Reducing food waste at home – behaviour interventions at Asda

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Which green issues do you think are most important for supermarkets to tackle?

**Ranking of green issues**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Footprint</td>
<td>10%</td>
</tr>
<tr>
<td>Energy use</td>
<td>8%</td>
</tr>
<tr>
<td>Water use</td>
<td>2%</td>
</tr>
<tr>
<td>Waste</td>
<td>33%</td>
</tr>
<tr>
<td>Selling responsibly sourced products</td>
<td>21%</td>
</tr>
<tr>
<td>Supporting farmers and suppliers to act green</td>
<td>15%</td>
</tr>
<tr>
<td>Supporting customers to act green</td>
<td>6%</td>
</tr>
<tr>
<td>Supporting local communities to act green</td>
<td>5%</td>
</tr>
</tbody>
</table>
Social influence theory

Theory of planned behaviour measures

- **Intention**
  - 'I intend to…'

- **Attitude**
  - 'How do I feel?'

- **Subjective norms**
  - 'I wonder how others feel…'

- **Perceived behavioural control**
  - 'Do I have the ability to change it?'
Cut your food bill
Food-saving tips, Save money on food bills...

Get it right, get ahead
Portion and plan to perfection...

Keep your food fresh and tasty
Fridge and freezer tips, Keep food fresh...

Get to grips with date labels
Use By, Best Before...
In 2014, we carried out interventions in October. These included:

**Facebook campaign:** Asda customers were asked to submit their favourite recipes using leftover food and were signposted to online ‘Love Food, Hate Waste’ tips from WRAP.

**Asda Life Magazine:** a feature in the October 2014 issue of the magazine (circulation of three million) provided tips for reducing the waste of specific foods. Tips included storage advice, recipe inspiration and methods to use up leftovers.

**E-newsletter:** an e-newsletter discussed using leftovers to reduce food waste and included a link to the social media campaign where they could share ideas for reducing food waste.

**Schools toolkit:** a food waste section was added to the schools toolkit with activities aimed at primary school students covering correct storage, portion sizing and general household food waste information. However, due to difficulties in collecting data, this intervention was not included in the analysis.
Behaviour Change Interventions

The 2015 interventions were carried out between August and September. These included:

**On-pack stickers:** advice and tips for making the most of four highly wasted product lines (potatoes, minced beef, carrots and rocket), including recipe tips and storage advice.

**In-store event:** Asda’s Community Champions engaged with customers about household food waste, discussed top tips for reducing food waste at home, played games and quizzes, handed out a leaflet containing customer quotes and tools for reducing food waste at home such as food clips, spaghetti measurers and to-do lists.

**Asda Life Magazine:** a three-page feature in the magazine with advice for making the most of products and using up leftovers, as well as tips and tricks for cutting down food waste.
Data were collected using Asda’s Everyday Experts panel of 20,000 shoppers. Surveys were carried out before the food waste interventions, approximately two weeks after the interventions ended and a post-test survey a few months later.

<table>
<thead>
<tr>
<th>Survey date</th>
<th>Responses (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2014</td>
<td>7,900</td>
</tr>
<tr>
<td>October 2014</td>
<td>5,383</td>
</tr>
<tr>
<td>March 2015</td>
<td>4,398</td>
</tr>
<tr>
<td>September 2015</td>
<td>3,464</td>
</tr>
<tr>
<td>December 2015</td>
<td>3,267</td>
</tr>
<tr>
<td>February 2016</td>
<td>2,789</td>
</tr>
</tbody>
</table>
**Measures:** self-reported food waste quantity (behaviour), self-reported food waste frequency, attitude, perceived behavioural control, subjective norms, intention.

**Analysis methods:** repeated measures test, paired sample t-tests, regression analysis.
Means of Quantity of Waste

Asda Secondary Shoppers

Intervention Recall

- Did not recall any interventions
- Recalled at least one 2014 and/or 2015 intervention

Estimated Marginal Means

May'14  Oct'14  Mar'15  Sept'15  Dec'15  Feb'16

Time
Findings

- Longitudinal study shows the two time-limited packages of interventions causing customers to become more accurate in measuring the food they waste followed by a reduction in self-reported food waste.

- Customers with higher food waste said they saw the interventions and responded to the interventions.

- Primary shoppers (i.e. dedicated Asda shoppers) who said they did not see the interventions had a similar pattern of waste as those who did (Primary and Secondary shoppers). This shows that some shoppers (Primary shoppers) did intuitively respond to the interventions.
• It was difficult to differentiate the effectiveness of each intervention, only each set of interventions.

• Over time the effect of the intervention is reduced and food waste levels increase until the next time-limited interventions. This shows that regular interventions are required to keep food waste low.

• Theory of planned behaviour variables were successful in predicting future food waste behaviour.
• 35% of customers told us they remember seeing at least one of the behaviour change interventions.

• While 34% of these customers have shown a positive change in behaviour by reducing the amount of food they say they throw away.

• Best estimates show this equates to 12% of Asda’s customer base so reaching an estimated 2 million customers.
Conclusions

1. Retailers can influence customers’ food waste behaviour.
2. People are influenced by information messages if they recall seeing them or not.
3. Repeated information campaigns are required for consumers to continue to reduce their reported food waste.