Consumer perceptions of precision breeding: Introduction

Research context

The Genetic Technology (Precision Breeding) Bill is currently progressing through parliament and, should the Bill achieve Royal Assent, this will allow the Food Standards Agency (FSA) to advise Ministers on the introduction of a regulatory framework for precision bred organisms (PBOs) for use in food and feed which is separate from the current regulatory framework for genetically modified organisms (GMO) for food and feed uses.

The introduction of precision bred food and feed to the market will impact on consumers and the choice of food products available. Now that the Bill is going through the UK Parliament and the scenario of the introduction of precision bred food into England is less hypothetical, the FSA wishes to commission further research to build on Consumer perceptions of genome edited food (2021).

Devolved nations context: The FSA's role and the Bill

Devolution in the UK means that there are different policy requirements, accountabilities and priorities across the four nations. The FSA operates in England, Northern Ireland, and Wales and has different policy responsibilities within these countries. Food Standards Scotland (FSS), a separate public body, has responsibility for food policy in Scotland.

Figure 1: Food policy responsibilities across the UK four nations

Food policy area	England	Northern Ireland	Wales	Scotland
Food and Feed Safety and Hygiene	FSA	FSA	FSA	FSS
Nutrition related Labelling, Composition and Standards	Department of Health and Social Care	FSA	Welsh Government	FSS
Food Compositional Standards and Labelling	Department for Environment, Food and Rural Affairs	FSA	FSA	FSS

The Precision Breeding Bill is for England only. Despite being an England-only Bill, there may be implications for consumers in Northern Ireland, Wales and Scotland:

- **Northern Ireland:** Precision bred foods authorised in England will not be permitted to be sold in Northern Ireland.?Northern Ireland continues to comply with EU Law under the current terms of the Protocol on?Ireland/Northern Ireland. Under EU Food law precision bred food would still have to be authorised as genetically modified food before it could be placed on the market and labelled as such. It would be subject to the EU authorisation process. We have included consumers from Northern Ireland in this research to understand their views on precision bred foods should products be sold in Northern Ireland in future.

- **Wales and Scotland:** Under the market access principle of mutual recognition outlined in the UK Internal Market (UKIM) Act 2020 a product that is authorised to be produced in or imported into England can enter the Scottish or Welsh market for direct sale. The mutual recognition principle only relates to the sale of goods in another part of the UK – local regulations govern any use/processing after sale by food/feed businesses. However, businesses in Wales and Scotland would not be able to produce precision bred foods to sell in Wales or Scotland themselves.

This research does not aim to get consumers' views on the Bill itself, but to understand consumers' priorities and opinions to inform the FSA's regulatory development and communication approaches if the bill is passed.

This research aims to:

- Understand consumer awareness and perceptions of precision breeding,
- Provide evidence on what information might be needed to maintain consumer confidence,
- Provide evidence on future information needs of consumers when precision bred food products come on the market,
- Provide evidence to stakeholders in the Welsh Government and Northern Irish Executive to inform future policy,
- Inform how the FSA should communicate the main themes of the Bill to consumers.

Research questions

1. What do consumers currently understand about the term "precision breeding"?
2. What are their attitudes to precision breeding, what concerns do they have and why?
3. What do they perceive to be the risks and/or potential benefits?
4. What are the factors that influence the different attitudes towards the acceptability of precision bred organisms entering the food and feed market?
5. What are consumer views on the FSA's proposed regulatory framework for precision bred organisms, and how if at all does it impact on consumer confidence?
6. What information do consumers need to come to an informed position on precision breeding?
7. How can the FSA best communicate with consumers about precision breeding?

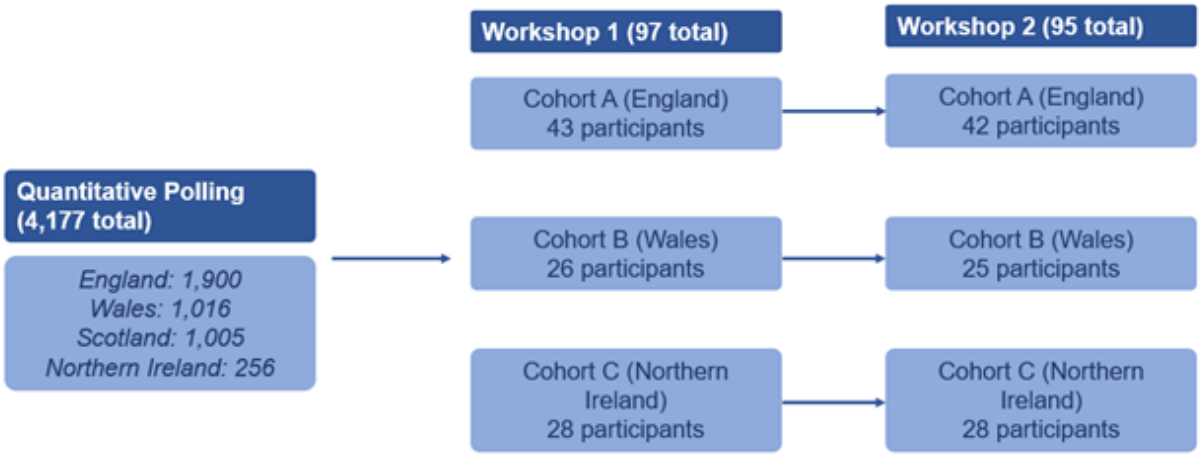
Methodology

In August 2022, the FSA commissioned Ipsos UK to conduct research exploring consumer views on precision breeding. This research used a mixed-methods approach and is comprised of two phases:

Phase 1: Quantitative survey research (England, Scotland, Northern Ireland, Wales)

Phase 2: Deliberative workshops (England, Northern Ireland, Wales)

Figure 2: Flowchart showing the fieldwork process



Phase 1: Quantitative online survey

For phase one of the research, an online methodology was used to deliver the quick turnaround required. The Ipsos Access Panel was used as it achieves national and regional samples that are representative of the population on key demographics, as well as allowing for equivalent split samples for the administration of nuanced surveys on specific topics.

From the online survey, the key issues were the level of awareness and knowledge of precision breeding, consumer views of the acceptability of precision breeding, and what are consumer views on precision bred food. The initial findings from this informed the qualitative phase of this research.

Phase 1: Sampling and recruitment

A key requirement for the FSA was how views varied across the UK nations. The achieved sample of 4,177 UK adults aged 16-75 was composed of online interviews through an Ipsos i:Omnibus survey in England (1,900), Wales (1,016), Scotland (1,005) and Northern Ireland (256). Fieldwork ran from 29 July to 1 August 2022.

Quotas for the overall sample were set on age, gender and working status. These samples were weighted to be representative of each nation by age, gender, working status and social grade. When they were combined into an overall UK data set, each nation was then weighted to its relative proportion. The full sample for phase 1 can be found in Appendix 1.1.

The survey included a split sample where respondents were made aware of the FSA's and FSS's regulatory involvement with precision breeding at different stages of the survey. Whilst this had little impact on findings, this report highlights where these differences in question wording occurred.

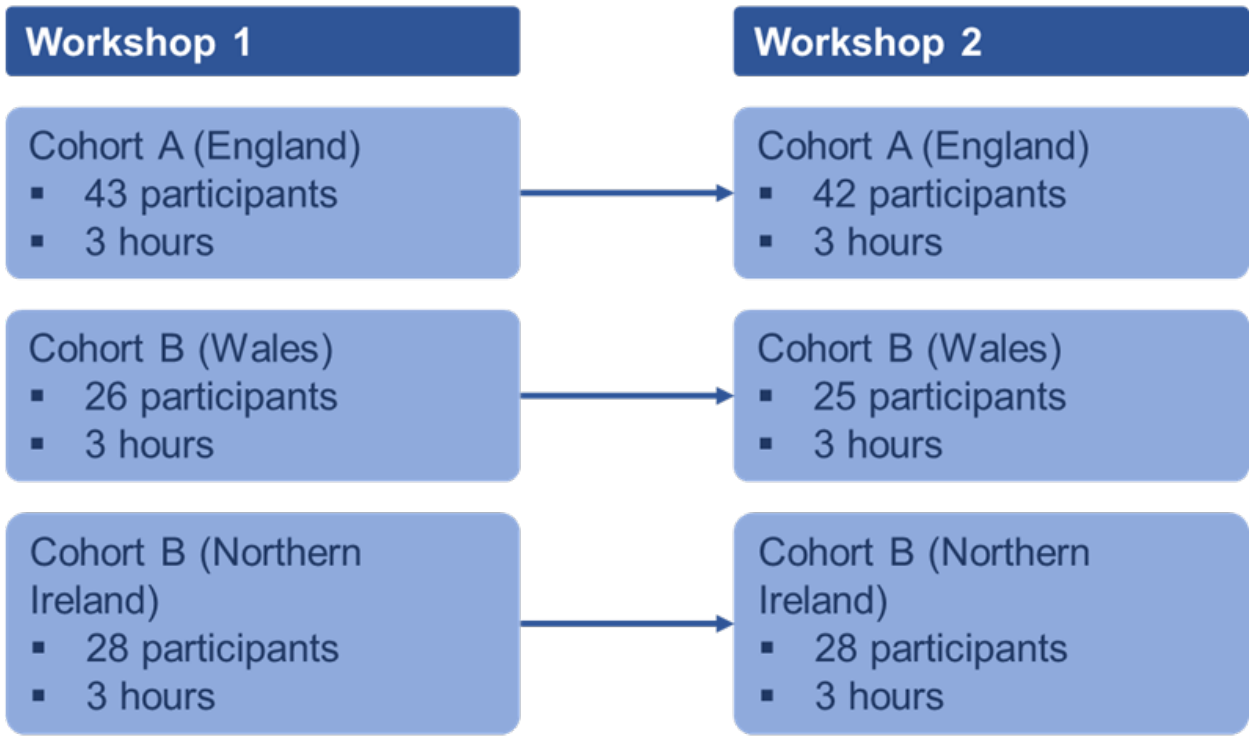
Only demographic differences that are statistically significant at the 95% confidence level, 2-tailed, have been commented on in this presentation, unless otherwise stated.

Phase 2: Deliberative workshops

Phase 2 was the qualitative stage of the research, consisting of reconvened workshops with 97 participants across three national cohorts. Each workshop was 3 hours long, providing participants with 6 hours of deliberating across the two sessions.

The benefits of using reconvened workshops were twofold. It meant that participants had enough time to familiarise themselves and ask questions about precision breeding before having to consider their own opinions. Additionally, it allowed space for reflection between the two workshops, meaning participants could discuss the topic with their peers and reflect on what they had learnt.

Figure 3: Flow chart of phase 2 design



Phase 2: Sampling and recruitment

The target sample was made up of 90 participants in total, split by nation: 40 England participants, 25 Wales participants and 25 Northern Ireland participants. To ensure this target was achieved, there was over-recruitment in each cohort. Due to good participant attendance, the achieved sample was 97, with 43 in England, 26 in Wales and 28 in Northern Ireland.

To ensure that the workshops delivered a diverse range of views and experiences, each workshop sample met minimum quotas on age, gender, ethnicity, and socio-economic group (SEG). Due to the nature of the research, the sample also accounted for additional relevant factors, including household makeup, dietary habits and food hypersensitivities.

For further details, please see the proposed quotas and achieved sample in Appendix 1.2.

A trusted recruitment partner used a screening questionnaire to select participants in each nation, and participants received £120.00 in total for their time (£60.00 per 3-hour workshop).

Workshops were hosted online via Zoom. To enable deep discussions between participants, each workshop was divided into smaller breakout room groups of around six participants. Each breakout room had its own facilitator to foster meaningful but also manageable interactive conversation.

Participants would return to the central plenary when being presented with further information. This ensured consistency in how key information was delivered to participants.

Workshop 1: The first set of online workshops took place on 11 (England), 12 (Wales) and 13 (Northern Ireland) October 2022. The key aim of this workshop was to introduce participants to the basic concepts of precision breeding, allowing us to capture baseline awareness of the topic, initial reactions to the concepts, and explore perceived benefits and risks.

Workshop 2: The second workshops took place a fortnight later, on 26 (England), 27 (Wales) and 28 (Northern Ireland) October 2022, with the remaining participants from each regional cohort (footnote 1). Breakout room groups were re-arranged so that participants were interacting with a different mix of people, and therefore exposed to diverging opinions and attitudes towards precision breeding. This session aimed to explore expectations of precision breeding regulation, seek feedback on a proposed regulatory approach, and understand how precision breeding information should be communicated to the public.

These workshops were held following conclusion of debates on the Bill in the House of Commons and prior to 2nd reading of the Bill in the House of Lords. Any details provided to participants was therefore based on the proposed contents of the Bill at this point, which was still to be subjected to debate in the House of Lords (where amendments could be considered).

Reporting conventions

This report blends both quantitative polling findings with qualitative workshop findings. It is structured around the flow of workshop discussions, with quantitative findings integrated at key points to provide context. Subheadings make clear where quantitative findings are included. Although the results have been blended, only the quantitative findings are relevant to Scotland, as qualitative work relates only to England, Wales and Northern Ireland. FSS will be carrying out separate qualitative research with consumers in Scotland.

There are some key differences in reporting conventions for the qualitative and quantitative findings:

- Quantitative: Refers to respondents, rather than participants. This aims to show quantity and proportion of respondents who held particular views. While similar quantitative research was conducted in 2020, it is important to note that the data sets are not directly comparable due to changes in language.

- Qualitative: Refers to participants, rather than respondents. Aims to show the range of views held, and the strength of feeling, not how many participants held a particular view.

1. There was some drop-out between workshop 1 and 2 for Cohorts A and B.