

Executive Summary

The aim is to provide an overview of the possible areas of change that climate change concerns could provoke in consumer behaviour, and explore how such potential change might impact on the key FSA policy areas.

Last updated: 21 Jan 2025

In this project

[In this project](#)

1. [Foreword](#)
2. [Executive Summary](#)
3. [Findings](#)
4. [Conclusions](#)
5. [Annex A: Evidence sources identified through expert engagement](#)
6. [Annex B: Workshop agenda](#)

Background and objectives

To ensure access to the most recent evidence and specialist thinking, the Food Standards Agency (FSA) has input from independent experts in Scientific Advisory Committees. The Advisory Committee for Social Science (ACSS) provides advice on social science's contributions to the FSA's objectives. It does so primarily through working groups, including the recently created working group on climate change and consumer behaviour (CCCB) which advises on how consumer behaviour may change due to climate change.

To guide activity of the working group, and inform FSA research priorities, a two-phase expert elicitation exercise was undertaken. The aim of this was to provide an overview of the possible areas of change that climate change concerns could provoke in consumer behaviour, and explore how such potential change might impact on the key FSA policy areas:

1. Regulating food businesses (under the Food Safety Act 1990) ensuring that:
 - businesses do not include anything in food, remove anything from food or treat food in any way which means it would be damaging to the health of

people eating it

- the food businesses serve or sell is of the nature, substance or quality which consumers would expect
- the food is labelled, advertised and presented in a way that is not false or misleading.

2. Ensuring food authenticity (for example, that food is what it says it is) in terms of (but not limited to) origin, method of production, expiry date, advertised benefits, nutritional claims, and ingredient. This is a key area of [food crime](#) (serious fraud and related criminality in food supply chains) but can also be unintentional (depending on point of supply chain). Key risks to food authenticity are:

- adulteration - including a foreign substance which is not on the product's label to lower costs or fake a higher quality
- substitution - replacing a food or ingredient with another substance that is similar but inferior
- misrepresentation - marketing or labelling a product to wrongly portray its quality, safety, origin or freshness

3. Ensuring/Encouraging food safety in terms of the conditions and practices that preserve the quality of food to prevent contamination and food-borne illnesses. This refers to the regulation of food businesses (under the Food Safety Act 1990) as well as exploring potential unsafe behaviours in the home and educating consumers accordingly.

Stage 1: Method and key findings

Stage 1 started with an initial online expert elicitation exercise, followed by an expert workshop. Ipsos UK (in partnership with ADAS), were commissioned to carry out these stage 1 activities. The online exercise was sent to experts in relevant research areas and sought their feedback on a draft framework mapping climate change relevant behaviours against FSA priority areas (developed by the FSA and ACSS working group members, with input from Ipsos UK), hereby referred to as the CCCB map. There were suggestions to include additional specific behaviours, but general support for the 4 broad classifications used in the map:

- Dietary change
- Purchasing preferences
- Behaviours in the home

- Eating outside the home

As part of the online exercise, participants were invited to submit an abstract for a presentation at a subsequent workshop to explore the topic of climate change and consumer behaviour. The expert workshop ran online on the 18th May 2021, with 38 attendees (6 members of the project team, 5 ACSS members, 5 selected presenters and 22 additional invitees). The first section of the workshop contained presentations from experts on topics relating to climate change’s impact on consumer food-related behaviours, with the second section focusing on discussing the map of climate change relevant behaviours against the FSA priority areas.

Based on stage 1 findings, the trends identified as having the highest potential impact on FSA priority areas are shown in table 2.

Table 2: Key climate change relevant behavioural trends and potential implications for FSA policy areas.

Behavioural trend	Potential implications
Avoiding food waste	Consumers may consume food dangerously beyond its use by date. Increased use of unregulated food sharing apps, possible contaminant risk.
Increased use of alternative packaging	Incorporating recycled material in packaging without appropriate safety testing, potentially leaving trace levels of toxic substances.
Increase use reusable containers to purchase food/drink in	Cross contamination from re-use of food/drinks containers without adequate cleansing.
Novel proteins increase	Some novel proteins, such as pea protein, raise allergen concerns. Some plant-based foods are highly processed (for example, excessive added salt), and health effects unknown. Consumers may lack knowledge on the practices of cooking alternative proteins, such as plant-based meats, insects, and legumes, and cook them in a way that poses risks for their health.

Stage 2: Method and key findings

In order to expand on the findings from stage 1, a second workshop was held on the 18th February 2022, with representatives from relevant FSA teams (such as Chemical Safety Policy and National Food Crime Unit).

For each of the 4 trends identified in stage 1 participants were asked:

- How concerned should the FSA be about the issues identified?
- What relevant activity is the FSA currently engaged in?
- Is further evidence needed on any area?

Participants in the workshop included ACSS members, as well as FSA staff covering a broad range of relevant policy areas. These included regulatory compliance, chemical safety policy, field operations, social research, additives and food contact materials, labelling, food crime, meat hygiene, general hygiene, strategic insights, wine standards, and novel proteins.

The workshop built cross-FSA understanding of the potential changes in consumer behaviour due to climate change and highlighted a number of key questions and opportunities for further exploration:

1. **Food Waste and Best Before/Use By dates:** How could the FSA support companies to ensure that accurate dates are used and that consumers observe the dates in the right way?
2. **Food Sharing Apps:** How could the FSA incorporate FSA messages into apps?
3. **Re-use of containers:** How could the FSA ensure messaging on suitable containers to use, and the importance of cleaning and maintaining containers?
4. **Novel/recycling packaging materials:** How could the FSA identify and plug any gaps in coverage of safety regulations, and ensure that the system is ready for a proliferation and increase in volume of novel and recycled materials?
5. **Novel proteins:** How could the FSA build understanding about the production standards for novel proteins, and their role in overall diet and nutrition? The FSA will need to seek partners for this kind of enquiry, including the Office of Health Improvement and Disparities (OHID). How could the FSA build an overarching framework of oversight bringing together the many parts of the organisation with an interest?

Cross-cutting themes: In all these areas, businesses could take much more responsibility. It would be helpful to have channels to understand businesses' expectations and discuss FSA's expectations of the businesses. Partners such as WRAP, through voluntary agreements such as the Courtauld Commitment, may be able to help establish such channels.

Conclusions

Concerns about climate change and sustainability are likely to influence consumer behaviours in a number of ways, from what food they choose to eat and how they access this food, to how they prepare and store food in the home. As consumer behaviours change this will have food safety, authenticity, and regulation implications for the FSA. This report via engagement with the FSA provides an overview of the main behavioural changes which could occur as a result of climate change and sustainability and has prioritised these potential avenues for further exploration as above.