

# Food and climate change: A review of the effects of climate change on food within the remit of the Food Standards Agency

Area of research interest: [Emerging challenges and opportunities](#)

Study duration: 2009-11-01

Project code: X02001

Conducted by: University of East Anglia

[Back to top](#)

## Background

The purpose of the report was to inform how climate change may affect the Agency's ability to deliver safe and healthy food, and to suggest ways that the Agency may engage in climate change mitigation and adaptation. The report aimed to examine all interactions between climate change and food.

[Back to top](#)

## Research Approach

The methodology included expert interviews and a literature search. The approach also includes review of the report by experts within different sectors of the Food Standards Agency. Aspects covered were the impact that food and food waste has as a driver of climate change, the impact of climate change on nutrition, the impact of climate change on food safety and how individual and societal responses to climate change may impact on nutrition and food safety.

[Back to top](#)

## Results

**The policy implications of the review are as follows:**

**For policy on food safety:**

- Need to increase horizon scanning and speed in addressing threats.
- Continue safety work on chemicals and radiation levels in foods and food borne infection, where risks may alter and increase in unpredictability.
- Close monitoring of animal health in UK and overseas for chemical contamination and pathogens.
- New targeted monitoring of areas and population groups.

**For policy on nutrition:**

- Initiatives to encourage healthy eating will become increasingly important should climate change lead to less healthy diets.
- National Diet and Nutrition Survey (NDNS) needs to continue to highlight changes and extend to vulnerable groups.
- Need to continue to monitor nutritional quality of food which could affect intakes as climate changes or new crop breeds might alter the content.

**For policies on safety and nutrition:**

- Engage with others aiming to reduce climate change, to avoid compromising safety and nutrition by other actions.
- Integrate low carbon diet, safety and nutrition in policy and in information for consumers.
- Increase the monitoring of local food sources if production localises, to protect safety and nutrition.
- Guidance to individuals, and catering, and industry on safe, nutritious and GHG-friendly diets and good business practices, and provision of such food through public services.

**More information is needed on:**

- How climate currently affects food safety - gain insight into future implications, in particular of increases in extreme weather events.
- Likely effects of climate change on food prices and availability in the UK.
- How climate affects food choice, and what this means for future climates.
- How specific groups of consumers will respond to food price fluctuations and rises.
- Life cycle analysis of foods and food waste.

Research report

**England, Northern Ireland and Wales**

PDF

[View A review of the effects of climate change on food within our remit as PDF\(Open in a new window\)](#) (2.35 MB)