Define research & insight

GM Labelling: Exploring public responses to the labelling of GM food and the use of GM-free labelling

Supplementary Appendix

Social Science Research Unit
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Define research & insight

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GM Labelling
Exploring public responses to the labelling of GM food and the use of GM-free labelling

Supplementary Appendix

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Appendix A: Additional Methodological Detail

In-Depth Interviews

In-depth interviews were included to focus in detail on the specific needs of particular participant types and to examine participant views with minimal influence of social dynamics and social norming. Food shopping is largely a private or family-centred activity; the majority of shoppers would first face GM labelling in the supermarket when on their own, in the absence of extensive information about GM technology or its (potential) impact on food.

These interviews thus helped ensure understanding of how individual food-purchasing habits and routines in these real-world conditions affected participants' views of GM, labelling needs and expected consumer behaviour.

In-depth interviews also allowed the research to assess the needs of participants who are less suited to inclusion in group discussions – such as those with individual needs that affect shopping behaviour and engagement with food labels (such as allergies) and those with particularly high engagement with food technology (such as those with dietary or science education).

Group discussions

Group discussions were also included in the qualitative sample. These helped to understand the influence of social discussions and attitudes on individual views and purchase decisions.

These sessions included a slightly smaller number of participants than traditional focus groups, enabling rich debate and discussion whilst retaining helpful rapport amongst participants.

Mini-group sessions were split by higher SEG (ABC1) and lower SEG (C2DE) to ensure homogeneity, ensure better dynamics within the sessions, and help research

determine whether understanding and information needs vary across SEG segments.

In order to aid understanding of how labelling needs differ across consumer attitudes, mini-group sessions were also clustered according to attitudes towards GM (as assessed at recruitment). Groups were segmented to include primarily 1) positive, 2) negative or 3) 'undecided' or 4) 'No Opinion/Indifferent participants.

Segmenting sessions in this way helped to ensure that more vocal opponents or proponents of GM did not drown out the views of 'indifferent' or 'undecided' participants and that all participants felt comfortable expressing their opinions.

2 groups containing 'mixed' attitudes were also included however in order to assess the influence of differences on opinion formation and expected consumer behaviour.

Follow Up Sessions

These interviews allowed the research to:
- Understand if the participants' views regarding GM and any issues raised during research still remained
- Uncover latent participant considerations about GM labelling issues.
- Gain considered reflection about labelling needs
  - Allowing participants with 'knee jerk' reactions based on 'top down' decision formation to reassess responses and further articulate their position.
- Assess individual views in the absence of group influences (for group participants)
  - In particular, to identify whether 'undecided majority' participants' views are overshadowed in any way in group settings.
- Explore reported real-life impact of GM labelling
  - For example, any consumer use of or search for GM labels following research sessions, or any search for further information

Appendix B: Additional Sample Detail

In addition to the sample factors discussed in Section C2, all participants included in the sample met the following inclusion and exclusion criteria, as determined via a short questionnaire at recruitment stage:

- *Socioeconomic Group (SEG)*
    - A range of socioeconomic groups were represented across the sample, determined by the occupation of the head of household or chief income earner.[1]

- *Mix of females and males were included*
    - Slightly higher representation of females to reflect this gender's typically higher level of responsibility for household shopping.

- *Responsibility for household food shopping*
    - All responsible for some household food shopping, e.g. either buying some household food products themselves or was a decision maker on which products are bought and consumed, from a spread of retail environments

- *Interest in and use of food labels*
    - Including a spread of interest in and use of food labels
    - Individuals with specific food issues (e.g. allergies) monitored but included in the sample as fell out naturally.
    - None to reject labelling

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[1] Based on the NRS social grade classification system (www.nrs.co.uk/lifestyle.html). Alternative systems such as the NS SEC (National Statistics Socio-Economic Classification) can also be used to determine socio-economic status. However, SEG was used in this research for pragmatic reasons; social grouping is more familiar to those recruiting participants to market research.

- *Attitudes towards GM food*
  - o Including a range of attitudes towards GM, segmented across groups.

- *Attitudes to science and technology*
  - o Including a range of views across the sample

- *Education*
  - o Including a range of education levels, segmented across groups as noted in Section C2.
  - o Those with postgraduate qualification(s) in nutrition/science/food science interviewed via in-depth interviews only (excluded from groups).
  - o Those working in nutrition/food science/science interviewed via in-depth interviews only (excluded from groups).

Appendix C: Commentary on Method

1. Individual and Group Dynamics

The literature on GM attitudes suggests that social norms and group dynamics may influence individual opinion formation (e.g. Sheldon et al. 2009). The current research employed a range of approaches to help understand the influence of these dynamics on opinion formation. These were also useful to ensure that individual responses were not overshadowed by 'group think' and that the views of all participants were captured, regardless of their level of knowledge and engagement. This was particularly important when including individuals with less established views.

These included:
- The inclusion of both in-depth interviews and group sessions
- Smaller group numbers, to ensure all participants were given the opportunity to have their voices heard, and so that moderators could prompt additional contributions from across group members to ensure full participation
- The inclusion of (two) group sessions containing a mix of views towards GM across participants, in order to determine the potential effect of more vocal participants; as well as (eight) more homogeneous group sessions in order to examine the effect of GM opinions specifically
- Consistent reassurance – at point of recruitment and throughout research sessions themselves – that all views were of interest, including those from individuals who were less sure of their opinions or less knowledgeable about GM overall
- In group sessions, the use of a range of research exercises and documentation to capture individual responses prior to group discussion

This was important as it was noted in the group discussions that strength of opinions could be increased, for example those who were more undecided or

mildly negative towards GM tended to take stronger anti-GM views, due to the 'group' effect than those in individual interviews.

2. Follow up sessions

Previous research suggests that consumer perceptions of risks and benefits are dynamic processes, and attitudes towards GM technology continuously evolve (e.g. Brendahl et al. 1998; Wilson et al. 2004). As noted previously, in order to determine whether views expressed during research sessions were maintained upon reflection, follow-up interviews were conducted with a proportion of participants.

Overall, these were a useful addition to the research approach and worked well to understand the overall reported impact of information provided during research sessions – such as details of current labelling legislation and mocked up label options explored. These follow-up interviews suggested that for some individuals, initial responses towards GM in a research context, can be on occasion somewhat heightened – as participants are driven to stronger stances and opinions than they might otherwise make if consulted individually.

For example, when prompted to consider GM in the research sessions, some indicated that it would be a key issue for them – one that they would seek out further information about, and which would affect their food shopping choices. However, evidence of further information seeking in follow ups was quite low overall; typically, only a core of 'most concerned' consumers reported having sought further details about GM foods. Likewise, participants typically reported that they had not sought out GM labelling in subsequent food shopping trips, regardless of interest expressed during research sessions themselves.[2]

For group session participants, follow-ups were also useful as a final check to ensure that consumers had an opportunity to represent any views they were less

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[2] Previous research has found similar disconnect between consumer behaviour and stated preference regarding GM foods – e.g., European Commission 2010.

comfortable airing in the group environment. Follow-up sessions and documentation prompts in particular were useful to ensure that participants' (often with less extreme) personal views were captured; for example, in some cases those who took a more negative stance towards labelling in group sessions admitted upon follow-up interviewing that they had not thought further about the issue and did not consider GM to be a priority concern.

Findings from follow-up sessions have been flagged throughout the report.

3. Information Provision in Research

As noted previously, prior research[3] indicated the importance of providing additional information about GM during research in order to avoid participant frustration, as pre-existing knowledge about the topic is generally low.

In order to help mitigate against this, this research introduced a brief summary of key details regarding GM foods (as discussed above and detailed in these Appendices). However, in order to ensure that both *spontaneous* and *informed* opinions were captured, this was introduced at differing times across the research process, given to half of the participants prior to attending the sessions and half of participants towards the end of research sessions, after capturing more spontaneous responses to labels.

The findings indicate that the provision of information can affect response to labelling. For those with less established opinions, or those lacking understanding, providing information about potential benefits and drawbacks of GM often lessened initial negativity and assumptions regarding GM foods.

For example, providing information about why GM feed is used and basic information about what this is – including that it is indistinguishable from non-GM

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[3] Sheldon et al. 2009

alternatives and is not used to alter animals in any way – lessened concerns for some participants.

Further additional information also increased understanding of meaning of labels; for example, for some participants, prior knowledge of GMO used in production and GM feed helped with understanding of these label options.

That said, this research indicated that informing participants about GM can be difficult, as it can be of low interest and hard to understand for those with less confidence dealing with scientific information; even those with prior information could still struggle with understanding.

APPENDIX D: EXAMPLE OF RECRUITMENT LETTER

Recruitment Letter No Pre-task Depth

Information Sheet: FSA GM Labelling Research

Thank you very much for your interest in this research. This information sheet is to provide you with some information about the research process.

This research session will take approximately 1.5 hours and will involve you discussing your views and ideas on the topic of GM food labelling.

As a thank you for coming to the sessions, we will be giving to all those participating £30 [1.5 hour interview]. These interviews are totally voluntary – if at any time you change your mind and no longer want to be involved, that is your choice. You of course would be free to withdraw at any time without reason.

The research is being conducted by Define Research and Insight Ltd. Define is a member of the Market Research Society and are bound by their code of conduct. Any personal details provided now or within the interviews (for example, names, address) will be kept confidential by Define, held securely and will not be used for any purpose beyond this specific project unless you give permission to do so. All these details will be removed from Define's records on completion of the project.

This study is being carried out solely for the purposes of social and market research. At no time either before, during or after the interview will any attempt be made to sell anything to you; this is purely a research exercise.

In order that the researcher has a record of the session's comments, these will be audio recorded, with your permission. All data collected will be kept strictly confidential and any published findings will not identify anyone. The main way the report will be disseminated/published will be on the FSA website (food.gov.uk).

The FSA may like to hold my contact details to potentially contact me in the future for follow-up research. If I give permission for the FSA to hold this information, it will be held securely for 2 years after the study has finished and they will not use my details for any other purpose. They also will not know how I responded during the initial research discussion or be able to associate my name/details with the comments I provide. Define will ask for this permission at the session.

After the research interview, the recording of the session will be listened to and a written record of all of the participant's comments that are said in the interview will be created. This is called a transcript and is used to analyse the participant's comments. This transcript will be created in a way that no-one will be able to be identified, i.e. anonymised. For example, personal details will not be written down. The FSA may also wish to receive and make this transcript available to the UK Data Archives. The UK Data Archives is a central place used by researchers to share anonymised information in order to maximise the benefit and use of research data. More information can be found at: http://www.data-archive.ac.uk/. Define will ask for permission for this at the session.

A researcher from Define may call a few days after the discussion with a few follow-up questions. Define will also ask for permission to call you at the session.

If you wish to ask any questions about the research please call Define on 0208 346 7171. Please ask to speak to Victoria Page, Research Director, who will be happy to answer questions you may have.

APPENDIX E: EXAMPLE OF CONSENT LETTER

Consent Letter Depth Interview

Informed Consent: FSA GM Labelling Research

I confirm that I have had an information sheet about the research and have had the opportunity to ask questions about this research and have had them answered satisfactorily.

I understand that the study is being carried out solely for the purposes of social and market research. No one will make any attempt to sell me anything before, during or after the interview. I understand that my participation is entirely voluntary and that I am free to withdraw at any time, without giving any reason. I understand that the study will involve an audio recording. All data collected will be kept strictly confidential and any published findings will not identify anyone. I understand that the main way the report will be disseminated/published will be on the FSA website (food.gov.uk).

A researcher from Define may call a few days after the discussion with a few follow-up questions. Define will not use my contact details for any purpose beyond this specific project and my details will be removed from Define's records beyond the completion of the project.

The FSA may like to hold my contact details to potentially contact me in the future for follow-up research. If I give permission for the FSA to hold this information, it will be held securely for 2 years (October 2014) after the study has finished and they will not use my details for any other purpose. They also will not know how I responded during the initial research discussion or be able to associate my name/details with the comments I provide.

The FSA may also wish to receive and make available an anonymised written record of this session (transcript) available to the UK Data Archives. The UK Data Archives is a central place used by researchers to share anonymised information in order to maximise the benefit and use of research data.

Please indicate whether or not you agree to each of these stages below. If you wish, you can decide about items 3 to 6 on completion of the interview.

1. *I agree to participate in this research.*	□
2. *I agree/do not agree for the research interview to be audio recorded*	□
3. *I agree/do not agree for an anonymised transcript of the interview to be made available to the FSA.*	□
4. *I agree/do not agree for an anonymised transcript of the interview to be made available in the UK Data Archives.*	□
5. *I agree/do not agree for anonymised quotes from the recordings from this session to be used to demonstrate the research findings (as part of the final report to the Food Standards Agency).*	□
6. *I agree/do not agree for Define to contact me with a few follow-up questions about this research after our discussion.*	□
7. *I agree/do not agree that the FSA may hold my contact details for 2 years (Oct 2014) to potentially contact me about follow-up research opportunities in the future.*	□

_____   _____   _____
Name of participant   Date   Signature
_____   _____   _____
Name of person taking consent Date   Signature

APPENDIX F: Pre-task information

Dear

Thank you for taking part in this research for the Food Standards Agency about the labelling of genetically modified (GM) foods. Your views and opinions are really important to us.

Below is some introductory information about GM and GM foods explaining a little about GM food products and the potential benefits and drawbacks. You may or may not already know this about GM foods, but we ask that you please read this information through before coming along to your research session, as it will be useful, as we look at different things in the session, for you to have some background on GM foods.

Don't worry, we won't expect you to remember all of this detail. You can bring it along with you and refer to it in the session if you would like to.

We are interested to hear everyone's views, even if you don't feel very strongly about this issue or aren't sure what you think.

If you have any questions about this topic before or at that session, the researcher can provide some additional information about where you will be able to find out more.

In the meantime, if you have any questions about the research process, please call Victoria Page, Research Director at Define on 020 8398 6331.

We look forward to meeting you at the session on_____

P.S If you come across any information about GM before the session please feel free to bring this along.

Information about GM Foods and Food Labelling

What is 'Genetic Modification'?

Genetic Modification, or 'GM' essentially means the process of changing the DNA of a plant – or any other living organisms such as animals or bacteria – by inserting genes from another organism. This process is also sometimes known as 'Genetic Engineering.' Inserting new DNA in this way can change the way that organisms develop and the characteristics that they display. This technique can produce precise changes more quickly than more traditional ways of altering foods, such as plant and animal breeding.

Development of GM foods began in the early 1990s, as scientists introduced new genes into plants in order to improve food crops, such as soya and maize. GM can be used to make plants more hardy or drought/pest resistant, or to alter the time when fruit or vegetables ripen. For example, some current GM crops involve transferring a gene from soil bacteria into a maize plant to make it more resistant to insect attack.

Although it is technically possible to transfer animal genes into plants, or to produce GM animals, this is not currently done in food production.

GM technology is different from the use of chemical additives ('E numbers'). For example, nothing is sprayed onto foods – rather, GM is being used to create new varieties of plants that are grown either for food use or for feeding animals. Once harvested, the GM crop is used in exactly the same way as conventional, non-GM, crops.

In the future, it may be possible to grow GM crops that have a different nutrient composition – for example, rice with a high content of vitamin A.

What kinds of GM products are there?

In terms of food production, GM can appear in three ways:

- Food that comes from GM crops, such as maize or soya
- Animal feed that comes from GM crops and that is eaten by livestock (cattle, pigs, hens etc.)
- GM can also be used as part of food processing – for example, GM bacteria can make an alternative to animal rennet, for use in cheese-making.

GM plants
GM plants are not grown commercially in the UK but they are increasingly being grown in other parts of the world. The most common food crops to be genetically modified include:
- *Soyabeans* (used in preserved food and any soya proteins or flours)
- *Maize* (used in foods that include glucose or fructose syrup, or some 'gluten free' products)
- *Oilseed rape* (used in vegetable oils, margarines crisps and mayonnaise)
- *Sugar Beets* (used in products that use sugar from sugar beets instead of cane sugar).

GM animal feed
GM materials (such as soya and maize) are also commonly included in animal feeds – for example, high-protein feeds fed to cows, chickens and other livestock. Dairy products and meats are often produced from animals fed with GM feed.

GM in food processing
Rather than appearing in foods themselves, GM materials may also be used in food processing. For example, GM is sometimes used to produce an enzyme called rennet, which is used in cheese-making and is an alternative to rennet extracted from calves' stomachs.

Other applications
There has also been some research into GM animals for food production but none of these is currently on the market. For example, there has been research into using GM to make a salmon that matures more quickly.

GM is also used in non-food applications, for example: cotton (for textiles) is largely GM; GM animals are used in medical research; GM processes are used to manufacture some medicines.

How is it approved?
GM food and feed products are only allowed to appear on the market once they have been evaluated and approved by regulators. Potential new products are assessed and only released once it has been concluded that they pose no risks for human health or the environment. This includes the effects of any 'indirect consumption' – for example, products like meat and milk from animals which have eaten GM feed.

What are the potential benefits and drawbacks?
Supporters of GM food development believe that it will help us to produce higher quality food and alleviate some problems with food production. However, some still have concerns that the technology may have negative impact, e.g. long term effects on health and the environment and think we should limit its development and use.

Here are some of the arguments made for and against GM foods.

Here are some things people have said about the potential benefits
- Can make crops resistant to pests, weed killers, harsh weather and disease (increasing the output of food crops and potentially help meeting the total demand for food around the world).
- Can produce foods containing added vitamins and nutrients (potentially helping ensure better nutrition or help solve poor nutrition).
- May help to lower prices (for example, by increasing the output of food crops/resistance to disease as above).
- Could help ensure steady food sources to developing countries to help world hunger.
- Potentially may have environmental benefits

- For example, by creating food processes which are more efficient, take up less farm space, or produce little or no waste.
- Or by reducing use of pesticides.

Here are some things people have said about the potential drawbacks
- Some have concerns that there may be health or environmental risks that are not known about – for example, ill effects that are yet to be understood.
- Some of the expected benefits of GM development (such as using GM to help plants withstand drought) have not yet been achieved.
- It can be difficult to separate non-GM and GM food crops
    - This could make it hard to ensure that crops are really non-GM.
    - And some worry that non-GM crops and GM crops will blend together and that there could be environmental implications.
- Some feel that GM is 'not natural' compared to other production processes such as traditional plant and animal breeding.
- Some people distrust companies that develop GM, and feel this may be done for profit rather than other benefits.

APPENDIX G: DISCUSSION GUIDE

DISCUSSION GUIDE – FINAL V2 FSA GM Labelling
Groups (2.5 hours)

Notes on Qualitative Questioning:

1. *This guide indicates the areas to be explored in the discussion, the likely order in which topics will be covered and the kinds of questions and techniques that may be used. As it is qualitative research, there will be diversions taken within the dynamics of each session in order to fully explore respondents' data. Timings given are for guidance only to indicate emphasis within the guide however actual times spent on each section will be dependent upon the knowledge/interests of the respondents.*
2. *The objectives of the research may be addressed through direct questioning, indirect questioning or analysis of data post hoc.*

Overall objectives for the project

The FSA requires qualitative research with UK consumers to explore the public's attitudes and needs with regard to *labelling of GM on food* and *options for labelling food as GM free.*

Specifically, research needs to:

- *Understand public experience of current labelling practices* (including awareness of and responses to current labelling approaches).

- *Identify consumers' ideal labelling system* (what types of GM should be labelled and which should not, interest in 'GM Free' labelling, understanding of labelling options and terminology, and whether views are influenced by cost of accurate labelling and enforcement).

- *Understand potential impact of labelling GM characteristics of products* (how this affects decision making vs. other factors, additional impact such as trust of products or regulators).

- *Understand needs for additional information* (if necessary, what it should include, channels and sources, potential impact)

- *How views and needs differ* (according to audience segments and types of food).

Stimulus

    A) **Flash cards with product types/ food types list**
    B) **Label stimulus (list of example foods, and blank label descriptions)**
    C) **Note sheet**
    D) **Current labelling guidelines**
    E) **Bubble cartoon**
    F) **Shopping priorities prompt**
    G) **Cost implication sheet**
    H) **Bite magazines and weblink**
    I) **Spontaneous thoughts prompt**

1. Introductions – 5 mins

- Moderator to introduce self and explain the process of market research to the respondents (including MRS guidelines, confidentiality and audio recording), and the format of the interview (some topics for discussion and occasional exercise for them to do)

- Explanation of Define's role in research, reassurance of neutrality and interest in all views:

  Moderator says: We are an independent research agency working with the Food Standards Agency to explore what consumers like you want and need in terms of food labels. Our role in this process is to understand the full range of views that there might be in order that we can present these back to the FSA. The FSA is the Government department responsible for UK policy on GM labelling.

  Over the coming year there will be discussion of GM labelling at European level, so the FSA are interested to understand the thoughts and views of UK consumers in order to be able to represent them effectively.

  Whether you have positive or negative views, aren't sure, or simply don't know much about this issue, we want to hear about what you think. Please be honest; whatever you feel, many other shoppers will feel the same way you do and so it's important for us to understand your views.

  Do you have any questions?

- Moderator to hand out consent form and answer any further questions before respondents sign consent to taking part. Respondents can complete further contact sections at the end of the session (as detailed in consent form).

Start recording

2. Background and Food Shopping – 10-15 mins

Aim: To gain a sense of respondents' 'universes', views and priorities with regard to influences when shopping.

Introduction
- Each respondent to introduce themselves – first name, job, where they tend to go for their food shopping and who they are buying for (self, partner, children), and how much of the household shopping they are responsible for and how much they tend to buy

Decision making when buying food
- When you are buying foods, what things do you consider in deciding what to buy? What prompts you to buy certain foods? What do you look for?

Moderator Instruction: Use flash cards of different food types (Appendix A) to prompt discussion – rotate order in which food type is discussed:

- When you are thinking about buying 'x' what makes you buy what you normally buy?
- *Explore spontaneous responses and then prompt briefly as necessary, e.g.*
  - Favourite brands? (self or family)
  - Flavour?
  - Price?
  - Convenience?
  - Safety?
  - Packaging?
  - Health benefits?
  - Allergies?
  - Environmental issues? (Organic? Pesticides?)

- *Explore first food in detail, then explore similarities/differences for other food types.* [N.B. purchases may be habitual so there may be limited consideration put on products – if this is the case, then ask, if possible, for them to say what initially prompted them to buy]

Use of food labels
- If not mentioned, do you read food labels at all? Do they come into your decision to buy certain foods? In what ways? How important are they to you?
- How does this differ across different types of foods?
- When are you most/least likely to look at labels?
- What types of labels do you tend to look out for? *(e.g. ingredients lists, nutritional info, 'traffic lights', allergy/specific ingredients labelling like 'gluten free' etc)* What impact do they have on your decision to buy?
- Are there labels which are of less interest?
- Are there occasions when you don't look at food labels? (*E.g. Certain foods*? *Under time pressure? Known* brands*? Buying food for others?)*
- Do you find food labels helpful? If so, why? If not, why not? *(Do not prompt but listen out for any benefits or issues, asking for examples where appropriate)*

3. GM Knowledge and Spontaneous Thoughts on GM Labelling – 15 minutes

Aim: To explore knowledge of GM and spontaneous needs and responses for GM labelling.

Moderator explains: *Today we are going to talk about food labelling and some options for labelling GM – genetically modified – foods. We will look through some mocked up examples*

and more information later in the session; for now I just want to ask a few initial questions and explore any first thoughts you have on this issue.

Moderator Instruction: Some groups may find this easier to discuss than others without the aid of food stimuli prompts; if prompting is considered necessary move through this section quickly and into 'Reactions to Label Options' below to gain considered responses.

For pre-placed sessions:
- Was GM something that you knew much about before reading our research information document? If so – what types of things did you know about it? *(Moderator to explore as appropriate. Reassure respondents as necessary that this is not a test of their knowledge and that GM is something many people don't know much about – we just want a sense of what they know/have heard overall, if anything).*
- Which information was new to you in the document? Anything about how GM is used? Why it is used?
- Before reading this, were you aware that GM is sometimes used in animal feed?
- Is there anything you are still confused about? *(Moderator to note that we will discuss more details as research sessions develop, and that additional materials are available to take away if they wish).*

For non pre-placed sessions:
Moderator to hand out response sheet (Stimulus I) for respondents to note individual thoughts.

Moderator to read: *Before we get into some specific examples, could you all please complete the following (see Appendix I) about what you think when you hear the term 'GM Food.' What do you think it is? How and why do you think it is used? And just briefly note anything else you have heard about it, and so on. Don't worry if this is or isn't something you know much about – GM is something many people don't know much about, and I won't ask you to share this with the group; it's just a way to get us started thinking about the topic.*

Moderator to then lead discussion:
- How difficult or easy did you find it to think of things to write? Why?
- Overall, what would be your 'top question' to ask about GM food?
- *Moderator to explore as appropriate. Note that we will discuss more details as research sessions develop, and that additional materials are available to take away if they wish.*
- Do you know about GM being used in animal feed or in the production of food?

Moderator then to collect all completed task sheets.

For all:
Moderator to introduce: *Now I want us to think a little bit about labelling GM information on foods. Again, it's ok if this isn't something you know much about or have thought about before.*

- Generally do you think GM ingredients/processes in food is something that should be labelled, for example, on the back of pack? Why/not?
  - o Is this something you have considered before? If so, why?
  - o Is this something you're interested in? Why/why not?
- What kinds of GM labels do you think there should be? [note for spontaneous discussion on including GM/excluding GM type labels]
  - o Do you think there should be labels for foods that contain GM in some way? What do you imagine they might say?
  - o What about for those that don't? What do you imagine they might say?

- What difference do you think this might make to your shopping choices?

4.   Reactions to Label Options – 25-35 mins

Aim: To understand prompted responses to potential GM labelling and non-GM labelling terms.

Moderator to split into groups of 2-3 and then explain: *We would now like you to look at a range of mocked up label options that could be used on food to provide information about GM content. Imagine you are out shopping for food for you or your family (as appropriate). How do you think you would respond if you saw each of these labels on a pack when making your food shopping choices? We will discuss these together in a moment, but first we'd like you to note your own responses (use note sheet – see Appendix C).*

Please focus on the meaning of the labels and the terminology used.

The labels you are going to see don't reflect 'real life'.

Moderator instruction: start with either GM or non-GM labels and explore all alternatives in that group before switching to other 'type' (check rotation). Point out GM/non-GM label as needed for respondent. Label options tested to include:

GM present alternatives:

1. Contains GM ingredients
2. From animals fed GM feed
3. GMO used in production/process

GM free alternatives
4. Non-GM
5. All ingredients are non-GM
6. Produced with non-GM ingredients
7. GM-Free
8. From animals fed non-GM feed

Hand out all food types with same mocked up label on them (e.g. Contains GM ingredients). Ask the respondents to look through.

Moderator Note: This section of discussion may prompt other discussion about GM more generally (e.g. overall attitudes towards GM, questions about the GM process, and claims about how other labels might affect shopping behaviour). Allow discussion to flow if feels natural – but remind respondents that we can return to this discussion later in the conversation.

Moderator note: If respondents ask why in 'ingredients list' explain that this is done for consistency – so people who would like to know this information would always know where to look.

For contains GM label options:
Then ask:
- Have you ever seen a label like this? Where/on what? *Moderator to note for later*
- What do you understand it means (in your own words)?
- What do you think about this label?
- Is anything unclear? Do you find this label confusing in any way?

- Do you have any further questions? If so, what?
- How useful is to have a label like this?
- Any drawbacks?
- Does it make any difference on what types of food this is put on? Why/not? How does it make you feel? [Contrast differences across the different food types]
- *Note spontaneous responses before prompting if necessary:* Do you want any additional information provided? If so, what?

Moderator instruction: Repeat for all GM labels, asking questions as required, and noting any differences between the different labels in terms of understanding of meaning and impact.

For Non-GM label options:
- Have you ever seen a label like this? Where/on what? *Moderator to note for later*
- What do you understand it means (in your own words)?
- What do you think about this label?
- Is anything unclear? Do you find this label confusing in any way?
    o If it were up to you, how would you make this label clearer?
- If not discussed previously, ask about understanding of tolerance as appropriate – e.g. is 'GM Free' understood as 'zero tolerance'?
- How useful is to have this type of label like this? What difference does this make to you?
- Any drawbacks?
- Do you have any further questions? If so, what?
- Does it make any difference on what types of food this is put on? Why/not? How does it make you feel?
- *Note spontaneous responses before prompting if necessary:* Do you want any additional information provided? If so, what?

Moderator instruction: Repeat for all non-GM labels, asking questions as required asking questions as required, and noting any differences between the different labels in terms of understanding of meaning and impact. Note for any preferences between label types

Once all labels explored:
- What do you think about labelling foods that have GM present?
    o How important do you think this is? Vs.other labelling/factors?
- What do you think about labelling foods that don't have GM present?
    o How important do you think this is? Vs. other labelling/factors?
- If some products are labelled as "GM-free" what does this make you think about products that are not labelled in this way?
- What do you think about labelling foods where GM has been used in the production of the food, but is not present in the final food product (i.e. where used in animal feed or in processing)?
    o How important do you think this is? Vs. other labelling/factors?
- If not mentioned, are there any other labels/ways that you think foods should be labelled with regard to GM?

Pre-tasked groups
- What difference, if any, do you think having information beforehand made to your response to the labels?
- Was the information in your pre-task useful in understanding these labels?
    o If so, how? Anything in particular?
    o If not, why not?

- Do you think you would have responded differently to any of the labelling options if you hadn't seen this beforehand? How? Why? *(Moderator – explore only briefly given low validity of speculative responses but useful to note any strong responses).*
- What did the information make you think about the need for labelling of GM on foods?
- What were the most useful pieces of information for you? *(Definitions of GM? Information about how it could be used – e.g. in product, animal feed or processing? Benefits and drawbacks?)*

<u>Non-pre-tasked groups</u>

Moderator instruction: Provide respondents with the information sheet and give them an opportunity to read through the information. Encourage respondents to mark up the sheet with thoughts or queries.

Build on previous spontaneous discussion about GM and ask as required.
- What do you think of this information?
    - Is anything new or surprising?
    - Did you know much about GM prior to reading this? If so, what?
- Is the information provided here useful in understanding the food label options?
    - If so, how? If not, why not?
- Do you think you would have responded differently to any of the labelling options if you had seen this beforehand? How? Why? *(Moderator – explore only briefly given low validity of speculative responses but useful to note any strong responses).*
- What were the most useful bits of information for you? *(Definitions of GM? Information about how it could be used – e.g. in product, animal feed or processing? Benefits and drawbacks?)*
- After seeing this information, do you feel differently at all about labelling of GM on foods? How? Why?
- How do you feel about the labels now? [Note if any shift in attitude and seek to understand what has created this shift]

5. Current GM Labelling – 10-15 mins

Aim: To confirm any current awareness and usage of GM labelling arising from previous discussion.

Moderator instruction: Explore as necessary depending on data gained in previous discussion.
- Revisit examples given in previous discussion of labels seen and recap
- Any others seen – when and where?
- What led you to notice these? *(e.g. sought out intentionally? Noticed while looking for other labelling information? Accidental?)*
    - What did you think of these? Did you find this helpful? If so, why? If not, why not? *Do not prompt yet but listen for: any confusion about what labels signified, any additional information needs, and expectations for additional/adjusted labels.*
- Did these affect your decisions of what to buy? If so, how?
    - Did GM labels change your opinions in any way about:
        - The product?
        - How GM should/should not be labelled?

6. Impact on Food Choices – 20- 30 mins

Aim: To understand how the different labelling options may impact on consumer behaviour and food choices.

- What would these types of labels make you think and feel in this context?

- *Gather spontaneous responses and then prompt for:*
    - Assumptions about difference in taste? Nutritional value? Price value?
    - Trust in a product? Food regulation/regulators? Providers?
    - Assumptions about safety/health
- What if anything is helpful/useful about this label? *(i.e. 'pros' of labelling option)*
- What if anything is less helpful/useful? *(i.e. ''cons' of labelling option)*
    - Is there anything that you would do to make this label clearer?
- In reality, what difference would this make on your purchasing decision? How would it compare to a similar product without this label? For example:
    - Likelihood of purchase
    - Price willing to pay
    - Other factors
- If this label was widely introduced, would this change your priorities when thinking about purchasing this item? How? Why? What would change vs. previous priorities?
- *As appropriate also explore impact of <u>absence</u> of certain labels – eg what would respondents assume about chicken or milk that didn't have 'GM Free'/'Non GM' labelling? (if 'From animals fed non-GM feed' present? If this also absent?)*

quality of ingredients, healthy eating, allergies, look of packaging, ease of packaging, size, convenience, and proposed label).

Ask respondents to list their top 4 priorities for buying that food – noting respondents' decision process and any 'additional priorities' discussed. Break up into pairs/small groups if necessary. Exercise will be stopped if creates fatigue.

Moderator to then check any differences vs. other food types

Moderator instructions: Then move on to discuss alternative type of labelling, i.e. GM present or GM absent

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7. Labelling Priorities and Justifying Needs – 15 -25 mins

Aim: To understand consumers priorities and needs with regard to labelling options

Moderator to read: Now that we have a sense of your thoughts about each of the label options, it will be helpful to understand what you believe should be labelled and how.

Moderator note: If respondents spontaneously mention use of a logo, briefly explore the pros and cons of this approach. Show EU logos as required, e.g.:

Moderator to introduce example logos (translating these and explaining that these would be adapted to be country specific - .e.g. 'Here is a logo used in France, and its translation is...') and explore response.
  - o What would you think if you saw a logo like this on a food package?
  - o Would this have any advantages over other ways of presenting this information?
  - o Any disadvantages?

- What types of foods should be labelled for consumers? *(Note spontaneous and then prompt as necessary – can draw on pre-task information and/or provide clarification about different options and categories as necessary to ensure respondent clarity)*
  - o Presence of GM ingredients?
  - o Products from animals fed with GM feed?
  - o GM used in processing (e.g. enzymes?)
- What makes you say that?
- How important is that?
- If you had to prioritise which labels they should use first, which do you think is most important?
- Do you think companies should label foods as *not* containing GM? Why/why not? *Moderator to explain that GM-free labelling would never be mandatory, only optional – but there might be certain rules set by the Government for using these claims.*
  - o Which labelling option do you prefer to communicate this? GM-Free? Non-GM? Other?
  - o Should there be set rules for this kind of labelling? What should they say? EG What would a company have to prove to be able to use these labels?
    - Do you think this could include products where GM is used in production – in feed or as a processing aid? Why/not?
    - Do you think a 'tolerance level' (e.g. allowing some tiny level of GM acceptable?) Why/not? If so, what? *(If questioned moderator to explain that will provide some information on current guidelines and tolerance in a moment, but for now we want to understand their first thoughts on the issue)*
  - o What levels do you think would be acceptable?

- o If animal products like meat and milk are marked as "produced without GM", would it be OK if the farmer had a small amount of GM in the feed, or if the animals had been given GM feed when they were younger?

Moderator to read: There are almost limitless possibilities that could come from requirements for labels to tell consumers all the other potential things a product DOES NOT contain, For example 'Trans-fat free', 'saturated fat free', 'growth hormone free' and so on....

- Do you think it is important in other categories too? Why/not?
  - o Is it different for GM vs. other ingredients/processes? Why?

- Are you aware of the current GM labelling requirements in the UK?
  - o What do you think/guess current labelling guidelines are?
  - o What do you think does/does not have to be labelled?
  - o Why do you think this? *(e.g. Assumption based on labels seen? Based on what 'should be' done? Have looked up information/read information?)*

Moderator instruction: Introduce 'current GM labelling requirements' stimuli (Appendix D)
- Are these guidelines what you expected?
  - o What here is 'new' information for you?
  - o Does anything here surprise you?
  - o Is anything confusing?
  - o What do you think about the tolerance/trace element?
  - o Do you have any questions?

- Do these guidelines feel 'right' to you? Why/why not?
  - o If the decision were yours, would you make any changes? Why?

Moderator to hand out 'costs of labelling' stimulus *(Appendix G)*

- What do you think about this information?
  - o Is anything here new or surprising?
- Does consideration of the cost change your views in any way?
  - o If so, how?
  - o If not, why not?
- Would the costs of your ideal labelling solution be acceptable?
  - o What if it raised food prices?
- Are there any compromises you would make to your ideal labelling solution?
  - o If so, what and why?
- What kinds of labelling remain *essential* to you, regardless of cost? Why?
  - o How important would this label be to you compared to other types of product information?
- What are your thoughts regarding potential fraud associated with GM free labelling? For example, as GM may not 'show' in the final product via testing, it may be impossible to confirm that some items are 100% GM free.
  - o Does this change your thoughts on ideal labelling requirements?

8. Perceptions of GM foods – 10-15 mins

Aim: to understand respondents' views on GM

Moderator instruction: these questions are to be explored as they arise naturally in the conversation. If not covered earlier please explore them here.

- What are your views on GM foods/ingredients? [As far as possible moderator to gauge overall attitudes towards GM generally]
  - Positives/Negatives/Very little?
- What do you know about them? Where can they be found?
- Is this something that you had thought much about before this session?
- What had you seen/heard about them?
- Is it something that you are interested in? Why/not?

9. Needs for Additional information – 10 mins

Aim: to understand any needs for additional information

Moderator instruction: explore additional information priorities and channels. Remind respondents of practical considerations as necessary (for example, on-packaging space is limited so information beyond a brief few lines need to be provided externally).

- Do you think consumers need additional information provided to them beyond pack labels on food?
  - If so, why? If not, why not?
  - What would be the priority information you would want included? *(e.g. information from the pre-task? Which bits? Other information?)* Why?
- What should this include? *(Info about GM? Risks and benefits? Other details?)*
- How should additional information be provided to consumers?
  - What format do you find most helpful? *(What channels? On-pack? On website? Brand website or FSA or other? Telephone? Other?)*
- *What information should be included (briefly, to assess extent of expectations)*
  - If on-pack
  - If online
  - Other
  - Who should provide this information? *(Brand? FSA? Other?)*
- How do you think you would *use* the additional information? *(Check once for understanding? Repeat for different products? 'Reality check' as necessary – e.g. would they really visit a website? Would they buy and check when home? Write down product name/url and check before buying?)*
- If this additional information was made available, do you think it would make you feel differently about GM labelling?
- How do you think additional information would affect how you shop for food? *(Affect product chosen? Use of labels? Other?)*

10. Summing Up – 5-10 mins

- How have your views changed since before our discussion today?
- Overall, what are the key priorities for a GM labelling system?
- Do you have any other thoughts about the labelling system and how this should work that we haven't yet discussed and want to pass on to the FSA?

Stop audio recording

Moderator note: If respondent asks specific questions about GM or require further information, please hand out Bite magazine/URL/other information used in research.

11. Permissions – 5-10 mins

Moderator to give respondents a chance to look over the permissions indicated in their consent form and confirm and complete any remaining answers as necessary.

Thank and close

1893 FSA GM Labelling

Follow Up Discussion Guide (10 mins)

Telephone Depth Interviews

N.B This Guide indicates the areas to be explored in the discussion, the likely order in which topics will be covered and the kinds of questions and techniques which may be used. There will be some flexibility of discussion, however, for each individual being interviewed.

Objective of follow up interviews:
- To understand what has been remembered from the initial interviews and any further thoughts, after a period of reflection or after food shopping, on the information and labelling options shared with them – including whether their views on labelling have changed.
- In addition, to understand whom they may have discussed/shared the information with, the thoughts and comments of those individuals and the impact these have had on the respondent's views.
- To identify any information they have sought subsequently and understand any impact this has had on their views.

- Moderator to explain that this is a short interview to see what they remember from the research session and also to understand if they have had any thoughts since about the topic. Moderator to reassure respondent's that this is not a 'test' and whatever they tell us is useful – even if they remember very little or have not done anything differently since.
- Moderator to make notes of the interview

Initial recollection
- What do you remember about what was discussed? What has stuck in your mind? [*Moderator to note all that was recalled, noting in particular respondents own language when describing labels, etc*]
- What was most interesting? What seemed most/least important?
- What if anything was surprising or unexpected about what we discussed?
- Have you been shopping since? Has the information that was discussed had any impact at all on that?

Specifics:
- *If not discussed previously:* What do you remember about the individual/ mocked up labelling options we showed you? Which ones do you remember? [*Note to see which ones are recalled and why those in particular – prompt if required*]
  - o Contains GM Ingredients?
  - o Derived from animals fed GM feed?
  - o GMO used in production? ["Produced using rennet from genetically modified organisms"]?
  - o GM Free?
  - o Non-GM?
  - o All ingredients are non-GM?
  - o Produced from non-GM ingredients?
  - o Derived from animals fed non-GM feed?

- Which of these felt important to you at the time? [*Moderator to refer back to notes as required*]
- How do you feel about these now?
- In hindsight do you think this is practical/important?
- Have your opinions changed since we last spoke to you? Do you feel any differently about GM labelling? How? Why?
- What/who has influenced your views since the discussion?
- Overall, what do you think is important to label on foods with regard to GM? Why?
- *Briefly, if not discussed previously:*
  - Do you think that it is more important to label foods that have GM present? GM absent? Why?
  - Do you think the use of GM animal feed should be labelled? Why/Why not?
  - Do you think the use of GMO in food production should be labelled – as in our example of GM rennet used in cheese production? Why/Why not?
  - Do you think that food labelling should allow for certain 'tolerance' of GM? Why/Why not?

Interaction with others
- Did you speak to anyone about what was discussed – who did you speak to? If yes? Why?
  - What did you say? What were their reactions? Describe to me how the conversation went?
  - Were they positive about what you talked about? In what way?
  - Were they negative? In what way?
  - Were their views similar to yours? In what way?
- Did this conversation change your opinion in any way? How?

Further information (as appropriate)
If respondent took Bite magazine or web link
- Did you look at the additional information (magazine/weblink)?
- If so, what did you think about the information offered?
  - What was most/less helpful about this information?
  - Did you find anything confusing or have any further questions?
  - How satisfied were you overall with this as an information source?

For all
- Have you looked into GM/GM labelling further since our discussion? Why?
- What did you find out? What did it make you think?
- What were the questions you wanted answers to? Any questions you couldn't find answers to?

Last word:
- Is there anything else that the FSA need to consider with regard to GM labelling?

Thank respondents

APPENDIX H: FSA GM Labelling Requirements

On 18 April 2004, new rules for GM labelling came into force in all EU Member States.

In the EU, if a food contains or consists of genetically modified organisms (GMOs), or contains ingredients produced from GMOs, this must be indicated on the label (usually in the ingredients list or in another clear place on the label). For GM products sold 'loose' or in prepared foods, information must be displayed on menu or immediately next to the food to indicate that it is GM (or has been prepared using e.g. an oil from a GM source).

Products such as flour, oils and glucose syrups also have to be labelled as GM if they are from a GM source, although it is not possible to detect GM material in such products.

Products produced with GM technology (cheese produced with GM enzymes, for example) do not have to be labelled.

Products such as meat, milk and eggs from animals fed on GM animal feed also do not need to be labelled. Examples of labelling can be found in the table below.

Any intentional use of GM ingredients at any level must be labelled. However, the Food and Feed Regulation provides for a threshold for the accidental presence of GM material in non-GM food or feed sources. This means that there may be trace presence of GM material in non-GM food. This is necessary, for example, due to mixing of GM and non-GM feed during transport and storage. This is allowed up to 0.9% and only applies to GMOs that have an EU authorisation. Any unauthorised GM material cannot be present at any level.

Use of the terms 'non-GM' and 'GM-free' are currently voluntary and are not legally defined, so different manufacturers' usage may be inconsistent.

Under current requirements, organic foods generally do not contain any GM ingredients. Organic animal products (such as meat and milk) also can not be produced using GM ingredients (eg fed using GM feed).

Labelling examples table:

GMO type	Hypothetical examples	Labelling required?
GM plant	Lettuce or cauliflower	Yes
GM seed	Maize seeds	Yes
GM food	Maize, soybean, tomato	Yes
Food produced from GMOs	Maize flour, highly refined soya oil, glucose syrup from maize starch	Yes
Feed produced from a GMO	Corn gluten feed, soybean meal	Yes
GM feed	Maize	Yes
Food from animals fed GM animal feed	Meat, milk, eggs	No
Food produced with help from a GM enzyme	Cheese, bakery products	No
Food additive/flavouring produced from GMOs	Highly filtered lecithin extracted from GM soybeans used in chocolate	Yes
Alcoholic beverages which contain a GM ingredient	Wine with GM grapes	Yes
Food containing GM ingredients that are sold in catering establishments		Yes

APPENDIX I: Additional Information for Research

Animal Feed

- The use of GM plants in animal feed is not new; GM ingredients have been used in animal feed since the early 90s when the first GM crops were grown commercially.

- Europe does not produce enough protein rich crops to feed all our livestock, therefore feed ingredients (mainly maize and soya) are imported from North/South America where the majority of production is GM.

- Animal feed using GM soya or maize is used the same way as non-GM feed and does not impact on animals any differently.

Processing

DNA is the shortened name of the material in all living things that determines characteristics such as height and hair colour in humans, as well as flower colour and resistance to disease in plants. A piece of DNA that is associated with an individual characteristic is called a **gene**.

Rennet, which is used to curdle milk, has traditionally been taken from calves' stomachs, but the demand for cheese is greater than the number of calves available and this rennet does not always produce consistent batches of cheese. Today, the gene responsible for the active component of calf rennet can be inserted in bacteria (or in yeast), making an alternative and consistent type of rennet that works just like the traditional product. Only the bacteria are genetically modified, not the rennet, so the cheese has no GM content because the bacteria are not part of the cheese.

Genetic modification can be used in production in a range of other ways too. For example, GM *enzymes* can be used in baked goods to preserve freshness, and in the production of white sugar or other sweeteners such as corn syrup. Enzymes used in production in this way are usually found in miniscule quantities in the final food product. GM can also be used to make *lactic acid bacteria* which carry out faster, more efficient fermentation in some fermented food products (like beer).

APPENDIX J: Examples of GM Logos

Germany	'Produced without GM technology'	
France	Carregour supermarket logo – 'Without GM'	

APPENDIX K: FSA GM Labelling – Potential Cost Implications

There are a number of potential cost implications to new labelling – to both Government and industry. In order that the labelling is consistent and accurate, there are costs to the manufacturer who have to ensure that products adhere to the guidelines, which may involve changing processes such as using separate machinery or introducing continuous testing. And there are costs to local government who have to monitor if companies are labelling products correctly and take appropriate action if they are not. Introducing labelling, either of GM or non-GM, therefore may have an impact on the costs of food.

Some additional or specific considerations include:

Lowering or eliminating tolerance levels
If 'tolerance levels' change, or no tolerance level is allowed, many more food products would carry GM labelling and fewer products would qualify as "non-GM" or "GM-free". If companies wanted to avoid labels for GM presence, they might incur costs to change their procedures and how they do business – for example, to ensure there is no mixing of GM ingredients with non-GM ingredients. This may impact on food cost. Regulation costs would also increase to enforce/approve labelling.

'GM used in packaging or processing'
Every food company would have to prove that GM ingredients are/are not used in the processing or packaging of its food, and local government officials would have to validate these claims. Enforcement of this could be very difficult and/or costly, as the resulting food cannot be easily tested for GM material. As GM may not 'show' in the final product via testing, it may be impossible to scientifically confirm that some items are 100% GM free. Other methods (such as paper trails for food products) would have to be used but may not be completely reliable and/or may be liable to fraud.

'Products from animals fed with GM feed'
If this labelling is required, many more foods containing animal products (meat, dairy) would carry GM labelling. The cost to industry of compulsory labelling is high. Companies that do not want their food to be labelled would have to pay for more expensive non-GM feed, which could raise prices. It is also possible there may be supply issues – for example, there may not be enough non-GM feed to supply to all food producers.

APPENDIX L: TNS Questionnaire - Quantitative

QS8581 FOOD

FILTER: 1\2 sample of adults 16+ in England, plus a full sample of adults 16+ in Scotland, Wales and Northern Ireland

IF WALES GOR, GOTO Q.L1, ELSE GOTO Q.2

FILTER: All adults 16+ in Wales

Q.L1 For this section, we have a questionnaire in Welsh available that you can complete yourself on the computer if you prefer to. Would you prefer to complete the questionnaire in Welsh yourself, or are you happy to continue in English?

1: Happy to continue in English
2: Prefer to do self-completion in Welsh

IF Q.L1\1 GOTO Q.2, ELSE GOTO INTRO AFTER Q.12B

DO NOT SHOW SCREEN UNTIL TOLD TO DO SO

MULTICHOICE

Q.2 What, if any, sort of information, do you usually look for when purchasing food for the first time? DO NOT PROMPT.
Probe: What else? Anything else?

Nutritional information

1: The amount of fat
2: The amount of salt
3: The amount of sugar
4: The amount of saturated fat
5: The amount of protein
6: The amount of carbohydrates
7: Calories

Information about ingredients

8: Additives
9: Allergy information
10: Suitable for vegetarian\vegan diet
11: List of ingredients
12: Information about GM (genetically modified) content
13: Organic labelling

General information

14: Animal welfare\free range
15: Name of the food\brand
16: Health claims

17: Country of origin
18: Price
19: Best before\use by date
20: Cooking\storage instructions
21: Fair Trade

22: Something else (PEN WRITE IN)
: DK (BUTTON)

FILTER: 1\2 sample of adults 16+ in England, plus a full sample of adults 16+ in Scotland, Wales and Northern Ireland

SHOW SCREEN – MULTICHOICE

Q.3 Here are some examples of information found on food labels. Please select the most important to you. You may choose up to three answers.
INTERVIEWER: RECORD IN ORDER OF MENTION

SCRIPTER: SET UP TO RECORD ORDER OF MENTION

1: Nutrition information such as the amount of fat, sugar, protein, salt etc.
2: Cooking\storage instructions
3: Price
4: Calories
5: Country of origin
6: Information about genetic modification (GM)
7: Best before\use-by date
8: List of ingredients
9: Organic labelling
10: Name of food\brand
11: Animal welfare\free range
12: Something else (PEN WRITE IN)
: DK (BUTTON)

FILTER: 1\2 sample of adults 16+ in England, plus a full sample of adults 16+ in Scotland, Wales and Northern Ireland

Q.5 Before today, have you ever heard of the use of genetic modification, or GM, in food or food production?

1: Yes
2: No
: DK (BUTTON)

IF Q.5\1 OR DK GOTO Q.6, ELSE CLOSE

FILTER: All who have ever heard of genetic modification in food or food production

Q.6 Before today, have you ever…

SHOW SCREEN AND READ OUT STATEMENT

…talked with anyone about the use of genetic modification, or GM, in food or food production?

…searched for information about genetic modification, or GM, in food or food production?

1: Yes – frequently
2: Yes – occasionally
3: Yes – only once or twice
4: No, never
: DK (BUTTON)

FILTER: All who have ever heard of genetic modification in food or food production

SHOW SCREEN

Q.7 Which of the statements on this screen describes how knowledgeable you feel about the use of genetic modification, or GM, in food or food production?

1: I know very little or nothing
2: I know a little about it, but my knowledge is very patchy
3: I have a reasonable, basic knowledge
4: I have a good knowledge
: DK (BUTTON)

FILTER: All who have ever heard of genetic modification in food or food production

Q.8 For each of these statements about GM please tell me to what extent you think it is true or false. If you are unsure, just say and we'll go onto the next one.

SHOW SCREEN AND READ OUT STATEMENT

…GM foods are widely on sale in the UK
…GM crops are currently being grown by farmers in the UK
…Farmers in the UK use animal feed that contains ingredients from GM plants

1: Definitely true
2: Probably true
3: Not sure
4: Probably false
5: Definitely false

FILTER: All who have ever heard of genetic modification in food or food production

Q.9 GM or genetic modification can be used in a number of ways in food and food production. How important to you is it that it is written on the label if…

SHOW SCREEN AND READ OUT STATEMENT

…the food itself is from a genetically modified plant
…one or more ingredients in the food are from a genetically modified plant
…the food product, e.g. meat, milk, eggs, is from animals that have been fed genetically modified plants

1: Very important
2: Quite important
3: I have no feelings either way

4: Not very important
5: Not at all important

FILTER: All who have ever heard of genetic modification in food or food production

Q.10 Some food might be labelled as "GM Free" or "Free from GM". If a product is labelled as "GM Free" or "Free from GM", how important is it that…

SHOW SCREEN AND READ OUT STATEMENT

…the food contains no traces of GM ingredients, even at very low levels
…that it contains no ingredients from GM plants
…for items like meat, milk or eggs, the food is from animals that have not been fed GM plants

1: Very important
2: Quite important
3: I have no feelings either way
4: Not very important
5: Not at all important

FILTER: All who have ever heard of genetic modification in food or food production

Q.11 Do you think it is ok for a food, like milk or eggs, to be labelled as GM free if…

SHOW SCREEN AND READ OUT STATEMENT

…the farmer gave GM feed to his animals when they were younger, but not in the last few months before the milk or eggs were collected
…a farmer has not fed his animals GM feed, but does not whether they were fed GM feed by a previous owner
…the animals have not eaten GM feed, but they have been treated with a vaccine or medicine that was produced using genetic modification

1: Yes, that could be labelled as GM free
2: No, that should not be labelled as GM free
3: I am not sure (BUTTON)

SCRIPTER: ROTATE ORDER OF ASKING Q.12A AND Q.12B

FILTER: All who have ever heard of genetic modification in food or food production

SHOW SCREEN

Q.12A If you were buying a product for the first time for yourself and you noticed that the label said **it contained GM**, how do you think this would affect your decision as to whether to buy it or not, assuming that everything else was right about the product?

1: I would be much more likely to buy it
2: I would be a little more likely to buy it
3: I would be just as likely to buy it
4: I would be a little less likely to buy it
5: I would be much less likely to buy it

6: DK (BUTTON)

SHOW SCREEN

Q.12B If you were buying a product for the first time for yourself and you noticed that the label said **it was GM free**, how do you think this would affect your decision as to whether to buy it or not, assuming that everything else was right about the product?

1: I would be much more likely to buy it
2: I would be a little more likely to buy it
3: I would be just as likely to buy it
4: I would be a little less likely to buy it
5: I would be much less likely to buy it
6: DK (BUTTON)

IF Q.L2\2 GOTO INTRO BEFORE Q.E1, ELSE CLOSE

We'll just go through a couple of practice questions in English so you can learn how to complete the survey yourself.

Q.E1 Example of single coded question where only one response is allowed.
Is yellow your favourite colour?

Ask the interviewer if you need help at this point. Otherwise tap your answer then tap the OK button to continue.

1: Yes
2: No
DK – BUTTON

MULTI CHOICE

Q. E2 Example of MULTI-coded question where more than one response is allowed AND you can write in a response that isn't on the list. To write in a response, you first select other and then a screen appears where you use the screen pen to print your response in capital letters. Click ok after you have chosen\written your response.

Which colours don't you like?

Remember to tap your answer then tap the OK button to continue.

THIS IS A MULTI CHOICE QUESTION SO PLEASE SELECT ALL THAT APPLY

SCRIPTER: DO NOT INVERT

1: Brown

2: Grey
3: Black
4: Purple
5: Pink
Other (PEN-WRITE IN)
DK – BUTTON

FILTER: All who chose to complete in Welsh

Q. E3 Example of an 'open ended' question where you record your response in your own words. In the area below the question, is where you use the screen pen to print in your responses. Please print and use capital letters.

Why do you say that?

When you have written your answer then tap the OK button to continue.

(OPEN)
DK (BUTTON)
R (BUTTON)

Now it's over to you. Please read the questions as they appear and remember to press OK when you have finished each question.

INTERVIEWER: Please hand the machine over to the respondent for them to complete the remainder of this link themselves

FILTER: All who chose to complete in Welsh

Q.W2 Pa fath o wybodaeth, os o gwbl, rydych chi'n cadw llygad amdani fel arfer wrth brynu bwyd am y tro cyntaf? Please use the pen to print your answers on the screen using capital letters.

When you have written your answers then tap the OK button to continue.

OPEN ENDED

FILTER: All who chose to complete in Welsh

MULTICHOICE

Q.W3 Dyma rai enghreifftiau o wybodaeth a welir ar labeli bwyd. Dewiswch y wybodaeth sydd bwysicaf i chi: hyd at 3.

SCRIPTER: SET UP TO RECORD ORDER OF MENTION

1: Gwybodaeth am faeth fel faint o fraster, siwgr, protein, halen ac ati sydd yn y bwyd
2: Cyfarwyddiadau coginio\storio
3: Pris
4: Calorïau
5: Gwlad tarddiad
6: Gwybodaeth am addasu genetig (GM)
7: Dyddiad ar ei orau cyn\defnyddio erbyn
8: Rhestr cynhwysion

9: Labelu organig
10: Enw'r bwyd\Brand
11: Lles anifeiliaid\cynnyrch maes
12: Arall, nodwch (PEN WRITE IN)
: Ddim yn gwybod (FIX AT END – MUTUALLY EXCLUSIVE)

FILTER: 1\2 sample of adults 16+ in England, plus a full sample of adults 16+ in Scotland, Wales and Northern Ireland

Q.W5 Cyn heddiw, oeddech chi erioed wedi clywed am ddefnyddio addasu genetig (neu GM) mewn bwyd neu wrth gynhyrchu bwyd?

1: Oeddwn
2: Nac oeddwn
: Ddim yn gwybod (FIX AT END – MUTUALLY EXCLUSIVE)

IF Q.W5\1 OR DK GOTO Q.W6, ELSE CLOSE

FILTER: All who have ever heard of genetic modification in food or food production

Q.W6 Cyn heddiw, oeddech chi erioed…

… wedi siarad â rhywun am ddefnyddio addasu genetig (neu GM) mewn bwyd neu wrth gynhyrchu bwyd?
… chwilio o gwbl am wybodaeth am addasu genetig (neu GM) mewn bwyd neu wrth gynhyrchu bwyd?

1: Do, yn aml
2: Do, ambell waith
3: Do, dim ond unwaith neu ddwy
4: Naddo, erioed
: Ddim yn gwybod (FIX AT END – MUTUALLY EXCLUSIVE)

FILTER: All who have ever heard of genetic modification in food or food production

Q.W7 Pa ddatganiad ar y cerdyn hwn sy'n disgrifio pa mor wybodus ydych chi am ddefnyddio addasu genetig (GM) mewn bwyd neu wrth gynhyrchu bwyd?

1: Dwi'n gwybod fawr ddim neu ddim o gwbl
2: Dwi'n gwybod ychydig amdano, ond mae'n wybodaeth i'n dameidiog iawn
3: Mae gen i wybodaeth sylfaenol, resymol
4: Mae gen i lawer o wybodaeth
: Ddim yn gwybod (FIX AT END – MUTUALLY EXCLUSIVE)

FILTER: All who have ever heard of genetic modification in food or food production

Q.W8 Nodwch i ba raddau mae'r datganiadau isod am GM yn wir neu beidio. Os nad ydych yn siŵr, dywedwch hynny ac mi awn ymlaen at y nesaf.

…mae bwydydd GM ar werth yn eang ledled y DU
…mae ffermwyr y DU yn tyfu cnydau GM ar hyn o bryd

…mae ffermwyr yn y DU yn defnyddio bwydydd anifeiliaid sy'n cynnwys cynhwysion o blanhigion GM

1: Hollol wir
2: Gwir mae'n debyg
3: Ddim yn siŵr
4: Ddim yn wir mae'n debyg
5: Ddim yn wir yn bendant

FILTER: All who have ever heard of genetic modification in food or food production

Q.W9 Gellir defnyddio GM neu addasu genetig mewn nifer o ffyrdd mewn bwyd ac wrth gynhyrchu bwyd. Pa mor bwysig i chi yw cael y wybodaeth ganlynol ar y label...

…bod y bwyd ei hun yn dod o blanhigyn sydd wedi'i addasu'n enetig
…bod un neu fwy o'r cynhyrchion yn y bwyd yn dod o blanhigyn sydd wedi'i addasu'n enetig
…bod y cynnyrch bwyd (e.e. cig, llaeth, wyau) yn dod o anifeiliaid sydd wedi'u bwydo â phlanhigion a addaswyd yn enetig

1: Pwysig iawn
2: Cymharol bwysig
3: Does gen i ddim barn naill ffordd na'r llall
4: Ddim yn bwysig iawn
5: Ddim yn bwysig o gwbl

FILTER: All who have ever heard of genetic modification in food or food production

Q.W10 Efallai y bydd rhai bwydydd yn cynnwys labeli "GM free" neu "free from GM." Os yw cynnyrch yn cynnwys label 'GM Free' neu 'Free from GM', pa mor bwysig yw'r canlynol…

…Does dim olion o gynhwysion GM yn y bwyd, hyd yn oed lefelau isel iawn
…Does dim cynhwysion o blanhigion GM yn y bwyd
… Yn achos cig, llaeth neu wyau, mae'r bwyd yn dod o anifeiliaid sydd heb eu bwydo â phlanhigion GM

1: Pwysig iawn
2: Cymharol bwysig
3: Does gen i ddim barn naill ffordd na'r llall
4: Ddim yn bwysig iawn
5: Ddim yn bwysig o gwbl

FILTER: All who have ever heard of genetic modification in food or food production

Q.W11 Ydych chi'n credu ei bod hi'n iawn labelu bwyd (fel llaeth neu wyau) fel rhai 'GM free'…

…os ydy'r ffermwr wedi rhoi bwyd anifeiliaid GM i'w anifeiliaid pan oedden nhw'n iau ond heb ei roi yn yr ychydig fisoedd cyn i'r llaeth neu'r wyau gael eu casglu
…os nad yw ffermwr wedi rhoi bwyd anifeiliaid GM i'w anifeiliaid ond nad yw'n gwybod a gafon nhw fwyd anifeiliaid GM gan berchennog blaenorol
…os nad yw'r anifeiliaid wedi bwyta bwyd anifeiliaid GM ond eu bod wedi'u trin â brechlyn neu feddyginiaeth a gynhyrchwyd gan ddefnyddio dulliau addasu genetig

1: Ydy, mae'n iawn labelu hynny fel cynnyrch di-GM
2: Nac ydy, ni ddylai hynny gael ei labelu fel cynnyrch di-GM
3: Dwi ddim yn siŵr

SCRIPTER: ROTATE ORDER OF ASKING Q.12A AND Q.12B

FILTER: All who have ever heard of genetic modification in food or food production

Q.12A Pe baech chi'n prynu cynnyrch i chi'ch hun am y tro cyntaf ac yn sylwi bod y label yn dweud ei fod yn cynnwys cynhyrchion GM, i ba raddau y byddai hynny'n effeithio ar eich penderfyniad i brynu'r cynnyrch ai peidio (gan dybio bod popeth arall am y cynnyrch yn iawn)?

1: Llawer mwy tebygol o'i brynu
2: Ychydig mwy tebygol o'i brynu
3: Yr un mor debygol o'i brynu
4: Ychydig llai tebygol o'i brynu
5: Llawer llai tebygol o'i brynu
6: Ddim yn gwybod (FIX AT END – MUTUALLY EXCLUSIVE)

FILTER: All who have ever heard of genetic modification in food or food production

Q.12B Pe baech chi'n prynu cynnyrch i chi'ch hun am y tro cyntaf ac yn sylwi bod y label yn dweud ei fod yn 'GM free' i ba raddau y byddai hynny'n effeithio ar eich penderfyniad i brynu'r cynnyrch ai peidio (gan dybio bod popeth arall am y cynnyrch yn iawn)?

1: Llawer mwy tebygol o'i brynu
2: Ychydig mwy tebygol o'i brynu
3: Yr un mor debygol o'i brynu
4: Ychydig llai tebygol o'i brynu
5: Llawer llai tebygol o'i brynu
6: Ddim yn gwybod (FIX AT END – MUTUALLY EXCLUSIVE)

APPENDIX M: TNS OMNIBUSES RANDOM LOCATION SAMPLING METHODOLOGY AND WEIGHTING

The TNS Omnibuses employ a random location methodology each week. A varying number of sampling points are issued depending upon the length of the questionnaire. The number of Great Britain sampling points issued can be 143, 126 or 112 and corresponding sampling points in Northern Ireland are 4, 4 or 3. The points used are sub samples of those determined in a sampling system developed by TNS for its internal use.

Sampling Frame

2001 Census small area statistics and the Postcode Address File (PAF) were used to define sample points. These are areas of similar population sizes formed by the combination of wards with the constraint that each point must be contained within a single Government Office Region [GOR]. In addition, geographic systems were employed to minimise the drive time required to cover each area as optimally as possible.

600 points were defined south of the Caledonian Canal in Great Britain [GB]. Another 25 were defined in a similar fashion in Northern Ireland. Finally 5 points were defined north of the Caledonian Canal. These latter differ in size from the other points and each other to meet the need to separately cover the different parts of the Highlands and Islands.

Stratification and Sample Point Selection

285 points were selected south of the Caledonian Canal for use by the Omnibuses after stratification by Government Office Region and Social Grade. They were also checked to ensure they are representative by an urban and rural classification. Those points are divided into two replicates. One set are used in one week. The other set are used in the next week. One of the points north of the Caledonian Canal is also used. 16 of the points in Northern Ireland are selected and divided into four

replicates. Those replicates are used in rotation to give a wide spread across the Province over time. Similarly the statistical accuracy of the GB sampling is maximised by issuing sequential waves of fieldwork systematically across the sampling frame to provide maximum geographical dispersion. This ensures that the sample point selection remains representative for any specific fieldwork wave.

Selection of Clusters within Sampling Points

All the sample points in the sampling frame have been divided into two geographically distinct segments each containing, as far as possible, equal populations. The segments comprise aggregations of complete wards. For the Omnibuses alternate A and B halves are worked each wave of fieldwork. Each week different wards are selected in each required half and Census Output Areas selected within those wards. Then, groups of OAs containing a minimum of 125 addresses are sampled in those areas from the PAF.

Interviewing

The addresses, selected as above, are issued to achieve an adult sample of 15, 17 or 19 interviews in provincial areas and 13, 15 or 17 in London depending upon the questionnaire length. Assignments are conducted over two days of fieldwork and are carried out weekday 2pm-8pm and at the weekend. Quotas are set by gender/housewife. Within female housewife presence of children and working status is set, within men working status is set to ensure a balanced sample of adults within effective contacted addresses. All interviewers must leave 3 doors between each successful interview.

Weighting

This stratified sampling corrects disproportionately high numbers of interviews from certain smaller geographic locations in order to ensure robust samples for analysis amongst all regions. Weighting is used to correct for this and to ensure data is demographically representative of the UK population as a whole. Data was weighted to the National Readership Survey[4] which takes population estimates from JICPOPS (Joint Industry Committee for POPulation Standards) in terms of age, social grade, broad region within gender. This weighting is applied to the whole dataset. The weighting matrices are shown below.

ALL ADULTS BASE = 47125

MALES	ABC1				C2				DE				TOTAL
	16-24	25-34	35-54	55+	16-24	25-34	35-54	55+	16-24	25-34	35-54	55+	
NORTH	570	605	1312	1214	220	297	675	642	343	307	676	683	7544
MIDLANDS	469	514	1048	971	205	200	544	518	237	194	471	437	5808
SOUTH	858	1023	2141	1749	237	340	728	609	327	308	559	584	9463

FEMALES	ABC1				C2				DE				TOTAL
	16-24	25-34	35-54	55+	16-24	25-34	35-54	55+	16-24	25-34	35-54	55+	
NORTH	548	630	1501	1445	210	237	550	548	393	329	703	1063	8157
MIDLANDS	415	485	1163	1118	171	183	444	470	269	240	475	759	6192
SOUTH	787	1040	2245	1995	205	316	573	571	354	349	654	872	9961

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[4] http://www.nrs.co.uk/sample.html

Significance Testing

Weighting data reduces the overall accuracy of the sample. However this is taken account of through the use of significance testing which is based on the effective sample size (ESS) – the equivalent un-weighted sample size which would provide the same level of reliability as the achieved weighted sample. The overall weighting efficiency for this research was 86.5%. Therefore for an overall sample size of 1467 interviews, the effective base is a sample size of 1269.

The significance testing is applied to the data post-weighting.

The significance testing applied was called Tstat (test statistic). It is considered as a numerical summary of a set of data that reduces the data to one or a small number of values that can be used to perform a hypothesis test. This was applied at the data processing stage using Quantum. No further data adjustments were performed. Data tables were created and used in the analysis of the findings.