwing food away. This evidence is especially compelling and not something participants had previously seriously considered.

*"I think the waste in food is something that everyone could be more aware of. I mean I am not surprised that under 25's waste more than older people because again, I think there is a generational thing about – I mean you go back to my sort of grandparents about the war and rationing and all of that... But I think that whole section about wasting food, I think, yes is something that people could be aware of and tackle."*

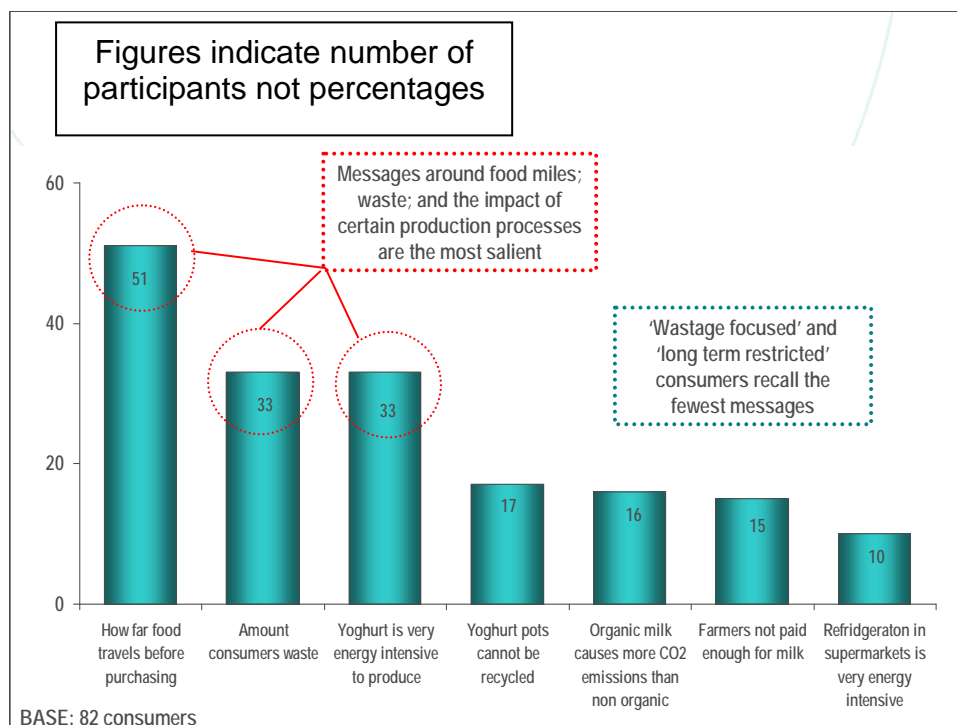
Male, London, 'Basic Contributors'

- 6.14 In addition, follow up telephone interviews with participants reveal that messages around waste 'stick' – about a third of consumers could recall this information and many participants actively commit to cutting back the amount of food they waste at home by buying less, and by making sure that they use the food they already have in their fridge rather than buying new produce.

- 6.15 Figure 1 below shows the messages that participants recalled from the groups

when recontacted around two weeks after participating. Three key messages stand out: how far food travels within its lifecycle, the amount of food wasted and the intensive nature of the production process for yogurt, which was one of the products covered by the lifecycle information given to participants in the groups (see Annex C). Recall of messages varies by segment, with ‘Wastage Focused’ and ‘Long Term Restricted’ participants recalling fewer messages than participants from other segments.

Figure 1: Salient messages mentioned in the follow-up calls (spontaneous)



## Switching to more seasonal and local food

6.16 This goal marries with a number of participants’ aspirations around food, namely, taste, health, variety and supporting local or British producers. Some participants already consider the seasonality and locality of produce when shopping for the above reasons - particularly ‘Greens’ and those participants based in rural areas. Other participants aspire to shop more in this way - particularly ‘Consumers with a Conscience’ and ‘Currently Constrained’ who believe that local and seasonal food will offer better quality and taste than imported food, as well as benefiting the environment. Some participants also

consider seasonal produce to be cost effective.

*“I know you can get stuff from all over the world. They’ve got broccoli all the time if you want to fall back on it, but you know, it’s nice to have things like parsnips and brussels in the winter and then go on peas and beans and things in the summer times and I think let’s try and eat what our country provides for us and keep veggies out of the sky.”*

Male, Farnham, ‘Consumers with a Conscience’

- 6.17 However, there are three significant barriers which exist to adoption: participants’ current habits, their levels of knowledge of seasonal and local food and their ability to access the outlets or sources which retail it.
- 6.18 Participants across all segments are honest about their attachment to current behaviours with most admitting that they are not yet ready to deny themselves certain produce when it is out of season because they have expectations and aspirations to be able to buy and experience a variety of foods at any time of the year.

*“We are expecting things out of season all the time and it was the supermarkets who supported that in the first place.”*

Female, London, ‘Basic Contributors’

- 6.19 There is a lack of knowledge about what constitutes seasonal and local produce across all of the segments, except for rural participants. ‘Greens’, ‘Consumers with a Conscience’ and ‘Currently Constrained’ participants recognise this and say that they would like more information to aid decisions.
- 6.20 Lack of accessibility and cost are seen as barriers by many participants, especially in urban and suburban areas. They question how feasible it is for them to buy fresh local and seasonal food cost effectively given their locations.

*“With local food, I would buy more but farmers markets for example, there is quite a lot of those around but they tend to be really expensive.”*

Male, Birmingham, ‘Currently constrained’

- 6.21 Participants were struck by the information presented in the case studies (see Annex C) discussed in the groups which highlight how far food travels.

[Discussing the yogurt lifecycle handout – see Annex C]

*Moderator: “Is there anything here that catches your eye particularly or surprises you?”*

*Female: “Yes, how far it goes the pot of yoghurt, how far it goes from the beginning to the end. It’s a long journey.”*

London, ‘Basic Contributors’

- 6.22 The follow up telephone interviews reveal that these messages have an impact – three quarters of participants refer to the distance that food travels (see Figure 1 above). Few participants pledge to eat more seasonal or local produce, believing they are unable to do so, but during the follow-up calls many say they have begun to alter their behaviour by thinking about where food comes from and trying to eat more locally produced products.

### **Increase purchase of organic or certified / assured food and drink**

- 6.23 Buying more organic, certified and assured food links into some participants’ aspirations, particularly around quality and health. Organic produce is seen as inherently of better quality and seen to be more tasty. Furthermore, organic food is viewed as having health benefits, being treated in fewer pesticides and directly supports the interests of British farmers which is an aspiration for a niche of participants.

*“I think that people switch to organic stuff because they think it’s better for them, not because it’s necessarily better for the environment.”*

Male, York, ‘Wastage Focused’

- 6.24 Eating more organic food resonates with participants to a greater extent than opting for fair trade or other certified products which they have poor levels of understanding about. However some confusion exists over whether eating more organic is actually sustainable. Importantly, the information provided does not help clarify queries as organic milk and yoghurt are shown to have slightly higher environmental impacts than their non-organic equivalents, which leads to much confusion amongst participants. Other participants are

concerned that there is not enough land to produce organic food on a mass-market scale.

*“If it’s organic, everyone is trying to eat organic then there is definitely going to be less food in the world, because you can’t grow enough for all the people.”*

Female, London, ‘Basic Contributors’

*“In the milk [case study] they said that the organic milk costs for us so much more to produce. So some of that’s contradictory. So you’ve got to decide whether you’re thinking of the animal or thinking about the environment.”*

Female, London, ‘Greens’

6.25 Ultimately, this goal has limited appeal as the number of barriers to adoption lead most participants to opt out, with only ‘Greens’ and ‘Consumers with a Conscience’ receptive to change in this way.

6.26 The main barriers to adopting this goal are the high price of organic and other certified foods which is a stumbling block for many, confusion about the supposed benefits of organic and a lack of awareness about what it is that participants should be looking for.

*“It depends on price, because organic has this expensive reputation and a lot of the people would just pass by the aisle, if it says green, organic, then they’re like “yeah, one day”.*

Male, Leeds, ‘Basic Contributors’

*“Because you want it, your conscience says you want to do more fair trade, you want to but if it’s you know a jar of coffee is a pound more expensive or whatever, you do think that’s an extra 20 quid out, 20 quid on your bill – it’s a lot of money.”*

Female, London, ‘Basic Contributors’

6.27 Besides these reasons, there is a great deal of scepticism about the concept of organic and the arguments for purchasing it.

*“I think there are a lot of foods that say they are organic but are not what you thought they were. They aren’t 100% organic so you are paying a lot more money for something that is not probably what it says it is”*

Female, Cheddar, 'Consumers with a Conscience'

*"I think to some extent a lot of people would probably be prepared to pay slightly more to make sure that things were done in the right way but it depends, you know, a lot of people wouldn't be able to afford to pay more and that is why the supermarkets will argue that they're feeding consumer demand for lower and lower prices."*

Female, York, 'Wastage Focused'

- 6.28 This was borne out in the follow up telephone interviews after only a small number of participants committed to buying more organic certified food in future, which a few claimed they had done when spoken to subsequently. More participants say that they would go organic if it was affordable but that it is not currently a realistic option.

### **Buy more certified / assured fish and fish products**

- 6.29 Eating more fish is an aspiration for some consumers, based on motivations of health and eating quality produce. Overall, this is a niche aspiration which appeals to the same groups who are interested in organic and other certified foods, 'Greens' and 'Consumers with a Conscience'.
- 6.30 Various barriers to adoption exist making this one of the least popular and feasible to adopt goals. Chiefly, certified fish is considered expensive and there is confusion over what certified means and how it can be identified. Some participants query the widespread availability of certified fish, and even though some adults aspire to eat more fish many say their families, particularly children, do not like the taste.

*"It's expensive though isn't it. When you're feeding a large family you can't afford to go and buy two pieces of cod from the fish man, that's about £7 and that wasn't enough for our family."*

Female, York, 'Long Term Restricted'

- 6.31 The information provided to participants does not refer in any way to fish and therefore does not provide participants with any rationale for the need to change the way they buy fish. As a result, and because of the barriers that

exist, few participants pledge to change in this way.

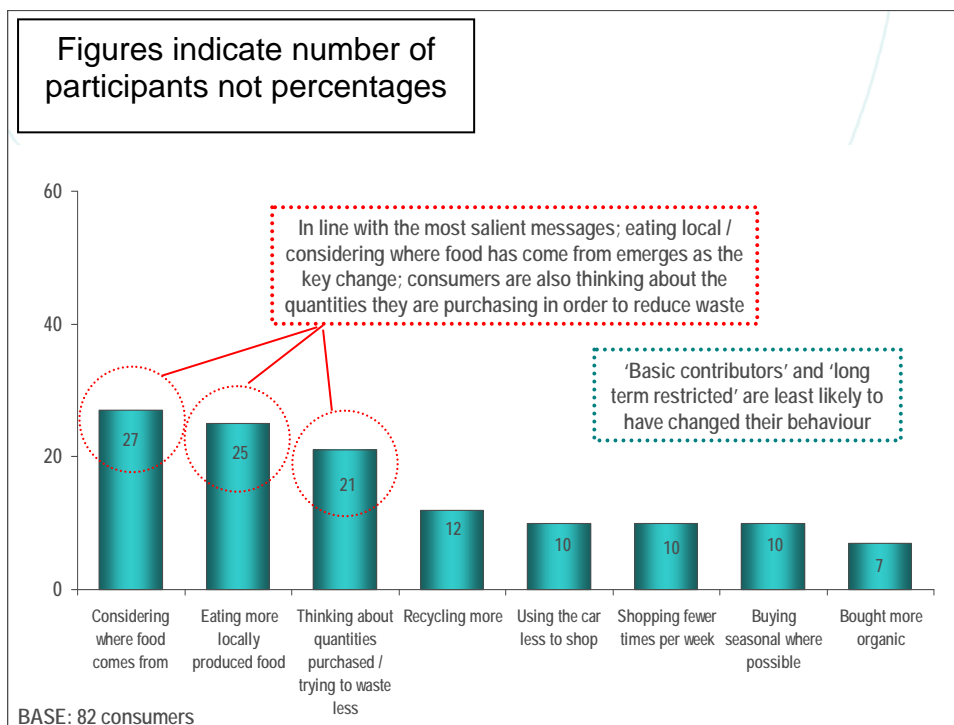
*“Some people can’t afford it, or they don’t have it in their budgets. And it is human nature, the minute you’re told you can’t have something, you want it.”*

Male, London, ‘Basic Contributors’

## Impact of information on behaviour

6.32 In the follow up telephone interviews, participants were asked if they had changed any of their behaviours around food after taking part in the initial group discussions. Responses show that a number of participants have made changes in three key areas: considering where food comes from, eating more locally produced food and considering quantities purchased in order to reduce waste (see Figure 2 below). This varies by segment, with ‘Basic Contributors’ and ‘Long Term Restricted’ participants less likely to have made changes to their behaviour than participants from other segments.

Figure 2: Achieved participant behaviour changes mentioned in the follow-up calls.



## **Implications for Defra**

- 6.33 Intervene with supermarkets in a range of areas to aid participants in realising behaviour change goals
- 6.34 Focus on health and taste levers to achieve goals
- 6.35 Develop information based on life-cycle analysis (similar to the information contained in Annex C) to lay out all the impacts of wasting food
- 6.36 Only provide the public with unambiguous information rather than information which has the potential to confuse
- 6.37 Further support local outlets and markets for farm produce
- 6.38 Accredite organic, certified and assured schemes and promote them
- 6.39 Consider means of improving the cost of certified options – or the provision of tax breaks
- 6.40 Focus on one certification scheme and explicitly promote this
- 6.41 Whilst recognising that air freighted food miles only have a limited impact on the overall impact of a food product, the fact that messages around how far food travels sticks with participants suggests that it might be worth capitalising on this as a way of getting other key messages across. Defra should use further research to investigate the links between different behaviour goals and certain key messages.

## 7 Perceptions of responsibility

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### Chapter summary

This chapter summarises the findings from the discussion session with participants around where they felt that the responsibility for tackling this issue lies.

In summary participants ask that:

Business (retailers and producers) should...	Government should...
Make sustainable choices clearer	Offer guidance and direction
Make sustainable affordable	Regulate if necessary
Reduce 'bad' supermarket offers	
Reduce packaging	
Examine supply chains	
Support British	
Reduce food miles	

The structure of this chapter is as follows:

- Introduction
- Personal responsibility
- The role for business
- The role for Government
- Implications for Defra

The implications for Defra arising from this discussion session are:

- Work with both the public, businesses and government to achieve behaviour change.

- Find a way of providing information with the wider public which empowers consumers to feel that they can make a difference in this area
- Work with businesses to ensure sustainable choices in relation to food are realistic options for consumers
- Work with Government to educate the wider public and place pressure on businesses to change their behaviour.

## **Introduction**

- 7.1 When explicitly discussing the five behaviour goals, participants were asked to consider what action could be taken, and by whom, to encourage people to change their behaviour around food.
- 7.2 Participants believe that joined up action is essential to tackle the challenges faced with the public, businesses and government all working together to realise some, or all, of the behavioural goals. A shift in public attitudes is deemed necessary but participants stress that any action on their part must be met with action from business and government, too. A premium is placed on leadership in this area: businesses are seen as the lynch-pin for change, and participants believe that the Government has a role to play in offering guidance and direction and, if necessary, regulation.

## **Personal responsibility**

- 7.3 The initial reactions to many of the behaviour goals were similar across all of the segments with many participants feeling powerless to affect change given the scale of the problem and their perceived personal inability to impact the big picture. Many initially responded by wanting to shift the onus for action onto others rather than taking personal responsibility.

*“The thing that annoys me, whatever we do to try and be green and environmentally friendly and all the rest of it they're not bothering in China are they so what is our little bit doing?”*

Female, York, 'Wastage Focused'

[Discussing the tomatoes case study – see Annex C]

*“You can’t win with this though really. Well the climate is not conducive to growing them in an open field, the minute you put them in a glass house it becomes bad, and equally if you then ship them in from where they can be grown outside, its always like a no-win situation.”*

Male, London, ‘Basic Contributors’

- 7.4 Participants tend to look to the bigger players – business and government - to bring about change rather than themselves. This is particularly true where participants feel that they will be making a personal sacrifice e.g. denying themselves certain types of food, rather than switching from one type of food to another.
- 7.5 After discussion, participants are both doubtful and positive at the same time about their ability to affect change. Many speak positively about change when they think about how certain behaviours and norms have evolved. However, they also feel change is difficult - many acknowledge they are ‘locked’ into high levels of ‘harmful’ consumption.

*“First of all we don't know enough about the science behind it and secondly they keep putting it on our shelves. If they don't want us to buy it then don't produce it, really.”*

Female, London, ‘Greens’

*“Supermarkets have made it too convenient for us not to get what we want whenever”.*

Male, Leeds, ‘Basic Contributor’

- 7.6 Differences gradually appear between segments in terms of their willingness to accept personal responsibility. Some segments believe that the impetus for change should come from the public, but others disagree and think that the public can play only a limited role. And a third category of participants completely reject the notion that they, as consumers, have any personal responsibility to act.
- 7.7 ‘Greens’ and ‘Consumers with a Conscience’ are more likely to accept their personal responsibility expressing alarm at some of the facts presented in the

case studies, particularly the information on food miles and wastage. They spontaneously commit to change and are passionate in suggesting ways in which they can do this. These participants are also the most likely to follow through on their commitments and during the follow up telephone interviews many cited behaviour changes which they have made.

*[Discussion about car journeys to the supermarket] "I could be a bit more organised, I shop about three, four or five times a week I am terribly unorganised but if I just write a list and do maybe two big shops a week instead of four medium sized ones."*

Female, Birmingham, 'Greens'

- 7.8 'Currently Constrained' participants accept their personal responsibility to change in theory but their current circumstances limit their ability to act. They are currently able to make cost-free changes but beyond that ability to change is minimal as many changes require an increased spend. This group's commitments to change focus around wasting less, although many say that they would buy more organic produce if cost was not a barrier.

*"If price wasn't an issue then that [switching to organic food] would probably be quite simple to do."*

Female, Birmingham 'Currently constrained'

*"You could do something but it's all down to cost isn't it really."*

Female, Leeds, 'Currently constrained'

*"The consumer does have power, like with the testing on animals, the majority of big companies stopped testing on animals."*

Female, Leeds, 'Currently Constrained'

- 7.9 Wastage focused participants recognise the personal cost benefits of some of the behaviour goals and are therefore willing to change. A willingness driven by perceived personal benefits rather than any wider benefit to the environment and society. These participants spontaneously commit to making some limited changes such as wasting less, thinking more about the food that they buy, and using the car less when shopping. Some 'Wastage Focused' follow through on these pledges, however others say that the

concepts have slipped their minds or been unable to implement them since.

*“As a consumer you feel so powerless. If I stop buying that tin of whatever will it make any difference? No.”*

Female, York, ‘Wastage Focused’

- 7.10 ‘Long Term Restricted’ and ‘Basic Contributors’ acknowledge the nature and scale of the problem and are personally willing to make cost-free changes (i.e. wasting less) but beyond that, willingness to change is minimal. On the one hand these segments say that they are looking for direction from business and government, but they dislike notions of the ‘nanny state’ and want to retain the choice of food currently available.

*“I don’t think there would be enough people to be prepared to actually go with it to make a difference if it was left [to consumers]. I think someone has got to make a decision and it’s got to be across the board, it’s got to be all or nothing.”*

Male, London, ‘Basic Contributors’

- 7.11 Age and location are cross-segment factors which impact perceptions of personal responsibility. Younger participants struggle to imagine sacrificing the choice and variety of produce which they are accustomed to, whilst older participants recall there being less choice available and are more accepting of the need to change. Older participants are more willing to accept personal responsibility on account of their greater ability to adopt sustainable practices.

## **The role for business**

- 7.12 Participants believe that both supermarkets and food manufacturers have a central role to play in creating the conditions for change. This can be achieved by both examining their own impacts and by making the behaviour goals feasible and attainable for participants.

*“If they didn’t introduce all these different varieties we wouldn’t be any the wiser, would we? Really, it’s not our fault – it’s the producers that are causing all the problems really.”*

Female, London, 'Greens'

*"I think responsibility lies with the big supermarkets doesn't it. They have more power now than the governments."*

Male, York, 'Wastage Focused'

7.13 Across all of the segments, participants are looking for business to self-regulate to ensure sustainable practices, enable participants to make better choices and implement sustainable practices during production.

7.14 They would like to see business taking some specific actions. These fall into two categories: actions which participants believe that supermarkets alone should take, and actions for both supermarkets and manufacturers.

Supermarkets only	Supermarkets and manufacturers
Make sustainable choices clear	Reduce packaging
Make sustainable choices affordable	Examine supply chains
Reduce 'bad' offers	Support British
	Reduce food miles

## Supermarkets only

### Making sustainable choices clearer

7.15 Participants believe that supermarkets have a vital role to play in making sustainable choices clearer. Many participants are confused about how to make sustainable choices, particularly 'Basic Contributors', 'Wastage Focused' and 'Long Term Restricted'. Some participants suggest supermarkets should stop selling the most environmentally harmful foods such as air-freighted fruit and vegetables.

[Discussing what would happen if supermarkets stopped selling air freighted products]

*"I think it's like everything else that there would be an outcry then people*

*would just get used to it.”*

Male, London, ‘Basic Contributors’

*“Even supermarkets could help there because they could put a thing up, couldn't they, you know, apples from Kent.”*

Female, London, ‘Greens’

*“They need to promote it, they need to say “Oh this is in season, this is cheaper, this is tasty”.*

Female, Leeds, ‘Currently Constrained’

- 7.16 Although they are interested in being informed, participants are uncertain whether detailed labelling on products would help as there is already much to consider when shopping. Instead, a broader campaign of education is recommended to transmit the right messages and some participants recommend direct advertising.

*“In a sense they do have to make more younger people aware because younger people now are very much part of the commercial society and as it says, they're wasting the most, quite a lot, because of their types of eating habits, etc. So Internet is quite good, maybe, at getting the information across. TV probably. I don't know about public information. It's how you present it, isn't it, as well? And schools.”*

Male, London, ‘Greens’

### **Making sustainable choices affordable**

- 7.17 There is a belief that purchasing more sustainable foods will increase the amount of the participants' overall shopping bill, particularly for organic, fair trade and certified products – seasonal foods are seen as cost effective options. Participants are looking for supermarkets to make sustainable foods a realistic, affordable choice. They believe that supermarkets have the power to change shopping behaviour and promote sustainable products by retailing them at offer prices.

*“I think supermarkets like... for example, you know they do give you extra points, like a green club card points, I think there has to be some sort of incentives to keep in their mind when they do go shopping.”*

## **Reduce 'bad' offers**

- 7.18 Special offers are one of the main barriers to participants purchasing more sustainable foods with participants recognising that offers are typically on heavily packaged, processed and unsustainable foods. These offers encourage participants to buy more, much of which is ultimately wasted. This is particularly true for 'Basic Contributors', 'Long Term Restricted' and 'Currently Constrained' who believe that supermarkets should change these types of offers and transfer them instead to foods with lower environmental and social impacts.

[Discussing supermarket offers]

*Male: "Why don't they halve the price? Why don't they halve the price in the first place?"*

*Female: "Or you could always still buy one and only get a half free."*

London, 'Greens'

## **Supermarkets and manufacturers**

### **Reduce packaging**

- 7.19 Packaging is a common concern across all segments with participants complaining about the volume of packaging and how they are unable to recycle much of this packaging. Participants would like to see the food industry introduce standard bio-degradable or recyclable packaging as they believe that this would help challenge the culture of waste.

*"I think people are being really fed up with all the packaging, you know, it's starting to get through thinking that is purely waste, some of the packaging, I think why am I just taking it off and throwing it straight away."*

Female, Farnham, 'Wastage focussed'

### **Examine supply chains**

- 7.20 Emphasis is placed on both supermarkets and manufacturers to re-examine

their supply chains. Participants believe that these should be as sustainable as possible and seek to avoid any overtly unsustainable practices.

*“So isn't that one of the biggest problems – that the supermarkets are controlling the cost of the milk? They're screwing the farmers so there's fewer of them and it's travelling backwards and forwards. So if the milk was produced more locally and sold more locally that would cut all those figures down.”*

Male, London, 'Greens'

## **Support British**

- 7.21 Supporting British is seen as crucial and a necessary step for the food industry. By this participants mean stocking and promoting British produce where possible and ensuring fair prices for farmers. Many participants pledge to buy more British produce but say that this needs to be a viable choice.

*“I think I have got a bit of Britishness in there as well, I would like the stuff to be produced in England.”*

Female, Cheddar, 'Consumers with a Conscience'

## **Reduce food miles**

- 7.22 Food miles are raised as an issue spontaneously by some participants who are aware of the distances that some foods travel from their origins through to consumption. Many participants noted the media coverage surrounding this issue in the weeks leading up their group discussion, and the food industry is seen to have a big role to play in this respect. Participants would like to see Manufacturers reducing the 'food miles' of their products and supermarkets insisting on stocking products which have travelled minimal distances.

*“I think that's a big waste isn't it, transporting stuff. With these big supermarket chains, they have their central distribution points.....lamb from down in Devon, why don't we use the lamb that we've got up here.”*

Male, York, 'Wastage focussed'

## The role for Government

- 7.23 Many participants question the government's commitment to achieving change in the area of sustainable food consumption. In the context of current debate about the environment, participants question why they have heard so little about sustainable food given the impacts that food production has. As other initiatives have been widely promoted (e.g. recycling) many expect to see similar Government actions. There is also some general cynicism about the Government's overall policies around climate change and global warming.

*"All these things where they say we've got to "put this in place because a global warming carbon footprint" – all this stuff. They get the money; do they spend it on doing things to improve the environment? No. It's just another little bit of money they've got. So I just feel we're being conned all the time, actually. I don't think it makes a blind bit of difference."*

Female, London, 'Greens'

- 7.24 There is also a sense amongst participants that Government has allowed supermarkets to go unchecked for too long.

*"But the government, they always go on about the environment and global warming and everything but they're still encouraging all these supermarket chains and convenience stores and stuff."*

Female, Leeds, 'Currently Constrained'

- 7.25 A particular concern is the relationship between supermarkets and farmers which is viewed as unfair and damaging the livelihoods of the farmers. Participants believe that the government has a role to place in forcing businesses to change if it is not delivered voluntarily by setting minimum standards enforced by legislation.

*"The government need to introduce regulations about percentage payments to producers and farmers and not this ludicrous thing of shipping things all around and making them stay regional."*

Female, York, 'Wastage Focused'

*"I seem to think that they need to come up with sort of legislation to do with packaging... Surely that would come from government and legislative, there*

*is some sort of regulation on standard packaging.”*

Male, London, ‘Basic Contributors’

- 7.26 The government is also seen to have a key role to play as an educator. Participants want to hear from the government what they should be doing to make more of a positive impact and how they can go about achieving it. An educational agenda which will reinforce the behaviour goals is deemed important, especially targeted at younger generations, who are able to effect changes in their parents’ attitudes.

*“It should be part of the school curriculum, to educate the kids from the beginning because someone mentioned that we’ve passed, you know, there’s no going back. I think if we try and construct a very good base for our kids then maybe in 50 or 100 years they would be laughing at the way that we’ve been living, in the same way that we’re laughing about the people that lived before us.”*

Male, Leeds, ‘Basic Contributors’

## **Implications for Defra**

- 7.27 Defra must find a way of working with both the public, businesses and government to achieve behaviour change.
- 7.28 Find a way of providing information with the wider public which empowers consumers to feel that they can make a difference in this area
- 7.29 Work with businesses to ensure sustainable choices in relation to food are realistic options for consumers
- 7.30 Work with supermarkets to choice editing in high impact areas
- 7.31 Work with Government to educate the wider public and place pressure on businesses to change their behaviour.

## 8 Conclusions and recommendations

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### **Switching to a diet with lower environmental and social impacts**

8.1 Overall, this is the most difficult of the five goals to achieve. Looking at current participant behaviour and aspirations, there are two key levers to encourage the uptake of this goal.

- Firstly, there are isolated examples of participants are prepared to sacrifice the quantity of the meat they consume for improved quality.
- Secondly, participants' aspirations to eat more healthily, and in particular to increase the amount of fruit and vegetables in their diet, could be used as a lever to drive behaviour change as participants say that increasing their consumption of fruit and vegetables would correspond with eating less meat and dairy.

8.2 There is also an opportunity to influence retailers on their use of offers by reducing the numbers of offers which encourage excessive consumption on meat and dairy products, and increasing the offers available on lower impact foods.

8.3 In terms of direct communication around this goal, there is a delicate balance to strike. Being explicit about what this goal means in practice works for a small minority. Some environmentally committed participants pledge to eat vegetarian once a week after hearing the case made. However, there is also a risk of alienating other audiences, who reject this goal because they feel that it is too interventionist and 'nanny state' and counter-cultural.

### ***Recommendations***

1. Intervene with supermarkets to promote quality meat and dairy products – focusing on quality over quantity
2. Focus on health levers to achieve goals

## **Wasting less food in the home**

- 8.4 Wasting less food is the goal on which the most participants are willing and able to act, but they need support and more information to be able to do so. The behaviour of supermarkets is key as they make buying larger quantities cheap and appealing, leading to the assumption that more is better, thereby removing the cost implications of excessive waste from the consumers' pocket. Participants also need information to prompt them to consider the implications of their waste, which should appeal to both their selfish and altruistic natures, focusing on the money they waste as well as the energy and natural resources.

### ***Recommendations***

1. Develop information based on life-cycle analysis (similar to the information contained in Annex C) to lay out all the impacts of wasting food
2. Intervene with supermarkets to reduce offers which encourage increased purchasing

## **Switching to more seasonal and local food**

- 8.5 Switching to more seasonal and local food has broad appeal across the participant segments. However, although participants are willing, many feel unable to buy seasonal and local food. In order for a shift in attitudes to come about, participants believe that supermarkets need to make seasonal and local produce feasible choices, both in terms of price and availability and information in store. Participants would like seasonal and local produce to be incentivised or cost neutral compared to food from other sources.
- 8.6 Participants would also like to see promotion of alternative to supermarkets, such as local butchers and farmers markets. At the moment, the more environmentally aware of participants and rural participants are more likely to use these alternative retail options, but others are interested in alternatives to supermarkets.

### ***Recommendations***

1. Intervene with supermarkets to encourage them to prioritise stocking and

promoting seasonal, local produce

2. Further support local outlets and markets for farm produce
3. Use taste levers to promote this goal

### **Increase purchase of organic or certified / assured food and drink**

- 8.7 This goal is challenging for consumers for a number of reasons. Currently, participants do not fully understand the different issues and messages relating to the various difference certifications for food, including organic, and are concerned about cost implications.
- 8.8 As a result, the key to achieving behaviour change in this area is to focus on one certification scheme e.g. organic, and make a case for participants to make the switch by clearly explaining the main benefits. Ways of making this a cost-effective choice also need to be explored in order to encourage participants to switch from non-certified products.

#### ***Recommendations***

1. Accredite organic, certified and assured schemes and promote them
2. Consider means of improving the cost of certified options – or the provision of tax breaks
3. Intervene with supermarkets to make organic, certified and assured schemes clearly visible, accessible and cost-neutral
4. Focus on one certification scheme and explicitly promote this

### **Buy more certified / assured fish and fish products**

- 8.9 This behaviour goal is a niche aspiration, but in many ways easier to achieve than buying more organic / certified products because it is clearer and more single minded. This goal could be achieved by tapping into the connection between eating more fish and healthy eating, which is an important aspiration for many participants, or by clearly labelling the certified fish so participants

are aware of what they are purchasing.

- 8.10 Participants like to support their local farmer so there is potential here for transferring support to local fishermen, but more simply, supermarkets could take the lead by choice editing and reducing the availability of non-sustainable fish.

### ***Recommendations***

1. Use the health lever to achieve this goal
2. Intervene with supermarkets to choice edit more thoroughly
3. Intervene with suppliers / processors to ensure sustainable produce
4. Promote local fish

### **Recommendations for further research**

- 8.11 This project has explored a broad range of issues and provides initial guidance on the potential triggers and levers to encouraging sustainable participant behaviour around food, as well as the barriers that need to be addressed. Further research with participants would be valuable to explore the individual behaviour goals in more depth, and in particular to develop and test possible communications messages or interventions, and explore the impact of the source of any messages e.g. directly from Government or indirectly from intermediaries such as supermarkets.

## Annex A: Recruitment Questionnaire - Greens

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**Q1** Have you or any member of your family or close friends been employed in any of the following occupations?

Advertising	Market Research
Marketing	Public Relations/Media
Journalism	Publishing
Defra	Farmer

**IF YES TO ANY OF THE ABOVE – CLOSE**

**Q2** Have you ever attended a market research group discussion?

Yes		Ask Q3
No		Go to Q5

**Q3** When did you last attend a market research group discussion?

In the last 12 months		CLOSE
12 – 18 months ago		Ask Q4
Over 18 months ago		Ask Q4

**IF DISCUSSION ATTENDED IN LAST 12 MONTHS – INTERVIEW MUST BE CLOSED  
NO MORE THAN 2 RESPONDENTS IN EACH GROUP SHOULD HAVE ATTENDED A DISCUSSION IN THE  
LAST 12-18 MONTHS**

**Q4** What were the subjects discussed in the group(s) that you attended?

**DO NOT RECRUIT IF ATTENDED A DISCUSSION ON FOOD CONSUMPTION OR ENVIRONMENTAL  
ISSUES E.G. CLIMATE CHANGE, RECYCLING ETC.**

### **CLASSIFICATION SECTION**

Can I just check a few details with you please:

**Q5 What is your gender?**

MALE	
FEMALE	

RECRUIT 2-3 men per group only

**Q6 How old were you last birthday? [RECORD ACTUAL AGE]**

Under 18	DO NOT RECRUIT
18-29	DO NOT RECRUIT
30-34	DO NOT RECRUIT
35-44	
45-50	
51-60	
60+	

*Recruit mix 35+*

**Q7 Which ethnic group would you place yourself into?**

Afro Caribbean	
Asian	
Asian Other	
African	
African other	
Black	
Black other	
Indian	
White	
Pakistani	

Other

Recruit 2 BME respondents per group for Nottingham, Leeds, London and Birmingham

Q8 Do you have a registered disability?

Yes	
No	

Q9 Could you tell me the occupation of the head of your household:

.....WRITE IN

.....(INDUSTRY)

**IF RESPONDENT IS NOT THE HEAD OF THE HOUSEHOLD – ASK Q6**

Q10 What is your occupation and is that full or part time employment?

OCCUPATION OF RESPONDENT..... WRITE IN

- FULL TIME (30HRS+)
- PART TIME (18-29 HRS)
- FULL TIME EDUCATION
- PART TIME EDUCATION
- NOT WORKING
- RETIRED


RECRUITER TO RECORD SOCIAL CLASS

A	
B	
C1	
C2	
D	
E	

**RECRUIT MIX BC1C2**

Q11 Which of the following best describes your household?

Owner occupied: own outright	<input type="checkbox"/>	Rented from private landlord / letting agency	<input type="checkbox"/>
Owner occupied: with mortgage / loan	<input type="checkbox"/>	Rented from Council / Local Authority / Housing association / registered social landlord	<input type="checkbox"/>
Live with parents/in shared accommodation	<input type="checkbox"/>	Rented other	<input type="checkbox"/>

AT LEAST HALF MUST BE HOME OWNERS – Does not matter if own outright or have mortgage / loan

**PERSONALITIES AND ATTITUDES**

Q12 I'm going to read you some statements could you let me know if you strongly agree, agree, neither agree nor disagree, disagree or strongly disagree with each of them.

	Agree/Disagree rating	
Lots of labelling on foods is confusing and misleading		
The plan to ban the advertising of junk food to children will help address the obesity problem the nation faces		
Environmental issues are very important to me and are something I think about when choosing how to go about my daily life		<b>MUST strongly agree</b>
The traffic light system used on many food packages is a really helpful aide in choosing what foods to purchase		
Big supermarket chains should be doing more to help local communities		
I think the environment is important but I don't really know much about it or what I should be doing		<b>MUST either disagree or strongly disagree</b>
Being 'green' is normal		<b>MUST either strongly agree or agree</b>
The Government should back out of the obesity debate and let people get on with things themselves		
Competition between supermarkets is a good thing		
Education should be the top priority for the Government		
I believe that talk about environmental damage and global warming is hyped up, and actually our environment is fine at the moment		<b>MUST strongly disagree</b>
I feel that there are too many big global issues at the moment for anything I do to make much difference – the answers lie with business and Government		<b>MUST strongly disagree</b>

**Q13** Which of the following sets of statements most reflects your own beliefs? You may not agree with all the statements in a box/exactly, but pick the one which fits closest overall.

**PLEASE USE PARTICIPANT CARD AT THIS POINT**

I take personal responsibility for the way I live my life, the things that I do, and the impact that this will have on the way of life for future generations. Indulging myself and my family every now and again is a pleasure that we deserve occasionally	<b>RECRUIT</b>
I strive to make my life as high quality as possible – I enjoy putting effort into my house, the way I turn myself out, the food that I eat, the experiences that I have - all contribute to that quality Being responsible for the impact that I have on society and the planet is something that I think about, but I try to buy the best, spending more if necessary, so that I've not got anything to feel guilty about	<b>Do not recruit</b>
'Waste not want not' sums up my general approach to life Saving money is something that is important to nearly everything that I do, but particularly so when I'm shopping	<b>Do not recruit</b>
There's a limit to how much influence any one person has to change anything big in society I'm quite pushed for time in everything I do so I tend to see food shopping more as a chore than something I like to take time over and really think about	<b>Do not recruit</b>
I do worry about things like ethics, the environment, politics and social responsibility but other things tend to take priority I'd like to be able to afford to buy more of the type of food that I really want but it's not a possibility in my life at the moment	<b>Do not recruit</b>
I don't have time to think about things like the community around me, people from elsewhere and, the environment, - my family and my friends are more important to me I don't see the point of buying expensive food products like organic or fair trade when you can get so much more for your money if you buy 'regular' goods	<b>Do not recruit</b>

**YOUR SHOPPING HABITS**

**Q14** Can you please tell me where you do most of your food shopping? [*n.b. this refers to the type of outlet rather than the location*]

.....

**MAXIMUM 4 TESCO SHOPPERS PER GROUP**

**Q15** And how regularly do you go to the shops to buy food? TICK ONE BOX ONLY

Daily	
2-3 times per week	
Once per week	
2-3 times per month	
Once per month	

**Q16** Finally, roughly how far do you travel per trip to do your food shopping?

Less than one mile	
1-3 miles	
3-5 miles	
5-10 miles	
10-20 miles	
More than 20 miles	

**CONTACT DETAILS**

**NAME:**

**ADDRESS:**

**TEL NO:**

**INTERVIEWER'S DECLARATION:**

I DECLARE THAT NO 2 PEOPLE IN THIS GROUP KNOW EACH OTHER AND THAT THIS IS A TRUE RECORD OF AN INTERVIEW WHICH HAS BEEN CONDUCTED WITH A RESPONDENT WHO IS NOT A RELATIVE OR FRIEND OF MINE

INTERVIEWER'S SIGNATURE ..... DATE .....

Please hand out pre-task diary and ask them to complete over a 7 day period. This MUST be taken to the groups.

## Annex B: Discussion guide

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### Moderator introduction (5 minutes)

- Opinion Leader facilitators introduce themselves
- Explain purpose of group (do not reveal client or exact purpose at this stage to enable spontaneous discussion about views of food, choices about food, and decision-making about food choices
  - To talk about what food they buy, the choices they make and how they make those choices
  - We are interested in everyone's opinions
- There are no 'right' answers
  - Feel free to disagree but please respect the fact that some people may feel differently to you.
- Stress confidentiality
- Seek permission to record the group

### Warm up exercise: respondent introductions (5 mins)

- Participants in pairs to introduce themselves to each other (name, family, an interesting fact about themselves)
- In pairs introduce each other to the group

### Discussion of the pre-task diaries (15 mins)

- Go around the group and ask people about the sorts of meals they have eaten / cooked this week
  - *Flipchart responses*
  - *Identify commonalities across the group*
  - *Note whether participants bought any of the product life cycle items*
- Ask explicitly in turn whether people have purchased any meat, fish and dairy
  - Where did they buy this from? What did they use it for?
- Explore general reasons behind consumers' purchases and the purchase making decision process
  - *Flipchart reasons*
  - *Group common influences*
  - *If not mentioned probe on:*
    - *Cost*
    - *Health*
    - *Animal welfare*
    - *Taste*
    - *Social influences*
    - *Availability*
    - *Convenience*

- *Seasonality*
  - *Locally produced food*
  - *Environmental considerations*
- Explore the perceived importance of each of these influences
    - *Explore any differences in opinions*

### **Exploring future aspirations / aspirations around the behaviour goals (40 minutes)**

Each participant to make a collage of images depicting the food that they would ideally like to eat in a whole day assuming that time, money and accessibility is not an issue. [N.B. these images are tailored to allow us to gauge aspirations around the different behaviour goals]

- Participants discuss their individual collages explaining why they have chosen the food that they have
- Explore common themes and ideas, differences
- Particularly probe why people have / have not chosen:
  - Organic meat
  - Certified fish
  - Dairy products
  - Fresh fruit and veg
  - Fair trade products
  - Packaged microwave meals / ready meals
- What does 'good' food mean to people?
- What does 'bad' food mean to people?
  - *Flipchart responses building a list of both good and bad food*

### **Introducing the concept of sustainable consumption and production in food (30 mins)**

Explain that as they might be aware there are lots of environmental, social and economic challenges associated with food such as; the effect that certain products have on the land, the wider effect that the way food is produced has on the environment, how animals are treated, the prices that farmers are paid for their produce, the way that we dispose of food, and where food comes from and how it gets to the supermarkets. For the rest of this session we want to talk in more detail about these sorts of issues.

- Is this something they have ever thought about before in relation to food? Why / Why not?
- What do they think the areas for concern are in terms of food production and consumption?
  - Probe: where do they think the greatest impacts lie?
  - Probe: extent to which consumers engage with social, economic and environmental choices
- Do they consider sustainability at all at the moment when making their food purchases?

- If yes, which aspects of sustainability do they think about the most? Probe on social, economic and environmental?

Go through each product handout [tomatoes, yoghurt and milk] in turn.

ROTATE ORDER BETWEEN GROUPS.

For each, read through the handout, check comprehension and explore initial thoughts, reactions and ideas.

- Is this something they have ever thought about before? If yes, which aspects?
- Do they think this matters? Why? Which parts?
- Do they already think about any of this when making purchasing decisions?
- What impact do they think:
  - They can have?
  - Business can have?
  - Government can have?
- What are the barriers to change?
- What is likely to happen/not to happen?

Discuss whether any of this information makes them think in a different way at all about their aspirations discussed earlier. How? What would they change (if anything)?

### **Exploring reactions to the five specific behaviour goals (15 mins)**

Explain that there are several behaviour changes that the Government has highlighted which if all consumers adopted would significantly reduce the overall environmental impacts associated with food production and consumption. They are keen to get feedback on these changes to find out what people think about them as an idea, and whether they can see themselves and others adopting these behaviours (or indeed if they already act in this way).

Introduce the five behaviour goals in turn. ROTATE ORDER BETWEEN GROUPS.

1. Switching to a diet with lower environmental and social impacts (eating a more balanced diet i.e. less meat and dairy)
2. Wasting less food in the home (i.e. Buying less food)
3. Buy more certified/assured fish and fish products (instead of non-certified)
4. Switching to more seasonal and local food – (i.e. Buying food in season which is also locally produced)
5. Increase purchase of organic or certified/assured food and drink (include fair trade)

For each, explore initial reactions and thoughts

- How do these behaviours fit with participants' current behaviour?
- Are they already doing any this? – Refer back to earlier discussions

- Do any of their aspirations contradict these behaviour goals?
- Can they see themselves doing this?
- Can they see other people doing this?
  - Why/why not?
  - What do they think are the barriers to people changing in this way?
  - Is this goal ever achievable? If yes,
    - What would need to happen in order for people to change?
    - What would business have to do?
    - What would Government have to do?

After considering each behaviour goal, as a group:

1. Rank behaviour goals in order of their personal willingness to adopt them
2. Rank behaviour goals in order of their perceptions of what society would be willing to adopt
3. Rank according to their current ability to take action in this way

For each ranking; explore reasoning fully and any differences amongst the group.

### Final things (5 mins)

Each participant to write a postcard (to be used as a prompt for the **follow up telephone interviews**)

- What have they learnt today?
- What surprised them most?
- How, if at all, have their perceptions changed?
- Do they think they will change anything about their food purchasing and consuming habits on the back of today?

**Thanks and close.**

## Annex C: Case studies and handouts

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# Milk

### Production

The energy use, land use, water use, direct greenhouse gas emissions and the draining of chemicals from both manure and man-made chemicals into the land which all occur in the rearing and milking of cows (and other dairy) have a major environmental impact.



The cooling (from 37°C to 3°C) and storing of milk also affects the environment and adds to the overall environmental impact of each pint of milk.

- The production of **1 litre** of raw, non-organic milk causes the equivalent of **1kg of CO<sub>2</sub>** emissions
- Organic milk produces the equivalent of **just over 1kg of CO<sub>2</sub>** emissions (partly because more land is used to produce the same amount of milk), however in general cows are treated better on organic farms and so are less likely to be lame, stressed, or carry diseases

### Packaging production

Producing materials to package milk results in carbon dioxide emissions and a lot of water being used.

In recent years there has been a change in the way milk reaches consumers, which has led to a change in the type of materials used to package milk

- **Doorstep deliveries** of **glass bottles** by a milkman used to be the way about **90%** of people got their milk
- Now more people buy their milk from **shops** (mainly supermarkets) in **plastic** or **paperboard cartons**

Glass bottles are much more energy intensive to produce but they can be reused lots of time. If they are reused around **10** times (as they used to be in doorstep deliveries) then they actually become the most energy efficient way to package milk.

## Processing

Half of all raw milk produced in the UK is used to produce drinking milk.

After milk arrives at the dairy it goes through several stages – checking, testing, filtering, standardising, pasteurisation, and homogenisation – before it is ready for packaging.

This process is energy intensive, uses lots of water and electricity, and also produces air pollutants. However, it is less energy intensive than the primary production of milk or the production of the packaging materials.

Long-life milk (such as UHT) and extra purified milk is more energy intensive to produce than regular milk as it is pasteurised a second time.

## Retailing

Milk arrives at supermarkets at least once per day and is stored in warehouses.

- Refrigeration in general accounts for approximately **40%** of the total energy used in a supermarket

The average person consumes **3.8 pints** of milk every week.

Although there has been a change in the way that milk is sold, the overall amount of milk being sold has remained the same.

The main impact of this change in the way milk is sold has been on farmers...

- Negotiations between big supermarkets (as the major retailer of milk) and large milk producers have meant farmer's profit margins have been increasingly squeezed since the 1990s
- One litre of milk costs around **70p** but farmers now only receive **18p per litre**. This means that many dairy farmers are struggling to stay in business.

## Transport

Transport consumes fossil fuels and emits global warming gases (particularly carbon dioxide) and other air pollutants.

Milk is transported from the farm, to the dairy processor and then to the retailers. In addition, packaging is transported from the manufacturer to the processor.

In many of these transportation stages, insulated or refrigerated lorries are used which have further environmental impacts.

Changes in the way milk is purchased have had a knock on effect on the way milk is transported because more people are using their cars to pick up milk from supermarkets these days than receiving doorstep deliveries. This is less efficient per kg of milk.

Finally, most dairies are located here while most milk consumed in the heaviest populated areas, here.



Next to consumer's handling...

# Yoghurt

## Milk production

The energy use, land use, water use, direct greenhouse gas emissions and the draining of chemicals from both manure and man-made chemicals into the land which all occur in the rearing and milking of cows (and other dairy) have a major environmental impact.

The cooling (from 37°C to 3°C) and storing of milk also affects the environment and adds to the overall environmental impact of each pint of milk.

- The production of **1 litre** of raw, non-organic milk causes the equivalent of **1kg of CO<sub>2</sub>** emissions
- Organic milk produces the equivalent of **just over 1kg of CO<sub>2</sub>** emissions (partly because more land is used to produce the same amount of milk), however in general cows are treated better on organic farms and so are less likely to be lame, stressed, or carry diseases

## Packaging production

The production of yoghurt pots results in carbon dioxide emissions and a lot of water being used.

Yoghurt pots can be made from lots of different materials and come in many different shapes and sizes, some of which have a greater environmental impact than others. And it's not the largest pots that have the largest impact - a 6oz yoghurt pot is the most plastic intensive per unit of yoghurt.

It is not possible to recycle plastic yoghurt pots as the quality of the plastic is so variable. That's why some manufacturers use a very thin layer of plastic and then put paperboard (which can be recycled) around it.

## Processing

Processing yoghurt from raw milk is a very complex, energy and water intensive process.

Compared to processing milk, processing yoghurt uses **twice as much water** and **six times as much electricity**. This is because of the extra processing stages necessary as more ingredients are added and extra heating and cooling is needed.

**Fruit** accounts for around 10% of a fruit yoghurt's content, and in many yoghurts **sugar** accounts for even more of the content. Both of these ingredients have their own life cycles (production, transporting, packaging, processing) and therefore significant environmental impacts of their own.

## Retailing

After cheddar cheese, yoghurt is the most popular dairy product in terms of household expenditure.

- The average person consumes over **6½ litres** of yoghurt every year
- Households with children and adults consume more than adult only households
- The market for yoghurts is growing with 'healthy yoghurts' the fastest growing market

Keeping yoghurts cool in shops (often in warehouses before being put on the shop floor) has significant environmental impacts.

- Refrigeration in general accounts for approximately **40%** of the total energy used in a supermarket

## Transport

Transport consumes fossil fuels and emits global warming gases (particularly carbon dioxide) and other air pollutants.

During the life cycle of a pot of yoghurt, transport occurs at several different stages:

- From the farm to the yoghurt processor (for milk, fruit and sugar)
- From the packaging materials producer to the packaging materials manufacturer
- From the packaging materials manufacturer to the yoghurt processor
- From the yoghurt processor to the retailer / distributor
- From the retailer to the home
- About **10%** of yoghurt is made abroad so this adds food miles too



In many of these transportation stages, insulated or refrigerated lorries are used which have further environmental impacts.

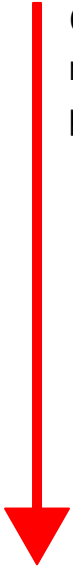


Overall a pot of yoghurt travels further in its life than a pint of milk. This is because of the many different stages in the life cycle of a pot of yoghurt and also because most yoghurt processors are located here

while most is yoghurt is consumed in the heaviest populated areas, here.



Next to consumer's handling...



# Tomatoes

Tomatoes are a very widely used food. We eat them in many different **forms** - such as on pizzas, in tins, in ketchup and of course raw. There are also many different **types** of tomatoes – such as cherry, plum and beef.

The amount of tomatoes consumed in the UK is rising but the amount of tomatoes that are produced in the UK remains about the same. In 2004, we consumed **470,000 tonnes** of tomatoes, however only **one fifth** of these tomatoes were actually produced in the UK.

How and where tomatoes are produced

## How tomatoes are grown

There are three main ways to grow tomatoes:

### 1. In an open field

The UK climate means that tomatoes for commercial production cannot be produced in this way here, however this method is widely used in Israel, Southern Spain and California among other places.

This is not an energy-intensive form of production.

### 2. In a glasshouse

This is the way that most commercial tomatoes are grown in the UK.

Tomatoes are grown in wool and the glasshouses protect the tomato plants and make sure the atmosphere is warm and moist. Most glasshouses are heated with gas-fired heating and lit with electric heating, however some use Combined Heat and Power sources which reduces the amount of energy used and therefore the energy emissions too.

Different tomato varieties need different areas of glasshouses, for example, specialist vine tomatoes require over four times as much space as classic loose tomatoes. Because the energy needed to heat and light a glasshouse depends mostly on its area, growing specialist vine tomatoes is a more energy intensive process than growing classic loose tomatoes.

### 3. In 'polytunnels'

Tomatoes are grown in the ground and plastic film tunnels are used to retain heat and moisture. The plastic tunnels need replacing about every 2 years. This method is used where tomatoes need less protection than they do in the UK, such as in Spain.

Because the plastic tunnels need replacing so frequently, the greenhouse gases and energy burdens associated with tomatoes grown in polytunnels are actually more than that of tomatoes grown in glasshouses.

#### Where tomatoes are grown

Although growing tomatoes in an open field is the least energy intensive way to produce tomatoes, by the time these tomatoes arrive at the retailer some studies show that they actually have highest environmental impact associated with them.

This is because tomatoes cannot be grown in the UK in this way so they are transported from places such as Israel and Southern Spain - usually in refrigerated trucks - which greatly increases the energy inputs and emissions associated with this form of production.

Some studies show that producing tomatoes in glasshouses in the UK actually has the lowest environmental impact overall.

#### The consumer's handling...

# Consumer impacts

## Transport

How you go to and from the places you buy food, and where those places are located has a big environmental impact.

- 59% of people use their car to go food shopping
- 30% walk
- 8% use the bus

While transporting food to shops uses **6** billion road vehicle kilometres per year, transporting food from shops to homes uses **10** billion car kilometres per year.

The **amount** of food transported each time has an impact too. Buying more food using fewer journeys reduces the environmental impact linked to each single item of food. Cars carry far less food than the trucks that transport food to shops so even though cars are more efficient than trucks, on balance cars carrying food to the home have a greater environmental impact than trucks carrying food to the shops.

## Storage

Storing food in fridges and freezers uses electricity and produces CO2 emissions.

Several factors determine the environmental impact of storing food:

- The **size** and **energy efficiency** of fridges and freezers are important
- The **length of time** that a product is stored before it is consumed also matters
- And whether the fridge or freezer is **full or not** also 'costs' energy

## Cooking

Cooking is essential for many foods and it is a big part of the total energy associated with the entire life cycle of food products, for example, cooking spaghetti accounts for more than half of the total energy used from field to fork.

## Wasting food

Food that isn't used has a significant impact on the environment as all the inputs into that product (production, processing, packaging, transporting) are wasted.

- The average household **buys 15.6 kg** of food per week
- The average household **wastes 5kg** of food per week (only 1kg of this is inedible/unavoidable waste)
  - o Under 25s waste the more than older people
  - o Families with only 1 or 2 children waste more than those with 3 or more children
  - o And people who shop 2 or 3 times per week waste more than people who shop once per month

## Waste disposal

Food waste can either be;

- Composted at home
- Recycled and composted in an industrial scale facility
- Put in a land fill with other waste

Landfills produce methane gas which is **21** times more harmful than carbon dioxide is to the environment.

In good composting facilities there is plenty of air which means carbon dioxide is produced rather than methane.

Compost can also be returned to the land as 'soil improver' which is environmentally beneficial.

## Annex D: Questionnaire for **follow up telephone interviews**

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Name	_____
Location	_____
Segment	_____

Hello my name is \_\_\_\_\_ I'm phoning from Opinion Leader Research. I believe that you recently attended a focus group with one of my colleagues about food that we conducted on behalf of Defra and I'm calling to ask you a few additional questions if that's ok? This will only take a few minutes - is now a convenient time to talk?

- If yes, continue
- If no, find out when might be convenient and book an appointment in your diary to call them back

### Section One

You might remember in the focus group that my colleague took you through some handouts about the different ways that consumers handle food and how this impacts the environment, and also about the life-cycles of few products and the different impacts of those products. Can you remember anything in particular from those handouts?

**DO NOT PROMPT BUT TICK RELEVANT BOXES BELOW**

	TICK ANY THAT APPLY
How much food consumers waste per week	
Yoghurt pots cannot be recycled	
Yoghurt is very energy intensive to produce	
How far food travels before you buy it	
How many people use their cars to go shopping	
That consumers transporting food from the shops to their homes takes more road miles than transporting food to shops	
One litre of organic milk causes more CO <sub>2</sub> emissions than regular milk	
Overall a pot of yoghurt travels further than a pint of milk	

Not using milkmen has had a big impact on how much farmers are paid for milk	
Not using milkmen has made milk production worse for the environment because we're all buying milk in plastic bottles	
Other mentions. PLEASE FILL IN COMMENTS BELOW	

### Section Two

Have you had any further thoughts since the group about how some of the issues that were discussed might be tackled? Specifically about:

1. What government could do?
2. What business could do?
3. What consumers could do?

**Section Three**

Has your behaviour changed in any way since attending the focus group?

Yes

No

If yes; what have you been doing differently?

**DO NOT PROMPT BUT TICK RELEVANT BOXES BELOW**

	TICK ANY THAT APPLY
Used the car less to go shopping	
Thought more carefully about the quantity I am buying in the shops so that I am wasting less	
Recycled more	
Reinstated the milkman	
Eaten less meat	
Eaten less diary	
Bought more organic food	
Bought more certified fish	
Bought more fair trade food	
Looked to buy food with less packaging	
Taken more notice of where food has come from	
Tried to buy locally produced food where possible	
Tried to buy seasonal food where possible	
Other mentions. PLEASE FILL IN COMMENTS BELOW	

--	--

**Section Four**

At the end of the session we asked you to fill in a postcard. In that you said that you thought you would do [READ OUT CONTENT OF POSTCARD] differently. Being completely honest, have you been doing this at all?

Yes

No

If no; what has stopped you doing this?

**DO NOT PROMPT BUT TICK RELEVANT BOXES BELOW**

	TICK ANY THAT APPLY
Having thought about it I don't think these issues are really a problem	
Not my responsibility to bring about change	
Anything I can do is so small scale compared with what business and government can do	
Had forgotten I said that	
Couldn't be bothered	
Not realistic	
Didn't really mean that I would do it	
Other mentions. PLEASE FILL IN COMMENTS BELOW	

--	--

That's all the questions that I have, thank you for your time.

## Annex E: Pre-task shopping diary

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### My Food Shopping Diary

As part of this project we would like you to record what food you buy for your household in a week (7 days). This should include **any** food you buy in shops, not just the food you buy in your main shop, but should not include food you have bought in a restaurant or fast food outlet. You may find it easier to attach your receipts than to list all of this, and that's fine.

We would also like to find out where you did that shopping: maybe it was your local shop, or a big supermarket, so please fill in the type or name of the shop on each page. Finally we would also like to know how far you travelled in total to do that food shopping – i.e. the total length of the round trip.

There's just a few quick questions before you start....

1. Where do you do **most** of your food shopping?

	Main shop (please tick one only)	Other shops (tick as many as necessary)
<b>Supermarkets</b>		
Tesco		
Asda		
Somerfield		
Sainsburys		
Morrisons		
Marks and Spencer		
Iceland		
Kwik Save		
Lidl		
Aldi		
Waitrose		
<b>Convenience Store</b>		
Londis		
Co-op		
Spar		
Costcutters		
<b>Other types of shops</b>		
Local corner shop		
Independent butchers' shop		
Independent Greengrocers		
Independent Baker		
<b>Markets</b>		

Farmers' market		
Local town market stalls		
OTHER: Please write in		

2. And roughly how far do you travel in a round trip, to this/these shops?

Distant	Please tick one
Online	
Under 1 mile	
1-3 miles	
3-5 miles	
5-10 miles	
10-20 miles	
20+	

3. And how do you **usually** get to the shops?

Mode of transport	Please tick one
Online so not applicable	
Walk	
Cycle	
Drive	
Public transport	

## My food shopping diary: Day 1

*Please record the food you have bought today...*

	<b>Did you buy food from any of these shops today?</b>  Tick as many as appropriate	<b>What did you buy from each shop?</b>  Either write in or attach your receipts	<b>Roughly how far did you travel in the round trip to this shop?</b>	<b>How did you get there?</b>  Record mode of transport
Tesco				
Asda				
Somerfield				
Sainsburys				
Morrisons				
Marks and Spencer				
Iceland				
Kwik Save				
Lidl				
Aldi				
Waitrose				
Londis				
Co-op				
Spar				
Costcutters				
Local corner shop				
Independent butchers'				
Independent Greengrocers				
Independent Baker				
Farmers' market				
Local town market stalls				
OTHER: Please write in				

## My food shopping diary: Day 2

*Please record the food you have bought today...*

	<b>Did you buy food from any of these shops today?</b>  Tick as many as appropriate	<b>What did you buy from each shop?</b>  Either write in or attach your receipts	<b>Roughly how far did you travel in the round trip to this shop?</b>	<b>How did you get there?</b>  Record mode of transport
Tesco				
Asda				
Somerfield				
Sainsburys				
Morrisons				
Marks and Spencer				
Iceland				
Kwik Save				
Lidl				
Aldi				
Waitrose				
Londis				
Co-op				
Spar				
Costcutters				
Local corner shop				
Independent butchers'				
Independent Greengrocers				
Independent Baker				
Farmers' market				
Local town market stalls				
OTHER: Please write in				

## My food shopping diary: Day 3

*Please record the food you have bought today...*

	<b>Did you buy food from any of these shops today?</b>  Tick as many as appropriate	<b>What did you buy from each shop?</b>  Either write in or attach your receipts	<b>Roughly how far did you travel in the round trip to this shop?</b>	<b>How did you get there?</b>  Record mode of transport
Tesco				
Asda				
Somerfield				
Sainsburys				
Morrisons				
Marks and Spencer				
Iceland				
Kwik Save				
Lidl				
Aldi				
Waitrose				
Londis				
Co-op				
Spar				
Costcutters				
Local corner shop				
Independent butchers'				
Independent Greengrocers				
Independent Baker				
Farmers' market				
Local town market stalls				
OTHER: Please write in				

## My food shopping diary: Day 4

*Please record the food you have bought today...*

	<b>Did you buy food from any of these shops today?</b>  Tick as many as appropriate	<b>What did you buy from each shop?</b>  Either write in or attach your receipts	<b>Roughly how far did you travel in the round trip to this shop?</b>	<b>How did you get there?</b>  Record mode of transport
Tesco				
Asda				
Somerfield				
Sainsburys				
Morrisons				
Marks and Spencer				
Iceland				
Kwik Save				
Lidl				
Aldi				
Waitrose				
Londis				
Co-op				
Spar				
Costcutters				
Local corner shop				
Independent butchers'				
Independent Greengrocers				
Independent Baker				
Farmers' market				
Local town market stalls				
OTHER: Please write in				

## My food shopping diary: Day 5

*Please record the food you have bought today...*

	<b>Did you buy food from any of these shops today?</b>  Tick as many as appropriate	<b>What did you buy from each shop?</b>  Either write in or attach your receipts	<b>Roughly how far did you travel in the round trip to this shop?</b>	<b>How did you get there?</b>  Record mode of transport
Tesco				
Asda				
Somerfield				
Sainsburys				
Morrisons				
Marks and Spencer				
Iceland				
Kwik Save				
Lidl				
Aldi				
Waitrose				
Londis				
Co-op				
Spar				
Costcutters				
Local corner shop				
Independent butchers'				
Independent Greengrocers				
Independent Baker				
Farmers' market				
Local town market stalls				
OTHER: Please write in				

## My food shopping diary: Day 6

*Please record the food you have bought today...*

	<b>Did you buy food from any of these shops today?</b>  Tick as many as appropriate	<b>What did you buy from each shop?</b>  Either write in or attach your receipts	<b>Roughly how far did you travel in the round trip to this shop?</b>	<b>How did you get there?</b>  Record mode of transport
Tesco				
Asda				
Somerfield				
Sainsburys				
Morrisons				
Marks and Spencer				
Iceland				
Kwik Save				
Lidl				
Aldi				
Waitrose				
Londis				
Co-op				
Spar				
Costcutters				
Local corner shop				
Independent butchers'				
Independent Greengrocers				
Independent Baker				
Farmers' market				
Local town market stalls				
OTHER: Please write in				

## My food shopping diary: Day 7

*Please record the food you have bought today...*

	<b>Did you buy food from any of these shops today?</b>  Tick as many as appropriate	<b>What did you buy from each shop?</b>  Either write in or attach your receipts	<b>Roughly how far did you travel in the round trip to this shop?</b>	<b>How did you get there?</b>  Record mode of transport
Tesco				
Asda				
Somerfield				
Sainsburys				
Morrisons				
Marks and Spencer				
Iceland				
Kwik Save				
Lidl				
Aldi				
Waitrose				
Londis				
Co-op				
Spar				
Costcutters				
Local corner shop				
Independent butchers'				
Independent Greengrocers				
Independent Baker				
Farmers' market				
Local town market stalls				
OTHER: Please write in				

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