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Agri-Food CanadaAgriculture et
Agroalimentaire Canada**EXPLORATION OF CONSUMER UNDERSTANDING AND ATTITUDES TOWARD
GENETIC ENGINEERING-RELATED FOOD PRODUCT LABEL STATEMENTS****FINAL REPORT**

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EXECUTIVE SUMMARY

Background

On April 13, 2004 the Canadian General Standards Board (CGSB) announced that the Standard for the *Voluntary Labelling and Advertising of Foods That Are and Are Not Products of Genetic Engineering* had been ratified by the Standards Council of Canada (SCC) and published as a National Standard of Canada (National Standard). The National Standard is voluntary and is intended to provide consumers with consistent information for making informed food choices while providing labelling and advertising guidance for food companies, manufacturers and importers.

The National Standard provides guidance that applies to labelling and advertising, to distinguish whether or not a food or ingredient is, or contains, a product of genetic engineering. It also provides guidance for the use of rationale statements to provide further details, as well as for the use of explanatory statements which may be required to ensure that a claim is truthful and not misleading. The primary goal of this research was to gauge consumer understanding and reaction toward specific sample label statements and the concept of labelling food products with claims concerning genetic engineering.

Methodology

This report is based on 25 focus groups conducted between March 10 and March 21, 2005. The research explored consumer attitudes and understanding toward genetic engineering-related food product label statements. The focus groups were held in 8 cities across Canada.

To meet the goal of the research project, participants in the 25 focus groups were shown a series of 27 different label statements that were drafted in accordance with terms of the National Standard. Participants were then led through a series of questions which were designed to gauge their understanding of, attitudes and opinions toward each statement. For this reason, the labelling criteria detailed in the National Standard were not provided to or discussed with participants in advance of the focus groups.

Focus groups are a qualitative methodology, where typically 8 to 10 participants are led through a guided discussion by a moderator (see Appendix B for Moderator's Guide). However, the moderator is free to pursue themes and questioning based on responses in the group that help shed light on the objectives of the research. In this case, the guided discussion was about food product label statements for food products that may or may not contain genetically engineered (GE) ingredients.

Key Findings

The focus groups revealed both positive and negative viewpoints concerning GE-related food labelling.

On the issue of awareness of genetic engineering:

- Although the term “genetic engineering” was less familiar than “genetic modification” or “GMO”, participants easily accepted and adopted the term “GE” in the focus group discussions;
- While GE-related food labelling helps consumers make informed choices, it was not a top-of-mind issue. For many participants, specific nutrition concerns (e.g., presence of *trans* fatty acids, carbohydrates, preservatives) were often the primary considerations.

Concerning label statement structure:

- Participants expressed a preference for short and simple label claims;
- Rationale statements that indicated a consumer health benefit resulting from the use of GE were generally viewed positively, but participants expressed the desire for additional detail (e.g., genetically engineered to reduce *trans* fatty acids - participants wanted percentages of how much *trans* fatty acids were actually reduced);
- Participants were not receptive to statements that indicated benefits relating to the production or manufacturing of the food product (e.g., to increase crop yield);
- A number of participants viewed the use of GE in food production in terms of a “black and white” issue. To them, if one ingredient was GE, the entire food product was considered GE – period. They expressed a preference for a simple labelling system to distinguish products that are GE from those that are not.

Regarding the level of understanding:

- With the assistance of explanations, most participants were able to understand some of the concepts involved in GE label claims, including the concept of adventitious presence (accidental co-mingling) and the 5% tolerance level, in relation to food production, in general, and specifically with respect to the use of GE in food production. They were also able, with assistance, to understand the concept of GE material;
- While participants were able to understand many of the label claims and their concepts, it is clear that participants found the label statements complex. The complexity of the concepts behind some of the tested GE-related food label claims emphasized the need for accompanying education;
- Participants expressed a need and a desire for education on GE topics, as well as for the availability of additional sources of reference information.

Other findings:

- For many participants, factors such as quality, taste, and competitive price were also described as important considerations in the purchasing decision; and,
- Participant comments indicated that their food purchasing would likely be unaffected by GE-related label claims – especially for brands and products that they have been purchasing for a while. As opposed to outright switching, the presence of a label claim would prompt participants to research what GE is, as well as how the use of GE would

have affected the food product, and then with this knowledge, they would be in a better position to make an informed decision.

As evidenced by the reactions of the focus group participants, labelling based on a method of production is complex. Given its inherent complexity, consumer education/communications strategies around the use of GE-related labelling are essential. A concerted effort to communicate with and educate consumers about the following is important to ensure the label statements are informative and will assist consumers in making informed choices:

- What GE is in very general and broad terms, and why it is used in food production.
- How GE gets into the food that we eat.
- Why labelling is being done the way the way it is, and how to understand and interpret it.

STUDY BACKGROUND, RESEARCH DESIGN AND METHODOLOGY

STUDY BACKGROUND AND RESEARCH DESIGN

Background & Objectives

In April 2004, the Standards Council of Canada approved the *Voluntary Standard for the Labelling and Advertising of Foods That Are and Are Not Products of Genetic Engineering* as a National Standard of Canada (National Standard). Developed under the guidance of the Canadian General Standards Board (CGSB), the National Standard is a tool that food producers may use to inform consumers about foods that are or are not a product of GE. The main goal of this research was to gauge consumer understanding and reaction toward sample label statements that were written in accordance with the National Standard. Two key elements of this goal were: #2

- To directly examine how well Canadians understand label claims that were written in accordance with the terms of the National Standard on such issues as clarity, overall meaning, how well the label claims help Canadians make more informed food choices and how potential reference to external information sources should be incorporated; and #3
- To provide information that will assist all stakeholders (Agriculture and Agri-Food Canada (AAFC), the food industry, other government departments, consumer groups, information multipliers and other interested parties) with labelling strategies and provide background for future discussions with respect to the National Standard. To this end, the research could also be used as input into the development of future policy and provide information that could be used in education and social marketing campaigns surrounding GE and non-GE food and food labelling. #4

To meet these two initiatives a number of specific research objectives and questions were developed. In order to investigate overall understanding of label claims which were consistent with the criteria in the National Standard, the research specifically examined whether:

- The label statements provide enough information to make purchase decisions given the current level of knowledge and education, and how a label statement could be clarified to make it more useful by consumers in making their purchasing decisions; #5
- The label statements directly cause any confusion or concern in the minds of consumers – in other words, do the label statements raise more questions than they answer, and if so, what would be necessary to clear-up the confusion; #6
- The absence of label statements on certain foods creates questions in the minds of consumers; #7
- The type of additional information, suggested by the Standard, found at external sources such as 1-800 numbers or websites on a label statement, or through other educational/social marketing campaigns would be sufficient and understandable; and #8
- The label claims raise any concerns about the concept of GE in general, and how consumers would react to the concept of GE, knowing that the majority of Canadian foods are likely to be GE or to contain GE ingredients. #9

The labelling criteria detailed in the National Standard were not provided to or discussed with participants in advance of the focus groups.

Methodology

AAFC and an advisory group of stakeholders used 27 sample label statements, written in accordance with the Standard, to test various aspects of the Standard. These statements, which were illustrative of the type of statement that could be seen, were “mocked-up” on foam boards and then shown to participants in a series of focus groups, in a number of cities, throughout Canada (see table for break-out).

Focus groups are a qualitative, open-ended discussion, which typically involve around 10 participants who are guided through specific topics to be covered by a moderator. The moderator uses a discussion guide that is drafted before any of the focus group sessions occur. The guide covers the main objectives of the study. A focus group, however, allows the moderator to explore ideas in-depth as participants raise them. The moderator can also observe and use group dynamics – that is, seeing how well an idea is expressed by an individual resonates with the rest of the group. These aspects allow for a very in-depth discussion of the topic, where feelings and ideas are explored and probed. Focus groups are also very well suited to showing different label statements and obtaining reaction to and generating discussion about the content of sample label claims produced for this study.

Western Opinion Research developed a screening instrument to recruit Canadian residents to participate in this study. The primary recruiting criteria for these sessions was to:

- Screen out the standard sensitive occupations (advertising, media, government, research) plus anyone who works for a food manufacturer, distributor or restaurant, including cooks.
- Include only principal grocery shoppers, or people who have shared responsibility for grocery purchases (with the exception of teens).
- Recruit high SES (Socio-Economic Status) in Toronto and Vancouver, defined as people with household income of \$75K or higher, and individuals with a university education. In Montreal, High SES was defined as individuals with a household income of \$50K and over and individuals with a university education. In all markets, Low SES was defined as people with a maximum household income of \$30K, and having no more than a high-school education.
- Recruit teens, defined as 16-19. Teen participation was with parental or guardian consent.

Participants were only told the groups were going to be about food and food choices, so as not to bias people prior to participating in the groups.

During the recruiting process and in the groups, participants were informed of their rights under the Privacy and Access to Information Act. They were told the purpose of the research, that AAFC was the sponsor and that Western Opinion was the research firm.

Focus Group Organization

Focus groups occurred in eight cities throughout Canada. For each group in this study, 10 participants were recruited, and for most groups between 7 – 10 people actually participated. The discussions lasted for approximately two hours. Prior to the start of the groups, participants had to show photo ID to confirm they were the actual participant recruited for the groups. Participants received a monetary incentive for their attendance at the groups.

A total of 25 focus groups were conducted in eight different markets throughout Canada (see Table).

	General Population	Low SES	High SES	Teens	Seniors	TOTAL
Halifax	2					2
Montreal	1	1	1	1	1	5
Trois-Rivières	2					5
Ottawa	2					2
Toronto	1	1	1	1	1	5
Portage La Prairie	2 ¹					2
Calgary	2					2
Vancouver	1	1	1	1	1	5
TOTAL	13	3	3	3	3	25

In total, 27 different label statements were tested. To ensure that the groups would be conducted in two hours and to ensure that participants would not get fatigued during the groups, the 27 label claims were divided up into two sets, with separate discussion guides. Label claims were divided based on the concepts they addressed (e.g., positive/negative GE statements, single/multi-ingredient foods, explanatory comments and ingredient list break-outs), and on “overlap” with other label claims – that is some labels had similar messages and characteristics, so where necessary they were divided so as to assure that groups were exposed to as many facets of the label claims and the Standard as possible, with minimal repetition in themes. Refer to the discussion guides in the Appendix to see which label claims were tested in which groups.

The Ottawa groups were held during the evening of March 10, 2005 and served as the kick-off market for the study. This session enabled staff members from AAFC, the Canadian Food Inspection Agency (CFIA), and International Trade Canada (ITCAN) to observe the groups without travel. This allowed for some very helpful early feedback for the moderators regarding the effectiveness of the selected label statements and the moderator’s guide structure in general.

Brian Bauman moderated groups in Ottawa, Halifax and Toronto. Nadia Papineau-Couture moderated groups in Trois-Rivières and Montreal. Andrew Enns moderated groups in Ottawa, Portage La Prairie, Calgary and Vancouver.

¹ Predominantly rural participants

Observers from AAFC, CFIA, ITCAN, Health Canada and Canadian Council of Grocery Distributors (CCGD) viewed many groups from behind a one-way mirror.

Context of Qualitative Research

The focus group technique is used in public opinion research as a means of gaining insight and direction, and is not used to collect quantitative data or absolute measures. It is particularly useful when showing research participants a large amount of visual material, like the mock-up label statements used in this study. Qualitative research provides an in-depth introspection of the material tested and an understanding of perceptions and reactions of the populations studied, as well as the reasons sustaining their evaluation. It is therefore a very appropriate tool for exploring the target audiences’ reactions to the label statements.

DETAILED FINDINGS

ANALYSIS OF LABEL STATEMENTS

#1 Non-genetically-engineered papaya
#2 Not genetically engineered

These Label Claims Were Well Understood

Both these label claims were well understood by participants. Individuals, however, tended to prefer the language and style of label claim #2 over #1. The statement “Not Genetically Engineered” seemed very definite and precise. It left many people with the view that the product was “organic”, “pure”, “real” and “all natural”.

The use of “Non-Genetically-Engineered” in the Papaya Statement, while seen by most people as meaning the same thing as statement #2, was somehow perceived to be less definitive. In many of the sessions, participants noted that the use of “Non” and hyphens seemed to make statement #1 more complex than it needed to be. In a number of groups the inclusion of the word “Papaya” in the claim was considered by some individuals as unnecessarily repetitive, “*If it is on a pile of papayas, then it’s obvious it’s referring to papayas.*”

Label claim #1, however, was preferred by participants in all the teen groups and General Population groups in Vancouver and Halifax. In these groups individuals liked the use of “Non” and hyphens as giving the statement a more scientific and authoritarian quality. Several Teens also mentioned they liked how the Papaya statement “*flowed better*” as opposed to the “*harsh*” and “*abrupt*” language of label claim #2. The overall sense though was that while certain groups preferred #1, most groups had a more positive reaction to #2.

It is worthwhile to note that for the most part, participants felt that these label claims were quite definitive in their approach. That is the negative statements simply meant that GE was not involved in any of these products – period. Participants did not feel that these statements left room for accidental inclusion or adventitious presence of GE material.

In French, these label claims were identical with the exception of the inclusion of the product name as part of the statement or inserted in brackets at the end of the statement, e.g., #1 « Papaye non modifié par génie génétique », #2 « Non modifié par génie génétique (mais) ». The issue was therefore the need to include the product in the statement or not. Most opted for the shorter version, without product name as it should be obvious. This nevertheless led the discussion on the need to obtain a good definition of what “génie génétique” is. What is the product modified with and why? What are the health benefits?

For The Most Part, Participants Did Not Feel These Label Claims Needed More Information Or Further Clarification

Participants were asked what information, if any was missing from the label claims – with the aim of seeing whether or not they actually believed the information on the label claim as is, and whether they would want certification/testing or an external reference. Overall, there was no sense that participants felt that any more information was necessary. Even when prompted directly by the moderator, participants indicated that they had little interest in seeing additional information.

The one piece of missing information that did come up in many of the sessions was the country of origin. Participants that mentioned this felt the information would be useful for two reasons. First, there are countries that are more likely to use GE in general, and second, some have less

stringent tracking and testing policies than others. They would use the country of origin to support their opinions about the validity of the label statements.

Participants Also Called Non-GE Products “Pure”, “Natural” And Even “Organic”

Some participants felt that it was not worth labelling products as ‘Not Genetically Engineered’, because if the product is “pure” and “natural” and it is not labelled, it should be assumed to be that way. This actually became somewhat of an ideological concern among participants that held this view. That is to say some participants felt that food production is moving so far away from what nature intended that it is ironic and a somewhat sad state of affairs that food needs to be labelled as being “real”. This sentiment dovetailed with a much broader theme strongly expressed by participants – in order to avoid confusion and make food purchasing easier, it was felt that only GE products should be labelled, as opposed to non-GE products.

Also, there was reference to the term ‘organic’ in a few groups. Participants were equating ‘non-GE’ as being the same as ‘organic’. The sense was that as labelling moves forward, GE label claims must distinguish themselves from organic label claims. Most likely, this would need to be done through education, stating the differences between organically grown and non-GE products so that when shoppers see the different label claims and statements, they understand the difference.

Participants Wondered About Food That Was Not Labelled

Some participants indicated that if they saw ‘non-GE’ label claims appear on some food, they would be suspicious of food that did not have this type of label claim on it. That is, they would definitely wonder about non-labelled food and whether it was GE or not. This comment is akin to a Pandora’s Box, where if some foods are labelled, consumers would want to know about all other foods. This was especially strong in the Calgary groups.

Similarly, the label claims generated a significant amount of discussion about GE in general. Once participants saw these label claims and started answering questions about what the statements meant, in virtually all the groups, discussion turned to issues like the merits and risks of GE, in the broader sense.

The Concept of Adventitious Presence Was Understood And Generally Accepted

After the discussion on these two label claims, the term ‘adventitious presence’ was introduced to participants. Most participants understood the concept and were quite comfortable with it, especially with how it related to the food chain in general, and GE in specific. A few participants in several of the groups related this ‘presence’ with warnings/ ‘may contain’ labelling declared on some labels, e.g., “Some ingredients may have come into contact with nuts”. Some participants wondered how the statement applied to corn and papaya. Did it mean, for example, that one kernel of corn would be contaminated, some kernels of corn or an entire ear of corn?

Participants were then asked how they viewed the two negative GE label claims, #1 and #2 in light of the adventitious presence concept. Many did not assume that this concept applied when they were initially discussing the statements. In their initial comments, they did not say something like “does this mean that 100% of the corn/papaya is GE, or is there room for error?” In their minds they felt these were definitive statements and as such, did not allow for accidental inclusion of GE material.

However, even though they thought that the semantics of these statements did not leave room for accidental inclusion, there was a general acceptance and acquiescence of the concept of adventitious presence in these statements. Participants were willing to accept these statements as is and felt that no change to the wording would be necessary, even though they knew about the 5% adventitious presence. The feeling was “*well, what are you going to do about it?*”, and that this happens in other types of foods as well. While a few participants reacted negatively, saying that the 5% adventitious presence made the label statements “absolutely useless” and that 5% was too high a margin, the general view was much more moderate. That is, even though the label statement implies that there should be no 5% adventitious presence, the fact that there is does not get “*under the skin*” too much.

Another factor driving this moderate view is that many participants had a general instinct that they were presently consuming GE food and it did not seem to have any directly adverse affect on them. Moreover, while they had a sense that they were eating GE food, they were not certain what food it was in, and what amount of it they were eating. Given this reality, consumers felt that a maximum 5% adventitious presence was at worst no different than the situation they were now in, which they appeared to be resigned to.

The one demographic group to differ consistently in this regard was that of High SES participants. Most of these individuals accepted that stakeholders in the food system tried their best, but could not guarantee no adventitious presence.

#3 Certified non-genetically engineered papaya

#4 Non-genetically engineered corn (tested)

While Participants Generally Appreciated ‘Certification’ and ‘Testing’ Being Included In The Label Claims, These Statements Received A Mix Of Reactions

These two label claims generated a broad range of reactions. In several sessions participants liked the inclusion of the words ‘tested’ or ‘certified’ as giving extra credibility to the ‘non-genetically engineered’ aspect. Several participants equated the ‘certified’ connotation as being similar to the organic accreditation. Also, participants who just heard the adventitious presence statement for the previous label claims were likely to assume that certification and/or testing would eliminate it. Also, since participants did not know a lot about GE in general, they felt that statements like this would give them more confidence in their food purchases.

The Western Canadian groups provided an interesting perspective on these terms. The sense was they did not like seeing the words ‘certified’ or ‘tested’. A common reason for this was that the participants did not want to have to start always looking for this reference when food shopping, “*What am I to think if a product does not have tested or certified on it? I kind of expect all food to be tested in some way.*” In some respects, there was a sense that the manufacturer should be thorough enough to back up their claims without the need for certification or testing. Another reason why participants did not like certification and testing was the belief it would increase the price of the food.

In French, the word ‘éprouvé’ was perceived to be misleading or confusing. Participants suggested the use of the more commonly-used term ‘testé’ for clarity and better comprehension.

Participants Wanted To Know The Details Of Certification And Testing

Regardless of opinions towards the statements, participants questioned the ‘who’ and ‘how’ of testing and certifying – and this sentiment caught on in the groups, meaning that as one person mentioned it, others reacted too and felt that without answers to these questions, they would doubt the statements. The view was these label claims would have to show somewhere—with a symbol or initial—who tested or certified the product. This was summed up by one participant who wanted “*A stamp right on the front of the package, ‘certified by’ and the name of the organization*”. The sense in the groups was that participants felt the government would have to be involved in this process (or in Calgary an arms-length, non-government third party, such as the CSA). Without an independent third party prominently involved, participants felt that the manufacturer or producer would be doing their own certification and testing, and for the most part, participants did not agree that the food producer should be the one doing the testing.

Some groups were asked whether they were as stringent and knowledgeable about the standards applied to organic food. That is, participants were asked directly, especially if they purchased organic food, if they knew the ‘who’s’ and ‘how’s’ of organic testing. The sense was that they did not know, or need to know this information – instead just seeing the certification made them feel positive about purchasing organic. If participants really wanted to know the who’s and how’s of organic testing and certification, they indicated that they knew the sources they could get this information from – and as long as they know that the information was accessible, this would be good enough for them.

The overall sense was that the terms ‘certified’ and ‘tested’ did provide more confidence in the label statements. However, it was certainly not a “must have” in the minds of participants, especially since it would raise questions about who did the testing and how it was done.

Participants Preferred “Certified” Over “Tested”

Generally, ‘certified’ (label claim #3) was preferred by participants over ‘tested’ (label claim #4). Many people noted that certified meant that it passed some defined standard and therefore carried more weight than ‘tested’. Certified was equated to a stamp of approval—“*It has status*”. A number of people commented that it made them think of “*government approved*”. Individuals felt tested meant just that – a food may pass the test or it may fail the test, and either way it could still be put on the market.

Another interpretation was that participants attached a ‘who’ to the term ‘certification’ and a ‘what’ to the term ‘tested’. They felt with ‘certification’, there was someone (e.g., participants mentioned everyone from the Federal Government to environmental organizations to individuals) who would be responsible for applying certification standards to non-GE food. With ‘testing’, participants tended to ask “what” was being tested. They wanted to know if it was the manufacturing process was being tested to ensure GE-free, the tree from which the produce was grown or whether other safety and health aspects were being tested as well.

Participants also raised concerns about how the term “tested” was presented in label claim #4. Having the word tested in parentheses did not sit well with some participants—“*The way it is positioned at the end of the statement in brackets makes it [tested] seem as if it is an afterthought*”.

#5 Like all other oranges, these oranges are not a product of genetic engineering

Claims that a food is not a product of genetic engineering, when no similar foods that are products of genetic engineering have been offered for sale, are considered misleading because they create the false impression that the product is unique. In such cases, the National Standard considers it appropriate to use an alternate statement, or to include an explanatory statement to avoid misunderstanding (par. 6.1.4 and 6.2.4).

This Statement Was Viewed Very Negatively And Was Perceived To Be Very Confusing

This statement was disliked, and it attracted a very large number of critical comments. On a very basic level, participants found it long and confusing. When they began justifying and explaining their responses in more detail, it became very clear just how perplexing and out-of-favour this statement actually was. For example, one participant said:

“I didn’t know all the others are [GE]. It doesn’t make sense. It just contradicts itself. Because it says ‘like all other oranges’ and it says ‘these oranges are not a product of GE’ so ‘all other’ and ‘these’ are two different things”.

Some participants thought the label claim was saying that all oranges were GE and like those oranges, this orange was a GE orange. Others were going around in circles trying to interpret the meaning, with many stumbling on the right logic and then abandoning it for another interpretation of the label claim. Those individuals who correctly understood the label claim to mean that all oranges are non-genetically engineered could not comprehend why, if this was the case, the labelling was written in such a convoluted manner.

Besides being confusing, participants thought the label claim was misleading and inaccurate. For example, they indicated that “all” was an absolute term and how could anyone be sure about all oranges produced in all other countries, especially given the concept of the 5% adventitious presence discussed earlier on. Others felt that this statement illustrated just how widespread and ominous GE could be – some felt, regardless of what the label claim was actually saying, that there could actually be an entire category of food that could now be entirely GE. Based on comments and discussions around many of the statements, there was a sense of concern over the potential for unchecked/unmonitored growth of GE. Others contended that this claim said nothing and that this was just another marketing ploy. Whether or not participants were exaggerating their feelings and/or “stretching” the meaning of the label statement with broad interpretation, the fact that they kept coming up with different negative opinions about the label claim indicates that it was not liked.

The bottom line was summed up nicely by those few participants who really understood the label claim. They simply indicated that the label claim said “nothing”, and if it so said, there should be no reason to have such a statement at all.

When It Was Explained, Participants Did Appreciate the Intent Of The Label Claim

In developing the National Standard, the CGSB Committee considered it necessary to include meaningful criteria for both GE and non-GE food products in order to prevent misleading claims. It was anticipated that in the initial stages of implementation, the use of non-GE statements would be more prevalent. Labelling of GE food products that carried benefits to consumers would likely begin to appear as such products are developed and approved for sale.

Some groups were informed that the reason for this statement was to prevent manufacturers from bestowing a “false benefit” on non-GE products. When it was explained this way, or explained using examples (e.g., using an illustrative example of two piles of oranges - one identified as non-GE and the other pile with no GE identification at all; or discussing the hypothetical claim of “Cholesterol Free Water”), participants slowly began to appreciate the need for this wording approach. However, the majority of participants said the most uncomplicated way to handle this was through positive labelling only, where only GE oranges or products would be labelled.

A Broader Theme Emerged Once the Label Claim Was Explained – Only Label GE Products

The idea of only labelling GE-positive products became somewhat of an ongoing theme throughout the groups. Participants generally agreed that it would be worthwhile to label only GE ingredients or material and not identify non-GE products, which were perceived to be natural and real. Participants began to find a sense of irony in this label statement in specific, and more generally in having to label “real” products like the oranges in this case as “real” oranges. They felt it would be alright for organic producers to do such labelling – but that it would not be acceptable for non-GE food to make negative GE claims.

Participants Got Very Frustrated When They Did Not Understand Label Claims

The reaction to this label claim highlights another key issue. While participants may or may not understand the intricacies and meaning of GE, it is not so much their lack of a detailed and scientific understanding of GE that causes issues for them with the label claims. What is at issue is whether or not they understand what the label claim is trying to say to them. Across many label claims, and especially this one, participants became frustrated only when they could not understand what they were reading. For example, label claims #1-#4, shown previously to this one, certainly provoked a lot of discussion, caused a lot of questions to be asked and even made for some good debate among participants. However, this label claim provoked negative reactions among the participants simply because they could not quickly and easily understand the meaning of it.

#6 Papaya (Product of genetic engineering)

#7 Genetically engineered corn

Claims containing the expression “product of genetic engineering” refer to foods consisting of organisms that have undergone genetic engineering and foods derived from these organisms. The choice of appropriate expression for claims about single-ingredient foods and ingredients that are a product of genetic engineering will depend on how much of the specific food has been produced through genetic engineering. “Product of GE” is an acceptable claim if the food or ingredient is obtained from sources that are more than 95% product of genetic engineering (par. 5.1.2 and 5.2.2).

General Reaction Was Positive, Given That These Were GE-Positive Statements

These were the first label claims introduced to participants that identified a GE-positive product. For the most part these label claims were relatively clear and straightforward for participants to understand. It was interesting that a few participants, most notably in Vancouver, commented that the pictures of these products (papaya and corn) looked fairly “normal” and not at all what they expected a genetically engineered product to resemble. Others in Toronto indicated that the pictures showed “the freshest possible” and “most colourful” food to underscore the effects that GE would have on food. At this point some people mentioned products such as square watermelons as examples of what they expected GE food products to look like. In the Vancouver Low SES group one respondent commented that the papaya looked “too red” and the corn “too big” in the pictures accompanying the label statements. In this individual’s mind, this raised suspicions about the products being GE.

This discussion illustrates the range of knowledge and misconceptions present among participants, especially because the pictures accompanying the label claims were not chosen in any way to reflect the GE status of the label statements. In fact, the pictures were similar throughout all the statements, and the moderators even made comments that the pictures were not chosen to reflect anything in the statements. The fact that some participants viewed the pictures this way does show a certain degree of bias about GE products.

Label claim #6 did elicit some concerns from participants, particularly in the Ottawa, Portage La Prairie and Vancouver sessions. Some individuals did express some concerns about the way the papaya statement was worded and laid out, though these concerns did not catch on with other members in the groups.

- “A product of genetic engineering sounds worse than genetically engineered. Sounds very laboratory”.
- “...I was thinking ‘papaya this is a product of GE’ that could be in some sense a little confusing, so does that mean that the product was created from [genetic engineering] as to opposed to ‘GE corn’, that says it has been ‘messed with’, but how has that actually been created?”

The use of parentheses was one of the factors that seemed to throw off some of the participants when considering this label statement.

It is noteworthy that reaction to GE-positive statements was not emotionally charged. That is to say, very few participants reacted with concern or shock over seeing a GE label claim – and if there was this reaction among only a few participants, it did not catch on within the groups.

Unlike With The Negative Label Statements (Specifically #1 and #2), Participants Felt These Label Claims Needed More Information And Clarification.

Many people felt that these label claims would require additional information for consumers, some of which should be included on the label and some of which should be available elsewhere (web site, 1-800 #, point of sale info). Some questions were clearly an indication of the fact that participants did not have a full understanding of GE, and needed to know more about the basics of it. For example they would want to know:

- What GE actually is – that is, a formal and general definition of GE.
- Who did the GE? (Was it the farmer, a corporation or a big farming conglomerate, which a few participants negatively mentioned as trying to “patent” genes).
- How the GE was actually done.
- Country of origin, as different countries have different standards and practices relating to GE.
- The purpose of the GE for that particular product.
- How GE actually affects the product in any way in terms of taste, texture or appearance, even if the purpose was not to affect these factors in the food. For example, one participant said that he heard they were Genetically Engineering tomatoes for longer shelf life, and asked whether that would affect how he would be able to digest those tomatoes compared to non-GE tomatoes.
- Reassurances about allergies and the source of the “spliced” material, for those who may be vegetarians or otherwise concerned about ingesting animal by-products.

Participants Felt that A Manufacturer Showed Confidence in Their Product When It Had A Positive GE Label Claim On It

Participants were asked why a manufacturer would want to label their product as being one of GE. The general sense was that the manufacturer would be “confident”, that by stating their product was GE, it would be better for the consumer in some way. This feeling of manufacturer confidence caught on in many groups, and the concept was perceived positively – that is, manufacturers should feel proud of the products they produce. Whether or not participants and shoppers would feel the same way about the product as the manufacturer would be a different story, but the sense was that participants would not begrudge a manufacturer for labelling a product as being one of GE.

Participants were asked to state what they perceived the benefits of GE to be. In general, they were not very forthcoming with benefits. The reason for that was for the most part they were not too familiar with or confident in the actual benefits GE provides. Some of the stated perceived benefits of GE which were voiced were:

- Improved shelf life
- Better flavour
- Ability to grow food in difficult climates
- Reduced pesticide use (including Roundup Ready Wheat)

Another Important Reason for Positive GE Labelling Is Choice

Participants indicated that putting a GE label claim on a product would give them the choice of whether or not to purchase the product overall, which is one of the key benefits of GE-related labelling.

Positive GE Labelling Would Cause Participants to Consider Their Purchase Behaviour

Participants were asked how seeing a label claim like #6 or #7 on a food would impact their purchase behaviour. There were definitely some participants who would avoid purchasing a GE product. Those that stated this tended to be quite emphatic about their position. However, there were many others who were open to the idea of purchasing a GE product – and it was this openness that resonated in the groups more so than strict avoidance of GE products. While no one was emphatic about purchasing only GE products, there was an attitude of “*buying with eyes open*”, which meant that if they saw a GE product, they would consider:

- Price: If GE products were competitive with respect to price, they would consider purchasing them. As one participant said “*Now you’re hitting my pocketbook*,” meaning that he would consider GE products if price were an issue.
- Quality: This had similar consideration as price. If there was a positive quality difference, without any perceived risk, purchasing GE products would be worthwhile.
- Comparisons between products: Some participants claimed they would actually purchase a GE and non-GE product together, particularly if it was produce, and do a direct comparison of taste, texture and appearance at home to see which one they would prefer.
- Opinions of others: They would purchase the GE product and search secondary sources for information, or engage friends and family in discussions about the advantages and disadvantages of purchasing GE products.
- Past purchase: There were a considerable number of participants who were reconciled to the fact they, in all likelihood, had already consumed genetically engineered food without knowing it. If, for example, one of their regular and preferred food purchases turned out to be GE, they would be inclined to continue to purchase this product—perhaps after some investigation into the merits of genetic engineering. There was a sense that participants wanted attributes like price, quality and taste to be the same as what they have come to expect from past purchases of that product.

There Were Some Wording Issues In The French Groups

French participants focused on terminology issues: ‘modifié’ vs. ‘issu’. Most tended to think that ‘modifié’ meant something had been changed or altered, “*that it was a normal product that was modified in a laboratory*”; it reminded some people about cloning. ‘Issu du génie génétique’ elicited the feeling that it was the result of a modification that could have been made to the soil in which the produce was grown. “*With the papaya, the soil might have been modified and with the corn it is the corn itself that was modified*.” ‘Issu’ was perceived to mean that it was the environment that was modified; ‘issu’ was seen to be more natural. ‘Modifié’ resonated as a negative word.

#8 Corn (partly a product of genetic engineering). See www.thisurl.com for more information

#9 Orange juice (combination of genetically engineered and non-genetically engineered)

Claims containing the expression “product of genetic engineering” refer to food consisting of organisms that have undergone genetic engineering and foods derived from these organisms. The choice of appropriate expression for claims about single-ingredient foods and ingredients that are a product of genetic engineering will depend on how much of the specific food has been produced through genetic engineering. “Partly” or “combination” of GE claim is acceptable when the source of food or ingredient is between 5% and 95% is a product of genetically engineered (par. 5.1.3 and 5.2.3).

Participants Were Not Particularly Receptive Toward These Label Statements

There were two reactions to the clarity of these label claims. Most participants in Western Canada understood the literal meaning of these statements while many in Ontario, Quebec and Halifax found them much more difficult to comprehend. However, whether or not the statements were understood, they were not well liked.

Those that did not understand these label claims stated things like “How can one ear of corn be both GE and non-GE?” Other individuals, notably in one of the sessions in each of Calgary, Trois-Rivières and Vancouver, expressed confusion over whether the orange juice carton was GE. That is, they did not understand that the ingredients would come from two different sources. In fact, many participants could not understand this concept of mixing GE and non-GE products together even after more knowledgeable participants attempted an explanation.

Others in the groups did not have this same difficulty, noting that it was likely a mixture of corn or orange juice types in the manufacturing process. Those who understood the label claims and the mixture process had difficulty understanding why they would be labelled in this manner—“Why not just say it is GE”. Some stated “you can’t be half pregnant”. The bottom line was that many participants felt that any sort of partial mixture or combination of GE and non-GE makes the product GE – period.

‘Combination’ Was The Preferred Wording, But ‘Partly’ Was Also Acceptable

Participants generally viewed ‘partly’ and ‘combination’ to have the same meaning, however, more individuals preferred the use of the word ‘combination’. The primary reason for this appeared to be a sense ‘combination’ was more precise as opposed to the use of ‘partly’ which seemed vague.

There were some individuals who preferred the use of ‘partly’, most notably Teens in Vancouver where several of them indicated it seemed to read more naturally compared to ‘combination’.

Participants Really Wanted To Know Exact Proportions of GE and Non-GE Ingredients

Another frequently mentioned concern was the need to see percentage amounts which made up the various ‘parts’ or ‘combinations’. Several people said that the product could be 90% GE and only 10% non-GE which might be important information to know. These individuals thought it

should be possible to provide a percentage in parentheses after each ingredient making up the combination. It should be noted that for many participants, particularly those very concerned or opposed to genetic engineering, any amount was too much and therefore a product labelled in this manner—with or without percentages—would not be acceptable to them. To them this label claim was a nice way out of directly saying that the products were GE.

Of Equal Importance, They Wanted To Know Why Manufacturers Combined GE and Non-GE Ingredients Together

A final general reaction from participants to these statements was a view that they needed to know why this product was a combination of GE and non GE ingredients. In several of the sessions participants raised questions as to why a food manufacturer would create a product in this manner:

- Was there a benefit to the consumer?
- Were the ingredients mixed up accidentally?
- Was the combination part of the concept of adventitious presence discussed earlier?
- Was the manufacturer not able to control its source ingredients?
- Was it cheaper to produce the product in this manner?
- Did the manufacturer just not care about how it produced its food?

Participants felt this label claim raised many questions, and in more than a few groups, when people asked these questions, some participants answered simply that the label claim was a form of “legal protection.” This means that the manufacturer simply used this label claim to avoid lawsuits because it actually did not know what went into its food, so this label claim helped protect the manufacturer, should GE material or ingredients be discovered.

Participants Appreciated the Value of A Website, But Concluded That It Is Unlikely They Would Use It

The National Standard requires that where a claim is made, supplementary information should be made available at an external source of information if not provided on the label (par. 4.1.1 e.).

Label claim #8 in this pairing of statements was the first to be discussed that provided a web address for consumers to visit for more information about the product. Prior to displaying a board with a mock web site, individuals were asked who they expected to be hosting the site and what information they want to see on this site.

In terms of hosting, most individuals felt the company or manufacturer of the product in question would be the host. The majority of people recognized this was commonly the case now with any contact information currently on food labels. However, there were a number of participants who stated that any information on the web site would be “suspect” because it would be no more than a “sales and marketing” pitch to purchase a manufacturer’s products. They felt that the content would do everything it could to subtly persuade people that GE was positive, and that the use of GE in the manufacturer’s products was equally positive. This idea caught on in many of the groups and the consensus was that while the web site and 1-800 number were perceived to be worthwhile, participants would simply not get “the truth” about GE. Instead, they would get the manufacturer’s marketing perspective.

To help counter this, there was a fairly strong indication that participants would want to see a link from the manufacturer's site to a third party/impartial site such as the government, or that the site have a significant amount of content from an independent party, such as government, medical or academic sources.

A listing of what information participants expected to find at a web address provided included:

- What is genetic engineering?
- How is it done (process, what genes are engineered)?
- Why is it done?
- How long has it been done on this product?
- What are the health risks?
- What is the combination percentage as it relates to label claims #8 and #9, and why is this being done?

The mock web site displayed with its accompanying information examples was well received by participants. It answered many of the questions raised initially in discussion.

A final note on the web site discussion related to the overall utility of this approach in terms of being a source of information for consumers when purchasing food. Participant views were somewhat mixed on this question. Specifically:

- Some people thought it was a good idea to provide an external reference as it would be an efficient way to quickly access a considerable amount of information.
- Another group of individuals did not mind having a web address, but these individuals felt a 1-800 number should be included as well. These individuals tended to be the senior participants and—self-confessed—less comfortable on the computer. Also included in this group of people were a significant number of Portage La Prairie participants who expressed concerns that without access to high speed Internet in their area, accessing such sites could be quite time consuming.
- Finally, there were participants who questioned the utility of the external reference and wondered why it was there at all – and it was this attitude that seemed to have a lot of resonance in the groups. The view was that most consumers would not take the time to write down a web address or 1-800 phone number while shopping, let alone actually visit the site or call. They indicated that in the case of GE, the questions they had about GE were relatively major and likely important purchase decision factors for them. It was not likely a shopper would call the 1-800 number while in the store to help make the purchase decision, or pull out a laptop as a few individuals noted somewhat sarcastically. Individuals felt that if they were that unsure about genetic engineering in the product, they simply would not buy it. They would not take the time or money to purchase the product and then look at the information once they got it home. Even if they did this, as mentioned before, it was likely that they would think the information on the site did not present the “whole truth” about GE.

It is important to note that participants expressing this last point of view did acknowledge, when probed, that providing a web address or 1-800 number did not necessarily detract from the label statement. While they questioned the utility of the information avenue for themselves, they acknowledged that some consumers may use it.

- In almost all French groups, participants felt that the existence of a Web site was reassuring, even if they would not check it out.

#10 Corn genetically engineered to reduce the use of pesticides

In some cases a manufacturer may want to provide further details concerning the reasons for using genetic engineering methodology. Any information provided in such statements must be truthful and not misleading, must meet all the requirements of Section 4 and 7 of this Standard, all other regulatory requirements, and must apply specifically to the food being labelled, unless given an appropriate context. Scientific data about a specific crop may be required to support such claims (Section 5.3.1 d. and 5.3.2 b.).

Reaction to Label Claim #10 Was Enthusiastic And Positive

This label claim was one of the first to receive a positive response from a large number of participants as it offered some justification for the use of genetic engineering. Positive reaction included comments like “*That’s what I mean*”, “*Now it makes sense*” or “*That’s what I’ve been looking for*”

The reaction could be broken out into two parts:

- The label claim indicated why GE was used. Participants said previously that they wanted to know exactly why a manufacturer used GE products.
- Pesticide usage was a relatively familiar issue and was one that appeared to be a significant top-of-mind concern among participants. As such, individuals responded well to the idea that genetic engineering could reduce the use of pesticides on crops.

There Were However, Some Questions and Concerns Generated By This Label Claim

Once the initial positive reaction was over, it gave way to quite a few questions. Some concerns expressed about this label claim were that there was no reference to ‘how much’ pesticide use was reduced. Some individuals, particularly those suspicious of the benefits of GE, suggested the reduction might have been very small. There was a sense that external references should be providing this information if such a claim is made.

Another concern about this label claim was related to seeing the word ‘pesticide’ on a food product. A few individuals in Ottawa, Portage La Prairie and Halifax expressed the view that this might turn them away from buying the product as they might only see the word ‘pesticide’ and not the entire context in which it was being used.

It is also interesting to note the tone of discussion about this label claim. While many conversations about different label claims involved “debate” (e.g., label claims #1 and #2 and label claims #6 and #7) or “frustration” (label claim #5), this label claim seemed to provoke open discussion and a willingness to discuss the issue of GE. Among those who did not really know much about GE, they were interested in how GE could reduce pesticides, and among those who knew about GE and did not necessarily support it, the label claim got them to think a little bit more about which option they would prefer – less pesticides or GE food.

Impact on Purchase Was Neutral

While this label claim would get participants to think about and discuss GE-related labelling, it would not have an immediate impact on their purchasing of a product. That is, they would take a

very non-committal approach to this type of labelling. The action they would take would be to find out more information (e.g., how much pesticide is reduced) with the view towards eventually purchasing the product. It is noteworthy that this reaction would likely change if this label claim appeared on a product which they already use. In this instance, they would be quite likely to continue purchasing the product.

#11 Corn Syrup. Product of genetic engineering (GE). Contains no GE material
#12 Canola Oil. Product of genetic engineering (GE). Contains less than 0.1% GE material

In some cases a manufacturer may want to provide further details concerning the reasons for using genetic engineering methodology. Any information provided in such statements must be truthful and not misleading, must meet all the requirements of Section 4 and 7 of this Standard, and must apply specifically to the food being labelled, unless given an appropriate context (Section 5.3.1. e.).

Reactions Were Very Negative To These Label Claims

These two label statements were perceived to be exceptionally difficult to understand, and resulted in confusion and frustration among the participants. Participants thought they were contradictory and misleading. When asked how they would react when they saw these label claims, reaction ranged from disbelief to confusion to frustration. Without even knowing the meaning or the context, there were several suggestions that this labelling approach should not be allowed as it would only serve to confuse consumers about the very issue the label claims were intended to explain—genetic engineering. Reaction to this label claim illustrates that participants do not get emotional about the issue of GE, per se, but are more inclined to have emotional reactions to label claims that they just do not understand.

The fundamental problem was, to use the words of participants, “*how can something be GE, but not be GE?*” The primary concern expressed in every group was that these label claims were providing conflicting or contradictory information. On one hand the label claims stated the product had been genetically engineered, but then went on to state that it contained a miniscule or no amount of GE material. Across the groups, participants were not able to put the statement together in a way that said the original product was GE, but after being highly refined, the end product contained no GE material (e.g., protein, rDNA or rRNA) in it. In fact, during the warm-up, when participants were looking at mock label claims, #12 was identified as being confusing. Seeing this approach highlighted on a story board did nothing to clarify matters. Participants felt that the problem was with the label claims, and not with their understanding of the concepts.

It is worthwhile to note that participants were “primed” for these label claims by the moderator who asked whether or not they had heard of the term “genetic material.” While about one or two participants in most groups knew or were somewhat aware of the definition, which they usually stated as DNA or “the stuff that is the blue-print for life”, virtually none could relate it in any way to food. The implication is that participants must be educated in this subject matter in order to understand what these statements mean.

Reactions Somewhat Changed Once the Concept of Genetic Material Was Explained

After the initial discussion about these two label statements the term GE material was explained in the groups (see Appendix C for definition). In describing GE material the intent of the two label claims was also explained. This discussion helped participants understand somewhat what these statements were trying to tell the consumer. While the notion that through processing all or almost all of the GE material could be removed was still difficult for some participants to fully comprehend, it was at least somewhat understandable for many participants in the sessions. With this understanding, participants were quick to point out, however, that not all consumers would

have the benefit of having a definition provided to them while standing in the grocery aisle with a product in hand.

Once most participants understood the wording, they were asked whether or not the statement would help them make a purchase decision. The main view was that these label claims were not worthwhile because most participants felt that even if the final highly-refined product contained no GE material, the original corn or Canola was GE, and if people wanted to avoid GE products, they would avoid purchasing these, even if there was virtually no GE material in them. A minority view, expressed in a few Toronto groups, was that if there was virtually no GE material in the final product, it would not even make sense to label it.

Once the label claim was actually understood, the moderators asked for opinions. To improve the understanding, it was suggested in a few groups that the label claims be revised by adding a few words such as:

- *Corn syrup, product of genetic engineering (GE). Due to processing contains less than 0.1% GE material.*

The addition of the underlined words was thought to perhaps assist consumers in understanding the intent of both these label claims.

“Less Than 0.1%” Was More Believable

A final note regarding these statements was that between the two label claims, the one indicating a “less than 0.1%” amount of GE material was the more credible of the two. Label claim #11 even after the explanation seemed still too hard to believe. Participants felt it was easier to believe that most of the GE material could be removed through processing as opposed to all the GE material. A few participants went as far to say that if the product contained no GE material as claimed, why bother saying anything at all? Other participants in this group disagreed with this view however, as the original input was a GE product and individuals should know this information.

The definition provided in French still left most participants unsure of the meaning of the expression “matériel génétique”. This confusion remained present throughout the rest of the discussion, particularly when there were mentions concerning “matériel génétique”.

“Derived From...” May Help Explain The Intent Of The Statements

In the Halifax groups, which were the last in the series, after participants were exposed to label statements #11 and #12, they were also exposed to slightly different statements, which said:

Corn syrup, derived from Genetic Engineering, contains no GE material
Canola oil, derived from Genetic Engineering, contains less than 0.1% GE material

The sense was the statements using “derived from” were viewed more favourably than the original statements, as they tended to explain the concept a bit better. One participant said “*derived gives it a whole different aspect*”. However, since these statements were only exposed to two groups after the initial discussion, the results need to be investigated further.

#13 Bread made with flour from non-genetically engineered sources

#14 Made from non-genetically engineered ingredients

#15 This corn bread is made completely from non-genetically engineered ingredients

#16 Made entirely from non-genetically engineered ingredients

The above label claims were shown independently and also together. Moderators would often make reference to many of these statements together as the discussions progressed. As such, these label claims are analyzed together.

#13 Bread made with flour from non-genetically engineered sources

General Reaction

Many participants understood that the label claim was talking about just one ingredient in the bread – the flour. For these individuals, singling out one aspect of the bread (the flour) raised suspicions about the other ingredients. Calgary participants were particularly wary of this.

Other participants, however, in many of the sessions assumed that the label claim was talking about the entire bread product. A few participants said “*The label tells me the bread is GE-free.*” What was even more interesting was that when other participants correctly said something like “*It’s just talking about the flour, not the bread*”, some participants, especially those who thought the statement was about the entire bread did not understand that the statement was about the flour only. There was a sense that a label claim like this could mislead.

Participants also wondered about the term “non-genetically-engineered sources”. They wondered what a source actually was, and wondered how a source was different from saying something like “bread made with non-genetically-engineered flour.”

Bread as A Multi-Ingredient Food

This label claim marked the introduction of multi-ingredient label claims to the group. What became clear very quickly was that some participants realized that bread is a multi-ingredient food, while others did not. Those who realized that bread is a multi-ingredient product generally said that the label claim did not provide them with enough information, because they wanted to know about other ingredients like eggs and butter used in the bread, and whether those were products of GE as well. In fact, those who realized bread was made of multiple ingredients stopped short of saying that the label claim was misleading, because it made it seem as if the whole bread was ‘GE-free’.

#14 Made From Non-Genetically Engineered Ingredients

General Reaction

Participants preferred the approach of talking about “the entirety of” ingredients compared to just one or a few, as in #13. Participants, for the most part assumed that the label statement meant that all ingredients in the corn bread (which was the food being labelled) were non-genetically engineered. In a few of the groups, some participants wondered whether it meant all ingredients, but that did not catch on too much in the groups, with the overriding opinion being that the product was simply ‘GE-free’.

#15 This corn bread is made completely from non-genetically engineered ingredients

#16 Made entirely from non-genetically engineered ingredients

General Reaction

Participants almost immediately noticed that these statements contained the words ‘completely’ and ‘entirely’, and for virtually all participants the message was clear – the entireties of the ingredients in the food were not GE. A few participants, most notably in one of the Calgary groups suggested using the terminology “*100% GE Free*” on this label approach. To these individuals this was a more recognizable style.

Some participants, however, did get quite concerned when these statements were displayed and compared to #14, because it clearly meant that they had to read a label claim very carefully if they wanted to buy a totally GE-free product. They were very surprised that one word could make such a difference in meaning, and wondered how #14 would not be entirely or completely GE-free. One participant, a lawyer in Vancouver, was fairly adamant that should a product with this label claim (#14) turn out to contain ‘some’ GE ingredients, it would be open to lawsuits as a result of being very misleading.

Participants were asked how they thought adventitious presence would fit in with these label claims. There was a split opinion. For the most part, they felt that statements using ‘entirely’ and ‘completely’ would eliminate the 5% adventitious presence in the food. However, some participants felt that even with ‘entirely’ and ‘completely’ on the label claim, they felt that the 5% would still be there, and that for the most part, this was acceptable.

#17 Soya beverage, made from non-genetically engineered soyabeans. Identity preservation system is used to ensure that the soybeans we use are not genetically engineered.

General Reaction Was Neutral

The reaction to this statement was neutral at best. Participants appreciated the general fact that the statement was trying to provide a reassurance and information to back up the non-GE claim. However, the positive feelings ended there. Participants considered the statement too long to be read quickly in a grocery store. There was a suggestion to shorten it to “*Made from non-genetically engineered soybeans. Identity preservation system used.*”

The more significant issue though is the fact that most participants did not know what was meant by the term ‘Identity Preservation’ (IP). Some felt it was a way to actually identify the genetic material used in particular seeds and crops, as if it would be passed through some sort of scanner or reader to identify how it was grown. Others thought the seeds would be put under a microscope. One participant in the Portage La Prairie groups, a farmer, knew the exact meaning of Identity Preservation (IP) and was surprised when no one else in the group understood what it was. He became sympathetic and realized that if people did not understand the term, then it would be confusing on the label claim.

The Neutral Reaction Underscores the Fact That Label Claims Should Not Confuse Consumers

What is clear is that if participants were confused about something in a label message, they tended to paint the entire label and its message negatively, and that was certainly the case here. Participants began to question not only what IP was, but how they could be reassured about it, whether all the soybeans were subject to IP, who was monitoring the IP, who was monitoring the manufacturer, and so on. Some participants found the claim simply unbelievable because they did not understand it, and could not reconcile it against the 5% adventitious presence, asking for example, how IP would eliminate “accidental inclusion” of GE material.

While the intent of the statement, which was to reassure was appreciated, participants need to be educated about the methods used to assure that GE material is not included in what they purchase. Without this education, doubt was cast over the entire label statement.

#18 This sandwich contains tuna fish, which like all other tuna fish, is not a product of genetic engineering (also contains GE ingredients; see ingredient list for more information.)

#19 This sandwich contains non-genetically engineered tuna fish (also contains GE ingredients; see ingredient list for more information.)

According to the National Standard, claims that a food is “not a product of GE”, when no similar foods that are products of GE have been offered for sale, are considered misleading because they create the false impression that the product is unique. In such cases, it is appropriate to use an alternate statement or to include an explanatory statement to avoid misunderstanding (par. 6.1.4 and 6.2.4).

#19 Was the Preferred Label Statement

The preference among these two label statements was clearly #19. Participants reacted to #18 the same way that they did to #5, which was with confusion and indignation. That is, they could just not relate to and understand the “like all other tuna fish...” In fact, there were a number of people who said that they would not purchase the tuna fish sandwich if #18 were on it because they would have felt that the tuna fish was actually genetically engineered, and they would really wonder how an animal can be genetically engineered. The other reason why they would not purchase the tuna fish sandwich if #18 were on it was because they would find the claim statement too complicated to read through.

While there was an appreciation for the fact that the label claim contained instructions to see the list of ingredients to find out what ingredients were indeed GE, participants wondered why the Principal Display Panel label claim in the same breath would say that the tuna was non-GE, but that there were other GE ingredients in it? This is reflective of the fact that participants wanted to know whether a product was GE or non-GE - period. While they were fairly good at recognizing the fact that a multi-ingredient food simply cannot be totally GE or totally non-GE, they felt that if a multi-ingredient food had a GE ingredient in it, then it should be considered GE – end of story, with no need to document every ingredient in it. It is reflective of the sentiment that participants wanted to see positive GE products labelled. They did not want to see negative products labelled – it would be too confusing for them, and participants felt that this label claim was certainly indicative of that.

While Ingredient List Reactions Were Somewhat Positive, There Still Were Questions

Unlike other ingredient lists (see #20), participants felt that the categories on this list were relatively exclusive and clear. As mentioned in #5 and above, they questioned the wording of “like all these other ingredients...”, but once they got past that, it was clear that the two categories stated what was GE and what was non-GE. They wondered why corn, which was the GE product, was not stated on the front, instead of the tuna.

There were a fair number of concerned comments about the fact that the bread and cream cheese had no break-out. Many people assumed these were non-GE ingredients, but they were not positive. Virtually none of the participants understood that these were multi-ingredient foods and that labelling was applied on the basis of individual ingredients. Instead, the absence of a break-out caused confusion for participants. There was a sense in many of the groups that the participants would be reluctant to purchase a product with this labelling approach—“*If I have to think about what the ingredients are made of too much, I probably will just pass it by.*”

#20 This lentil salad contains non-genetically engineered soybeans.

Ingredients: brown lentils*, carrots*, corn+, onions*, soybeans++, red pepper*, celery*, tomato **, asiago cheese, parsley, canola oil+++, red wine vinegar++, dijon mustard*, oregano*, salt* and pepper*

*Like all these ingredients, not genetically engineered

**Product of genetic engineering

+Mixture of product of and not of genetic engineering

++Not a product of genetic engineering

+++Product of genetic engineering. Contains less than 0.1% GE material

The Standard requires that when a claim is made about ingredients in a multi-ingredient food that are not products of genetic engineering, the manufacturer is also required to indicate within the list of ingredients, all known ingredients that are products of GE, or are mixtures of products of and not of GE. Claims cannot be made if 5% or more of the multi-ingredient food as offered for sale consists of ingredients of unverifiable origin (par. 6.2.5 b. and 6.2.7).

General Reaction Was One of Confusion

The lentil salad label claim was one of the mock-ups shown in the initial warm-up exercise. During that point in time, participants found the label claim very confusing, primarily because of all of the different category break-outs contained in the list of ingredients. When the label claim was shown in the group, this confusion continued, and it turned into frustration. It can be summed up by the fact that when the moderator asked participants to focus on the list of ingredients, the response came back in a few groups, *"Why bother, I made up my mind long ago not to purchase this lentil salad."* This is an example illustrating that a confusing label claim will lead to frustration, and the fact that participants will just not take the time to interpret it.

The confusing and frustrating aspects can be broken out as:

- Why does a lentil salad, whose primary ingredient is obviously lentils, focus on discussing a lesser-volume ingredient like soybeans? The perception is that this is deceptive in that it points out one ingredient that is not GE for the purpose of having a claim on the Principal Display Panel that can promote and market it as a non-GE product. There were concerns expressed that some people may see this reference and purchase it assuming it is a non-GE product.
- The number of break-outs on the ingredient list. With a total of five break-outs, participants said that they would not have the time or patience to look at them, and that they would not purchase the product because it would be too confusing to do so. They said that they do not think in that much detail, quoting one participant as saying *"how many people out there care if their canola oil is GE? But you know what? The red pepper is not, and good thing the cheese isn't... the cheese is all natural, great. You know it's silly."*
- Confusing break-outs. Even though participants had been exposed to many of the break-outs individually as previous label statements (e.g., *"*like all these ingredients, not genetically engineered"*) was similar to statement #5, and *"+++product of genetic*

engineering. Contains less than 0.1% GE material"), they still had a very hard time understanding all of the break-outs and what they meant.

In a similar manner the term "like all these ingredients..." led a number of participants to believe, particularly in the Vancouver sessions, that this definition was referring to all the ingredients making up the full ingredient list. This meant the list then became very confusing because clearly not all the ingredients outlined in the ingredient were non-genetically engineered.

- Break-outs were *"saying the same thing"*. Several participants felt that many of the break-outs provided the same information. For example, *"*like all of these ingredients, not genetically engineered"* and *"++not a product of genetic engineering"* meant the same thing – that they were non-GE. Similarly, *"**product of genetic engineering"*, *"mixture of product of and not of genetic engineering"* and *"+++product of genetic engineering. Contains less than 01% GE material"* all meant that they were products of GE.
- Break-outs with no indication beside them at all. Participants wondered about the asiago cheese and parsley, which had no indication beside them at all.

Participants Were Likely Not Ready To See This Level Of GE Information On Their Label Claims

The bottom-line interpretation of the reaction is that given the present state of education and information about GE in the marketplace, participants did not seem ready to appreciate this level of detail on their label claims. For example, the majority of the participants were unaware that soybeans are a crop that has a relatively high proportion of GE product, justifying attention being drawn to it on the Principal Display Panel. If participants could not understand the label claims, they got frustrated, which would lead to distrust and not purchasing the item in question.

Another way to improve this label claim, participants felt, would be to simply label the GE ingredients. As mentioned before, participants were more inclined just to look for positive GE information, and wanted one statement that let them know whether something was GE or not. In this case, they would want a label to say that the lentil salad contained GE ingredients, period.

#21 This soup contains corn genetically engineered to reduce the use of pesticides

In some cases a manufacturer may want to provide further details concerning the reasons for using genetic engineering methodology. Any information provided in such statements must be truthful and not misleading, must meet all the requirements of Section 4 and 7 of this Standard, all other regulatory requirements, and must apply specifically to the food being labelled, unless given an appropriate context. Scientific data about specific crop may be required to support such claims (Section 6.3.1 b. iii., and 6.3.2 b. ii).

General Reaction Was Somewhat Positive

Participants had a positive reaction to this label claim, however it was muted. They appreciated that they were being given a rationale for the use of GE in the corn – and this echoed the reaction for label claim #10, which said “Genetically engineered to reduce the use of pesticides”. However, when participants shop for vegetable soup, they are not necessarily thinking about pesticides. There was a sense that this is an important message to communicate, but participants questioned whether it should be on the Principal Display Panel. It was suggested that this information could be provided somewhere else on the label such as on the list of ingredients, or on an external information source. As a few participants stated, if they were interested in pesticide use, chances are they would take the time to look to find this type of information elsewhere on the label, but would not expect to find it on the Principal Display Panel.

Participants definitely appreciated the fact that there were less break-outs on the ingredient list, compared to item #20, the lentil salad. However, there still were concerns:

- Participants were still concerned about the fact that chicken broth, potato, canola oil, salt and herbs and spices did not have any sort of marking beside it.
- “GE and non-GE sources not segregated” caused concern for participants. It was a similar reaction to label claims #8 and #9. They wondered how and why a manufacturer would not do this, and if the sources were not segregated, then it should be considered GE, plain and simple. During several of the Vancouver sessions some participants raised the concern that perhaps the “not segregated” phrase meant the manufacturer was unsure where the ingredient came from, so this was somewhat of a disclaimer. The idea did not give these individuals great confidence in the product.

The expression “sans segregation” was not understood; participants attempted to explain what it could mean by reference to racial segregation without success.

Even If One Ingredient in the Soup Was GE, Participants Considered the Entire Soup to Be GE

Participants were also asked about how the fact that one discrete and identifiable portion of the soup was GE affects opinion about the entirety of the product. The general response was that if one portion of the soup is GE, then the entire soup was considered GE.

There was also discussion of whether or not this would actually impact the actual purchase of vegetable soup in the marketplace. That is, some groups, particularly in Halifax, mentioned that they often bought vegetable soup, and commented on whether or not seeing something like this would impact their purchase behaviour. The sense was that this would not significantly impact

their opinion one way or the other – primarily because they would not even read the label claim too closely anyhow.

However, if they did see this on the label, it is likely they would still continue to buy it. Many would realize that they have likely been consuming the GE corn for some time, so rather than not purchase the product, they would begin to read up on what GE was, and how it related to the vegetable soup they had been purchasing for a long time. This is illustrative of loyalty to the brand and taste, and not to whether something does or does not have GE content in it.

#22 Soya Margarine (embedded GE statement)

Ingredient list: vegetable oil (soybean oil, partially hydrogenated soybean oil - made from genetically engineered (GE) soybeans. Contains no GE material), whey, water, salt, artificial flavour, vitamin A palmitate, vitamin D3 added, milk

The Standard is designed to allow the manufacturer to provide GE information concerning a specific ingredient to be included in the list of ingredients. In this case, further details concerning the reasons for using genetic engineering methodology and the resulting end product has been provided. Any information provided in such statements must be truthful and not misleading, must meet all the requirements of Section 4 and 7 of this Standard, and must apply specifically to the food being labelled, unless given an appropriate context (Section 5.3.1. e.).

In this particular label claim the GE statement was put in the actual ingredient list, instead of on the Principal Display Panel. The overall reaction was generally positive to this approach. The sentiment was that if people wanted to know about GE, they would pick it up and read the ingredients anyhow. This is not to say that participants did not want statements on the Principal Display Panel or comments on other parts of the packaging – but the sense was that if a GE statement appeared just in the ingredient list, it would be acceptable.

There were some concerns expressed, particularly in Vancouver (the Low SES group) and Calgary regarding this approach. Several individuals in these sessions felt that this made the ingredient list quite wordy, which might inhibit some consumers from reading the list very carefully. In addition, a number of participants noted that the GE statement was one of those “conflicting” phrases (original product derived from GE, but less than 0.1% GE Material) which were problematic for participants to readily understand. These participants tended to like the legend with asterisks approach—so long as there were not too many different symbols.

#23 Made with canola oil from canola which has been genetically engineered to reduce trans fat**#24 Made from genetically engineered soybeans which removes need to hydrogenate...****#25 Soya beverage, made from soybeans genetically engineered to be good source of protein**

In some cases a manufacturer may want to provide further details concerning the reasons for using genetic engineering methodology. Any information provided in such statements must be truthful and not misleading, must meet all the requirements of Section 4 and 7 of this Standard, all other regulatory requirements, and must apply specifically to the food being labelled, unless given an appropriate context. (Section 6.3.1 b. iii., and 6.3.2 b. ii).

General Reaction Was Quite Positive

Participants were shown these statements with the goal of understanding how these claims would impact their opinion of the label claims. For the most part, opinion was quite positive towards seeing claims like this on labels, as it provided a reason for using GE which was of benefit to the consumer. In general, it did make people feel more positive toward the food. Similar to label claim #10, participants appreciated the claims, saying that claims provided a reason for why GE was done, and this was one of the fundamental pieces of information that they did not know about GE. Participants also began to have a more balanced discussion about GE, as opposed to discussions which were generally negative in tone. More specific to these label claims is that participants began to really become aware of some of the benefits of GE for them in the nutritional value of their food.

This, however, does not mean that there were not issues with the label statements. Participants qualified their responses in a number of ways:

- If participants were not looking for these nutritive benefits, they would not be swayed to purchase the products.
- Participants wanted to know how much *trans* fatty acid had been reduced and how much protein had been increased. Even though these claims were positive, they would want to know more information – and to many this made sense. Knowing that there had been a reduction of *trans* fatty acid or an increase in the amount of protein was not sufficient information. Instead participants wanted to know exact amounts or percentages of the reduction or increase.

In several sessions, notably in Calgary and Vancouver, participants noted that non-GE soybeans were already a ‘good’ source of protein so in their view what has the genetic engineering accomplished—were they now a ‘better’ source of protein?

- There was a sense that *trans* fatty acid and protein were “hot buttons” in nutrition today, so they felt that claims like this in general were positive. In fact, that must have been the reason why the participants preferred the *trans* fatty acid label claim over the other two.
- Most participants were not very familiar with hydrogenation and how it related to their food and nutrition. As a result, they found this label claim to be too long and complicated.

- While the protein label claim was also appreciated, some felt that this was a little too “weird” or “sci-fi” for them. Fat is something that has long been added or removed through what participants perceived as conventional techniques, whereas they felt that modifying protein content was something newer to them, and they were not sure how it would be done.
- For some participants, particularly those with strong concerns about GE products, these attempts by manufacturers to justify the use of genetically engineered ingredients amounted to pure marketing.

#26 Corn chips made with canola oil from canola which has been genetically engineered to increase crop yield

#27 This corn bread contains corn genetically engineered to use less pesticide

In some cases a manufacturer may want to provide further details concerning the reasons for using genetic engineering methodology. Any information provided in such statements must be truthful and not misleading, must meet all the requirements of Section 4 and 7 of this Standard, all other regulatory requirements, and must apply specifically to the food being labelled, unless given an appropriate context. Scientific data about specific crop may be required to support such claims (Section 6.3.1 b. iii., and 6.3.2 b. ii).

General Reactions Were Positive – But These Statements Were Perceived To Be More About Manufacturer Benefits Than Consumer Benefits.

While participants had been exposed to the concept of less pesticide use in GE in a previous label statement, their reaction was not as positive here. Participants quickly compared these two statements to #23-#25. They felt that #26 and #27 were statements that primarily demonstrated benefits that the producer or manufacturer received, not the consumer. Statements #23-#25 are about consumer health, and as such they were viewed in a much more positive light than #26 and #27. It is important to note that one of the preconceptions about GE in general was that big corporations used GE for their profit and benefit, especially at the expense of the local farmer. These statements tended to reinforce this preconceived notion.

For example, if pesticides cost money, then reducing their usage would be a cost saving benefit for the producer. Similar and even stronger opinions were expressed about increasing crop yield. While a few participants felt that increased crop yield would lead to lower prices, the overwhelming general consensus was that this statement said that the producer was out to produce food as cheaply as possible. In addition, a large number of individuals felt that there were ample quantities of food being produced in Canada, so why would there be a need to increase crop yields? There was really very little interest in the information in the claim presented in #26.

It was interesting to note that no one in the sessions equated the benefits of the GE described in these label claims as helping the family farm or the individual farmer. The benefits were always attributed to large farming corporations and thus viewed in a negative light.

Another concern raised in relation to these two statements was that there was no indication of how much the pesticide usage was reduced by or the crop yield increased. Several people noted that the reduction or increase could be very minor and if that were the case, it would not be worth the usage of GE in the first place.

Of these two statements, the pesticide reduction was the more positive message. As noted earlier this issue was fairly prominent in people's minds.

Initial Behaviour Toward Non-GE and GE Label Claims

CURRENT FOOD EVALUATION CRITERIA

The first question in the groups asked participants to indicate what factors they use to evaluate food. The goal was to determine if, and how, participants incorporate GE into their decision-making process.

GE Is Not “On The Radar” When Participants Shop For Food.

Across all the groups, when participants were asked what criteria they use to determine if they would purchase a food, GE did not enter into the equation. In fact, few participants mentioned GE at all, although it was mentioned by High SES and General Population groups in Vancouver. Criteria mentioned include:

- Price
- Protein
- Fat (specifically *trans* fatty acid and saturated fat)
- Carbohydrates
- Sugar
- Salt
- Preservatives
- Nut allergies
- Organic claims
- Food purchases that are based on health concerns such as weight, cholesterol, high blood pressure, diabetes or allergies.
- Chemicals, ingredient names that aren’t readily recognizable

It is not surprising that participants would not use GE as a criterion – that is, since GE food is not labelled in any significant, consistent or prolific way in Canada, participants are generally not aware of it. However, participants were also repeatedly asked what else they would use to evaluate food, and GE was very seldom mentioned as criteria in what participants look for.

Organic Is An Important Factor – And In Later Parts Of The Group Discussion It Was Revealed That Among Some Participants, “Organic” Equates To “GE-Free”.

There were a fair number of participants who did look for organic food, and in some cases, they preferred purchasing the organic product, even if it was more expensive than conventional food. They felt, generally, that organic products were more “natural” and “healthier” for them.

What is noteworthy though is that as the discussion turned towards GE and GE-related labelling, there was a sense that an organic food would, by definition, be a GE-free food. This was based on perception that organic foods were completely natural and pure. However, purchases of organic food were driven by the perceived benefits of organic food specifically, and purchases were not related to any direct desire to purchase a GE-free food.

INITIAL REACTION TO GE LABEL CLAIMS

Participants were shown six mock products, all of which had GE statements on them. Participants were asked to look at the products and write down observations about the information on the food. The goal was to determine initial reaction to GE label claims as a sense of how consumers would behave if they were actually shopping for these foods.

GE Label Claims Were Indeed Noticed As Something That Is New

When participants were asked to discuss things that they had not seen on the labels, GE tended to come up quite a bit. They were very quick to point out the GE-related statements on these labels, and in some groups, as participants were writing their answers to questions, they verbally indicated that they had spotted the GE-related statement on the label. The only exception to this was in one group in Halifax. In this group, participants were likely to mention other information as new or confusing to them before they arrived at the GE-related statements. Interestingly, in this Halifax group, it was much harder to get participants interested and engaged in the topic. It may have been attributed to the fact that it was much more difficult for participants in this group to grasp and comprehend the basic concepts involved in GE-related labelling (e.g., 5% adventitious presence, GE Material, differences between “organic” and “genetic engineering”).

The vast majority of participants said this was the first time they had seen this form of labelling on any food packaging. A handful of individuals indicated they had seen reference to “*genetically modified*” on product labelling in the past. A few said they had seen this terminology used in relation to organic foods while another individual thought they had seen GE-related labelling on food products while visiting California.

Generally, There Were Few Emotional Reactions To Seeing the Mock GE-Related Label Claims

It is worthwhile to observe initial reaction to seeing the mock GE-related label claims, since it is one of the first times Canadian consumers have been exposed to GE-related label claims. Overall, when participants discussed the GE-related label claims they saw, they did not react emotionally. They did not tend to get upset, angry or very surprised at the claims on the mock products. Similarly, participants did not indicate that they were “waiting for GE-related labelling” or that it was about time Canada caught up to other countries in terms of GE-related labelling. Overall reaction was quite matter-of-fact.

This is not to say that there were no emotional reactions. A few participants across a few groups, such as in the Ottawa and Toronto General Population groups, stated that they would be alarmed or slightly panicked if they saw the GE label claims. It is noteworthy that this reaction did not spread throughout the groups. What tended to happen was that participants who experienced these reactions would either calm themselves down quite quickly, or other participants would begin providing information which would either be reassuring, or put these participants in a more rational state of mind.

For example, a participant in Ottawa said her reaction was “*alarm*”, which caught on with a few other participants. However, she quickly stated “*once my first impulse ebbed, I said well, what are they exactly talking about when they say genetically engineered?*” Similarly, in other groups, more knowledgeable participants would attempt to provide reassurance and a bit of information about GE, highlighting the fact that GE has been used for a long time and in a number of common

products. Raising these issues certainly did not sway opinions in either way about GE, but it did get participants to think more rationally about GE in general and the label statements in particular.

However, Participants Did Have A Number Of Comments About The Label Claims In Specific.

While there may not have been a lot of emotion (and specifically not a lot of negative emotion) towards GE label claims, there were a number of comments, questions and even confusion surrounding the GE label claims.

Specifically, some participants were pleased that:

- GE label claims, like the one on the Corn Chips, stated benefits of GE. Participants generally found this to be informative and worthwhile. However, other participants were quick to point out that the corn chip label claim which said it used Canola oil which had been genetically engineered to reduce *trans* fatty acids, was vague because it only “reduced” and did not “eliminate” *trans* fatty acids. They wanted to know how much the *trans* fatty acids were reduced by (%).
- There were external references to find out more information.

However, the majority of comments about GE label claims focused on confusion. Participants did not necessarily know what the label claim was trying to say. Specifically:

- Label claims with the GE Material statements on them. Virtually all those who commented on them stated that the label claim made no sense – that is, how can something be genetically engineered and contain no or so little (e.g., less than 0.1%) GE Material. Other participants could not offer an explanation to this.
- The combination of ingredients where one was identified as GE and another ingredient was not. Participants often responded to this with “*is the product [corn chips] genetically engineered or not? How can it be both?*”
- Break-outs in ingredient lists. Participants generally felt that there were too many categorizations in the ingredient lists and that they did not make sense in general. They stated that they would not take the time to look at or understand these.

In fact, participants said that they would not take the time to interpret confusing label claims. Rather they would simply not purchase the product with the confusing label claim on it.

- On a can of soup there were two references to corn ingredients (corn and corn flour) not being genetically engineered. Participants often raised two questions: Why tell the consumer it is not genetically engineered? Why the separate references for corn and corn flour?
- Interestingly, there was generally confused reaction to the soya beverage message, which talked about Identity Preservation as a way of assuring the soybeans used were not a product of genetic engineering. While participants were appreciative that it was not

genetically engineered, they wanted to know what Identity Preservation actually meant. This statement tended to negate much of the positive feeling towards the statement.

- Some individuals were more familiar with the term ‘genetically modified’ or GMO, but were suitably comfortable with the terminology used on the mock products.

GENERAL ISSUES INVOLVED IN GE-RELATED LABELLING

GENERAL ISSUES INVOLVED IN GE-RELATED LABELLING

While the discussion guide focused on reaction to label statements, participants provided a significant amount of feedback about GE-related labelling in general as well as their attitudes and overall opinions towards GE.

Education Must Accompany GE-Related Labelling

There is a strong sense that the success of any GE-related labelling campaign is directly contingent on the education provided to the Canadian population about GE in general and labelling practices in specific. While the moderators' guide did not ask any direct questions about education that participants wanted about GE, their desire for education was observed in the following ways:

- Once being exposed to all the label claims, many of the groups were asked if they felt the label claims were on the right track, in terms of providing them with information about GE. For the most part, the response was quite emphatic that the label claims were on the right track. However, participants also qualified their response, saying that they felt that education would be necessary for the label claims to have maximum impact. One participant said, *"This doesn't educate us. If they are expecting to pop these up in stores... there is going to have to be, and I presume there would be a whole lot of prior education."*
- During the groups, it was not uncommon for participants to get frustrated with the label claims because they lacked a basic knowledge of what GE actually was and how it directly related to the food that they ate. This was seen as participants were exposed to more complex label claims (e.g., combinations of GE, GE material, entirely/completely statements) and they constantly had to "reframe" or re-evaluate their understanding of GE to fit with what the label claim was saying. For example, participants just could not conceptualize how frozen corn could come from a "combination" of GE and non-GE sources (i.e. they did not realize that the manufacturer could purchase two sources of corn, one GE, one non-GE and then combine those together in the processing). However, in many cases we saw that as participants were educated in the groups (either by the moderator or other participants) about GE, food manufacturing and how it all related to the label claim, their attitude changed from frustration to comprehension. From here they would understand what the label claim was saying and then they felt that they would be able to make an informed judgment about the food.

For example, a participant in Ottawa who was frustrated and somewhat annoyed with many of the label claims she saw said "The question for me remains... I have no clarification whatsoever since we have started of what is Genetically Engineered... like a farmer if he wants to grow Organic Bio stuff they have rules and regulations and if he does not meet those criteria it cannot be labelled as organic", to which the moderator said that the Standard provides the same reassurances. Her response was "I'm still at a loss [about what Genetic Engineering is] because for me the only thing that goes into mind is an image of Genetically Engineered 2 babies."

- On an even more practical level, there is some concern that GE will cause allergic, toxic or other immediate and negative reactions in people. Concern about allergies was mentioned across a number of different groups. While the moderator assured participants

about mandatory safety regulations for food that presented a health or safety issue, such as the presence of an allergen, there was a sense in the groups that participants need more education and reassurance about this issue.

Underscoring The Education Issue Was A Negative Perception About GE.

While there was a general awareness that genetic engineering is used in food and a very elementary understanding of GE and what it involves, there was quite a negative perception of it. What was particularly interesting was that this negative perception was expressed in very subtle ways. While there were a few direct and even derogatory statements about "Frankenfoods", "Siamese Twins" and how bad GE food is for human health, negative opinions about GE food were expressed in more subtle ways. Rather than making a direct or sweeping statement, the adjectives and use of language around GE tended to be filled with subtly negative connotations. For example:

- Non-GE foods were referred to as "organic", "safe", "normal", "real", "pure" and "natural"
- GE foods, on the other hand were referred to "harmful", "unsafe" and "dangerous", which would have a negative impact on the health of Canadians.
- 5% adventitious presence was referred to as "contamination"
- Seniors in particular made reference to Thalidomide and other products that were thought to be safe, but were eventually proven harmful, and they cast this same skeptical eye over genetically engineered products.
- GE foods were equated to 'corporate profits' and never the family farm. Participants were able to tell stories of corporations suing small farmers, crops that had a "self-expiration" gene and crops that would not grow unless it was in a specific soil or with a specific pesticide or herbicide.

What was particularly interesting about these references was the fact that participants were quite unaware that they were even making use of these judgmental words (e.g., describing non-GE food as "safe") and language in their speech. This indicates that the perceptions about GE were deeply held and ingrained – there was simply no conscious thought or "language filter" used in describing GE food. In their minds, GE and "unsafe" were one and the same, and this unconscious pattern was repeated quite regularly in the focus groups.

On The Positive Side, Participants Seemed Willing and Able To Understand GE Concepts When Presented With Them

While there was a negative perception of GE and demand among participants for more education about GE, there was a very clear sense that when participants were exposed to GE concepts (e.g., genetic material), they were able to understand and comprehend the ideas being discussed. On top of this, participants were asked to look at label statements and see if they could draw inferences from them (for example, what implication does "Like all other oranges, these oranges are not genetically engineered" have for products like papaya or corn).

What became clear was that participants were able and quite willing to understand and work through most of these concepts and definitions on their own or with assistance from other group members or the moderator. While there were clearly some participants who knew and understood the concepts before attending the focus groups, the majority had to work through them in the groups, and most were able to do so successfully. It is noteworthy though that working through

the concepts caused some frustration, and the implication for label claims is that participants did not want to work that hard when they saw a GE label claim. They wanted to be educated in advance. Even though concepts relating to GE and GE-related labelling may be detailed, complicated and technical, there was a sense that many participants had the ability to take the information they had received in the groups, work with it and come to an understanding that would make the label claims useful.

Also, there was a sense that genetic engineering had been used in foods for quite some time. While there was no direct consensus among participants about exactly how long it had been used, the sense was that GE is presently in our food and has been there for some time. Some said it had been in use for almost 100 years, while many would peg it at 30-40 years ago. A few thought that it had been in the food for about five years or less. The important fact to note is that participants realized that though the label claims might be new, GE was not. This has a somewhat important implication. Specifically, participants realized that if they had been ingesting GE food for a while with little or no side effects, they were more likely to continue purchasing it.

In Terms Of Present Attitudes and Behaviour, Participants Break Out Into Three Groups When It Comes To Currently Purchasing GE Food

What became clear throughout the groups was that there were three camps of people. The first was those who would and do not eat GE food at all, and would take every measure to avoid it. This group, while vocal was in the minority in the groups, and it is noteworthy that their enthusiasm against GE foods did not catch on. The second camp of people was simply more moderate and understanding. On the whole, they certainly would not seek out GE foods, but they would not strictly avoid them either. Rather, what they would do is purchase with “eyes open”. This second camp of people would do research, talk with people and actually compare the products to make a judgment for themselves about whether purchasing GE would be worthwhile. This philosophy seemed to catch on in many of the groups. The third camp could be described as people who just did not care too much about what they eat period. This was definitely the case in the teen groups, and also in the Halifax groups. This is not to say that they did not care about the food that they ate, but rather they simply had the attitude of “what can I do about it anyhow?”

What became clear across all three camps was a desire to learn more about GE. They had three questions that must be answered:

- What exactly is GE and how does it go from the lab to my table?
- Why are foods genetically engineered? What is the reason? What is the benefit?
- What are the effects – on the food itself, how it passes through the digestive system and the long-term effects of consuming these foods?

There Is An Indication That Participants Will Not Change Their Purchasing Habits If A Product They Regularly Use Has A Positive GE Statement On It.

It is worthwhile to note that if a proliferation of labelling were to occur, participants would not necessarily switch their grocery purchases, especially from tried and true brands and products, should there be an absence of GE-related labelling on them, or even a positive GE label claim. Participants generally stated that if the brand or product that they currently purchased had a label claim on it that had a “GE-Positive” statement, they would continue purchasing it. That is, the main loyalty was to the brand, taste and price of the product more so than the GE content. Overarching this sentiment is the opinion that GE was currently being used, and in some cases, participants said “GE is everywhere”, so finding that it was in a product that participants

purchased simply meant that they had been consuming it for a while, and that their health had not been compromised. This did not mean that participants would not research GE and the product they consumed – in fact they said that if they saw a GE label claim on a regularly purchased product, they would do research to find out more.

In fact, since participants did not read labels on products they purchase regularly, it was unlikely that they would notice a change in labelling. This was definitely the case with teens, who generally did not care whether a product was GE or non-GE. However, if participants did notice that a product to which they were loyal had a GE label claim on it, they would continue purchasing it with the caveat that they would start doing a fair bit of research on GE and how specifically it was used in the product they purchased.

It is important to note that there were exceptions to the sentiments discussed above. They include:

- If there was a perception that price or taste would change, participants would be more likely to consider a switch. This switch would occur either way – to a GE or non-GE product depending on which one tastes better and is lower cost.
- If they were not loyal to a particular brand and if there were lots of substitutes available, they would purchase something that said non-GE, assuming it was at the same price.
- In terms of produce, participants would generally purchase the non-GE product. However, some participants could picture themselves buying a GE and non-GE papaya together, for example, and comparing taste, freshness and other factors and then deciding which they would prefer. Price would also drive purchase patterns. If the non-GE product were more expensive, consideration would definitely be given to the GE product. As one participant put it, “Now you’re impacting my pocketbook.”

Regardless Of Opinions Towards Purchasing GE Foods, Participants Saw Labelling As Being About Choice – And It Was A Choice That They Wanted To Have.

While participants definitely had views on whether or not they would purchase a GE food, there was a fairly consistent sentiment that labelling is an initiative participants wanted. The logic participants used was that if GE food is being used, and if there were no guarantees about the long-term effects of it, then it is the label claims that will provide the information consumers need to make choices. So participants were positive on the concept of labelling, and were even positive towards the ideas presented in many of the statements that they saw. The fundamental issue was that they needed education and confidence in order to better interpret the label claims.

There was a sense though that labelling GE food is akin to opening a Pandora’s Box, which was not necessarily a bad thing in the minds of consumers. The fact is if labelling is about choice, then participants will want to make a choice on all the foods they purchase. The Pandora’s Box comes in because one GE label claim would spark awareness of the issue and then participants would want to see label claims on many more, if not all foods, and this pressure may cause manufacturers to utilize GE label claims. In essence, the label claims will drive education on this subject which is somewhat the reverse of what we have traditionally seen with food product label claims (dietary and nutritional information for example).

There Is Not A Significant Issue With Using 'GE' Over 'GMO' On Label Claims.

Moderators for this study exclusively used the term 'GE' or 'genetically engineered' and avoided the use of 'GMO', which is quite often the term used to describe genetically altered food in Canada. For the most part, participants were able to freely use and adopt the 'GE' terminology with very few questions about the meaning of 'GE', or wondering why the term 'GMO' was not used. When first exposed to the term 'GE' during the label mock-up exercise, participants generally did not question the term 'Genetic Engineering' on the label claim. They were able to intuit the basic meaning.

Discussing the Differences Between 'Non-GE' and 'Organic' Caused Confusion

Participants were more confused between 'non-GE' and the terms 'Organic' or 'Natural' and considered them synonyms. Very few knew the conceptual difference between the two statements (e.g., Organic is a method of production where no artificial or synthetic chemicals and/or no materials and products produced from genetic engineering are used in the growing process). Many participants interchanged 'non-GE' with the term 'organic' or 'natural,' indicating education is required to clarify the differences between these terms.

One of the more interesting comments made somewhat consistently is that a manufacturer who uses a GE-positive label claim is giving free advertising to organic foods, that can position themselves as being "better for you."

Participants Provided Other Labelling Suggestions

Along the way, participants provided a fair number of suggestions that they felt would be useful in GE-related labelling. They include:

- Only label GE products, and not bother with non-GE. Participants did not feel it was necessary to burden all manufacturers with labelling their foods, especially manufacturers that already use non-GE ingredients. Also, ideologically and with a sense of irony, participants felt that it was not a positive state of affairs in the food industry if manufacturers have to label their food as being a "real", "natural" or "non-GE" food. That burden, they say should be on the "manipulated" foods.
- For multi-ingredient foods, participants did not prefer statements on the Principal Display Panel which highlighted one or two ingredients of a food. If a multi-ingredient food was made from one type of ingredient (i.e., either all GE or all non-GE), then they would prefer that the label statement say this directly, using a statement like #14-#16. If there was a mixture of ingredients, they preferred having the Principal Display Panel highlight only the GE ingredients, and say nothing about the non-GE ingredients. For example, participants felt that a label claim saying "this lentil salad contains non-GE soybeans" (#20) was misleading because it did contain other GE ingredients.
- Breaking out ingredient list items with different categories was generally very confusing to participants. All of the ingredient lists that were shown to participants were seen as being very confusing and difficult to understand. Participants simply said they would not take the time to read the lists if they were shopping, and most likely they would not purchase a food with this much detail, as the number of categories, and their lack of understanding of what each means created doubt in their minds. Participants also fundamentally worried about ingredients that were not categorized. They wondered on

one hand how a label claim could have so much detail (e.g., five categories of ingredients as in the case of #20 lentil salad) but at the same time not categorize the asiago cheese on it.

- Participants also suggested using a word such as "natural" to indicate that a product was non-GE. While there was no direct objection to the term "non-GE" or "not genetically engineered", some participants felt (and the idea caught on) that if something was not a product of genetic engineering, it should not have a complicated "non-GE" label claim on it. Rather, it should simply be labelled as "natural."
- There was little indication that GE-related labelling needed to be a mandatory initiative, as opposed to a voluntary one. While some participants were concerned that it was voluntary, many aired their concerns in context of allergies or direct health and toxicity concerns they would have with GE food. Their concerns were generally allayed when they were told these issues are addressed by current legislation.
- There is a fairly strong desire for there to be one standard that says a food is either GE or not-GE – period! That is, participants wanted a black and white statement that said whether the food was a product of or not of GE. Even if participants understood all the nuances and complexities involved in the label statements and the different types of GE products in the marketplace, there was still a sense that one simple definition was preferred. They equated this to being "half-pregnant", one either is or is not – a half in this situation did not exist. They felt the same definition could be applied to GE-related labelling standards, even with all the complexities presented. While not significantly probed on the issue, the initial sense is that they would prefer anything that came from GE sources, including highly refined products to be "painted with the GE brush."
- Finally, as it relates to the point above, participants in a few groups indicated that they wanted a symbol like the "Heart Check" symbol that would tell them what to do with a food in terms of its GE content. While this suggestion certainly came from participants who were not able to fully understand the label claims or the GE concepts, it also came from those who had a fairly good understanding as well. The sense was that even if they were educated about label statements and could understand all the intricacies and different ways a product can be one of GE (or not), a symbol was much easier to understand and relate to. In one visual, it would tell participants all the information they needed to know about purchasing a food. In the minds of participants, if there was any sort of GE used in a multi-ingredient food, it should be considered GE and then have the logo attached to it.

A label statement bearing unfamiliar terms is not adequate for educating consumers about the complex issues related to GE. Comments from the focus groups indicate that there is a need to communicate with, and educate consumers about, the reasons why labelling is done the way it is, and how to make sense and eventual use of the information in, and about, the label claim. While a simple and straightforward statement to indicate only the use of GE was the preference, the focus group discussions have made some participants aware that the issue of labelling foods is as complex as the reasons for doing so are numerous. Participants demonstrated receptiveness toward information and the desire to understand in order to make an informed choice.

APPENDIX A: RECRUITMENT INSTRUMENTS

Toronto
AAFC Focus Groups
Recruit 10 for 8 to show per group

Toronto, ON

Wed March 16 @ 4:00pm – 6:00pm: Seniors (Recruit 10)

Wed March 16 @ 6:00pm – 8:00pm: Low SES (Recruit 10)

Wed March 16 @ 8:00pm – 10:00pm: High SES (Recruit 10)

Thurs March 17 @ 6:00pm – 8:00pm: Teens (Recruit 10)

Thurs March 17 @ 8:00pm – 10:00pm: Gen Pop (Recruit 10)

Interviewer Name and No.: _____

COMPLETE THIS SECTION ONCE THE PERSON QUALIFIES AND AGREES TO ATTEND

Participant Name: _____

Participant Address: _____

Participant Home Phone: _____ Work Phone: _____

Hello. My name is _____. I am calling on behalf of Western Opinion Research. We are conducting research for a federal government department, Agriculture and Agri-Food Canada. We are phoning to invite people to attend a discussion group. The topic of the discussion is food and the food choices you make as part of what you eat. All participants will receive a monetary incentive [NOTE: THERE ARE DIFFERENT INCENTIVES FOR DIFFERENT GROUPS, SO DO NOT MENTION AN AMOUNT UNTIL QUALIFIED FOR A SPECIFIC GROUP] for their time at the conclusion of the group. The group will last between 1 ½ - 2 hours. Participation is voluntary and all your answers will be kept confidential and will be used for research purposes only.

[IF NEED MORE INFO] These discussion groups are an important way of conducting PUBLIC OPINION RESEARCH. The intent of the group is to get your feelings and impressions on a particular topic – in this case food and the food choices you make as part of what you eat. They are NOT SALES MEETINGS. At no time during or after the group will anyone try to sell you anything. We are inviting you to get your input, attitudes and opinions.

The format is a 'round table' casual discussion led by a research professional and will last no more than 2 hours. An audio tape of the group session will be produced for research purposes. The tapes will be used only by the research professional to assist in preparing a report on the research findings and will be destroyed once the report is completed.

Would you be available to attend a discussion like this on Wed Mar 16 or Thurs Mar 17? **If Yes, Continue**

That's great. First, I have a couple of questions for qualifying purposes.

Please tell me if you or any members of your immediate family work in:

- ☐ Media [THANK AND TERMINATE*]
- ☐ Advertising [THANK AND TERMINATE*]
- ☐ Public Affairs [THANK AND TERMINATE*]
- ☐ A company that manufactures food [THANK AND TERMINATE*]
- ☐ A role where you prepare food for others, like a chef or a cook [THANK AND TERMINATE*]
- ☐ The federal, provincial or municipal government [THANK AND TERMINATE*]
- ☐ Market Research [THANK AND TERMINATE*]
- ☐ An occupation that provides advice and guidance on nutrition or diet (could be a doctor, nurse, naturopath, dietician, counselor, etc...) [THANK AND TERMINATE*]

2a. [FROM VOICE INDICATE MALE OR FEMALE] Recruit good mix.

- ☐ Male
- ☐ Female

2b. When you shop for food for your household, are you the person who has primary or shared responsibility for making food purchase decisions?

- ☐ Yes, respondent has sole or shared responsibility
- ☐ No [ASK TO SPEAK TO SOMEONE WHO HAS RESPONSIBILITY FOR FOOD PURCHASES. IF NO ONE TERMINATE*]

3. We are recruiting people of different ages to attend specific groups. Please tell me what your exact age is? ____ (If you get an exact age, use the response list below to indicate where you should skip to on the screener) (If refuse) Please tell me what range of ages I would put you in? [Recruit a good mix of ages for both groups]

- ☐ 16 - 17 GO TO TEEN RECRUITING SECTION PAGE # 7
- ☐ 18 - 19 GO TO TEEN RECRUITING SECTION PAGE # 7
- ☐ 20 - 25
- ☐ 26-32
- ☐ 33-39 ANYONE WHO IS 20 TO 54 CAN CONTINUE TO Q3
- ☐ 40-46
- ☐ 47-54
- ☐ 55+ GO TO SENIORS RECRUITING SECTION PAGE #11

When Seniors and Teen recruiting is complete, you may continue to qualify those 55+ and those 18-19 into the other categories.

Do not recruit 16-17 into any other group but teens.

3. Can you please tell me which of the following best describes your major activity during the past six months? [Recruit a good mix]

- ☐ Working Full-Time
- ☐ Working Part-Time
- ☐ Retired
- ☐ Unemployed
- ☐ Unable to work

4a. We would like to talk to a cross-section of people with different income levels. Which ONE of the following groups best describes your household income before taxes? Please stop me when I get to your category.

- Less than \$15,000 ☐
- \$15,000 - \$19,999 ☐
- \$20,000 - \$24,999 ☐
- \$25,000 - \$29,999 ☐
- \$30,000 - \$34,999 ☐

- \$35,000 - \$49,999 ☐
- \$50,000 - \$64,999 ☐
- \$65,000 - \$74,999 ☐

- \$75,000 - \$99,999 ☐
- \$100,000 - \$124,999 ☐
- \$125,000 - \$149,999 ☐
- \$150,000 and over ☐

Don't Know/ Refused [*THANK AND TERMINATE]

4b. What is the highest level of education you have obtained? Is it ...? [AIM TO RECRUIT GOOD MIX]

- ☐ Less than high school
- ☐ High school graduate
- ☐ Some college
- ☐ College graduate
- ☐ Some University
- ☐ University graduate
- ☐ Other _____
- ☐ Don't Know/ Refused [*THANK AND TERMINATE]

CHECK SES STATUS (Social Economic Status)

If Income \$30K or under and education Less Than HS/High School Graduate , recruit for Low SES Group

If Income \$75K or higher and education Some University or higher, recruit for High SES Group

IF SES GROUPS ARE FULL OR RECRUIT DOES NOT QUALIFY FOR SES GROUPS, CONTINUE @SG1

SES/General Pop Recruiting Section

SG1a. Please tell me whether you have a positive, neutral or negative reaction to each of the following terms...

	Positive	Neutral	Negative
Fortified or enriched food	☐	☐	☐
Genetic Engineering, Genetically Modified Organism or GMO	☐	☐	☐

SG2. [FOR EACH ITEM BELOW, ROTATE AND ASK...]

SG2a. Are you very familiar, somewhat familiar, not very familiar or not familiar with... [READ FROM LIST]

SG2b. [IF VERY, SOMEWHAT OR NOT VERY FAMILIAR, ASK...] Have you purchased...[READ FROM LIST] in the past 3 months?

	SG2a FAMILIARITY				SG2b
	Very Familiar	Somewhat Familiar	Not Very Familiar	Not Familiar At All	Purchase Last 3 Months
Organic Food	☐	☐	☐	☐	☐
Food with the Heart Check symbol	☐	☐	☐	☐	☐
Vegetable Grain-Fed meat	☐	☐	☐	☐	☐
Free-Range products	☐	☐	☐	☐	☐
Genetically Engineered or Genetically Modified Food	☐	☐	☐	☐	☐

SG4. As I mentioned earlier you are being invited to a group discussion with approximately 10 other people.

How comfortable are you in participating and speaking out in group discussions of this size?

- ☐ Very Comfortable
- ☐ Somewhat Comfortable
- ☐ Not very comfortable [THANK AND TERMINATE*]
- ☐ Not at all Comfortable [THANK AND TERMINATE*]
- ☐ Don't know [THANK AND TERMINATE*]

SG6. What is your current occupation? [IF A STUDENT, ASK...] What is your current level of schooling?[PROBE FOR FULL RESPONSE]

Occupation _____

Current level in school _____

SG7. Have you ever attended a discussion or focus group?

- ☐ Yes
- ☐ No [skip to Q.SG8]

If yes, how long ago? _____ [TERMINATE* IF LESS THAN SIX MONTHS]

If yes, how many have you attended in the past five years? _____ [TERMINATE* IF MORE THAN FIVE]

If yes, what was the topic(s) of that focus group(s) _____ [TERMINATE* IF TOPIC _____RELATED]

SG8. Are you familiar with the concept of research discussion groups?

- ☐ Yes [SKIP EXPLANATION OF FOCUS GROUP]
- ☐ No

The purpose is to gather the opinions of the participants on a particular subject. Participation is on a completely voluntary basis and comments made during the discussion will remain confidential. During the session, participants are asked to discuss issues related to the topic being examined and will follow a scripted line of questioning and probing of key issues.

SPG9. Based on the answers you have provided, we would like to invite you to participate in our focus group which will last approximately **2hours** and for which you will receive [**\$50 for General Population, \$50 for Low SES, \$60 for High SES**] for your participation.

Are you interested in helping out by attending this research discussion group?

Yes **That's great.**

No [thank and good bye]

Would you be comfortable in writing-out answers to some questions and reading materials that relate to the research. Again, we are not selling anything – rather, we just want to make sure that you are comfortable during the research and stating your opinions on things you may read or see in the groups.

Yes – **Continue**

No – **Thank and Terminate**

Would you be able to participate in the discussion group, to be held on [insert date & time]?

Wed March 16 @ 6:00pm – 8:00pm: Low SES Group

Wed March 16 @ 8:00pm – 10:00pm: High SES Group

Thurs March 17 @ 8:00pm – 10:00pm: Gen Pop Group

The group will be held at:
Toronto Focus (Yonge St, North Of Sheppard in the Madison Centre)
4950 Yonge St, Suite 306
416-221-9450

SKIP TO PAGE #12

Teen Recruiting Section

T1. Please tell me whether you have a positive, neutral or negative reaction to each of the following terms...

	Positive	Neutral	Negative
Fortified or enriched food	☐	☐	☐
Genetic Engineering, Genetically Modified Organism or GMO	☐	☐	☐

T2. [FOR EACH ITEM BELOW, ROTATE AND ASK...]

T2a. Are you very familiar, somewhat familiar, not very familiar or not familiar with... [READ FROM LIST]

T2b. [IF VERY, SOMEWHAT OR NOT VERY FAMILIAR, ASK...] Have you purchased...[READ FROM LIST] in the past 3 months?

	T2a FAMILIARITY				T2b
	Very Familiar	Somewhat Familiar	Not Very Familiar	Not Familiar At All	Purchase Last 3 Months
Organic Food	☐	☐	☐	☐	☐
Food with the Heart Check symbol	☐	☐	☐	☐	☐
Vegetable Grain-Fed meat	☐	☐	☐	☐	☐
Free-Range products	☐	☐	☐	☐	☐
Genetically Engineered or Genetically Modified Food	☐	☐	☐	☐	☐

T3. As I mentioned earlier you are being invited to a group discussion with approximately 10 other people.
How comfortable are you in participating and speaking out in group discussions of this size?

- ☐ Very Comfortable
☐ Somewhat Comfortable
☐ Not very comfortable [THANK AND TERMINATE*]
☐ Not at all Comfortable [THANK AND TERMINATE*]
☐ Don't Know [THANK AND TERMINATE*]

T4. Think during the last year, from January to now. Were you in high-school, working, or in post-secondary education?

- ☐ Grade School → What grade were you in from January until you finished? _____
☐ Working → What was your occupation? _____
☐ Post Secondary Education → What level was your post-secondary education _____

Recruit a good mix of individuals

T5. Can you tell me roughly what range does your total household income before taxes fall?
[RECRUIT A MIX]

- Less than \$20,000 ☐
 \$20,000 - \$34,999 ☐
 \$35,000 - \$49,999 ☐
 \$50,000 - \$69,999 ☐
 \$70,000 - \$74,999 ☐
 \$75,000 + ☐
 Don't know ☐

T6. As I mentioned earlier you are being invited to a group discussion with approximately 10 other people. How comfortable are you in participating and speaking out in group discussions of this size?

- ☐ Very Comfortable
☐ Somewhat Comfortable
☐ Not very comfortable [THANK AND TERMINATE*]
☐ Not at all Comfortable [THANK AND TERMINATE*]
☐ Don't know [THANK AND TERMINATE*]

T7. Have you ever attended a discussion or focus group?

- ☐ Yes
☐ No [skip to Q.T8]

If yes, how long ago? _____ [TERMINATE* IF LESS THAN SIX MONTHS]

If yes, how many have you attended in the past five years? _____ [TERMINATE* IF MORE THAN FIVE]

If yes, what was the topic(s) of that focus group(s) _____
[TERMINATE* IF TOPIC _____, RELATED]

T8. Are you familiar with the concept of research discussion groups?

- ☐ Yes [SKIP EXPLANATION OF FOCUS GROUP]
☐ No

The purpose is to gather the opinions of the participants on a particular subject. Participation is on a completely voluntary basis and comments made during the discussion will remain confidential. During the session, participants are asked to discuss issues related to the topic being examined and will follow a scripted line of questioning and probing of key issues.

Based on the answers you have provided, we would like to invite you to participate in our focus group which will last approximately **2 hours** and for which you will receive **\$40** for your participation.

Are you interested in helping out by attending this research discussion group?

Yes **That's great.**

No **[thank and good bye]**

IF RESPONDENT IS 16-17... Because you are under the age of 18, I will need to speak to a parent or guardian to assure that it is OK for you to attend the group and to make sure that they do not have any questions. May I speak with someone now? **[Under no circumstances are you to give-out the location of the group prior to speaking with the parent or guardian.]**

Get Parent Name

[If parent unavailable, get a call-back time]

[When parent is on the phone, explain about focus groups, and the purpose of the discussion. If they need further verification, give the phone to a supervisor]

Would you be comfortable in writing-out answers to some questions and reading materials that relate to the research? Again, we are not selling anything – rather, we just want to make sure that you are comfortable during the research and stating your opinions on things you may read or see in the groups.

Yes – **Continue**

No – **Thank and Terminate**

Would you be able to participate in the discussion group, which will be held on **Thurs March 17 @ 6:00pm – 8:00pm?**

Thurs March 17 @ 4:00pm – 6:00pm: Teens Group

The group will be held at:

Toronto Focus (Yonge St, North of Sheppard in the Madison Centre)
4950 Yonge St, Suite 306
416-221-9450

Directions:

SKIP TO PAGE #12

Seniors Recruiting Section

S1a. Please tell me whether you have a positive, neutral or negative reaction to each of the following terms...

	Positive	Neutral	Negative
Fortified or enriched food	☐	☐	☐
Genetic Engineering, Genetically Modified Organism or GMO	☐	☐	☐

S2. **[FOR EACH ITEM BELOW, ROTATE AND ASK...]**

S2a. Are you very familiar, somewhat familiar, not very familiar or not familiar with... **[READ FROM LIST]**

S2b. **[IF VERY, SOMEWHAT OR NOT VERY FAMILIAR, ASK...]** Have you purchased...**[READ FROM LIST]** in the past 3 months?

	S2a FAMILIARITY				S2b
	Very Familiar	Somewhat Familiar	Not Very Familiar	Not Familiar At All	Purchase Last 3 Months
Organic Food	☐	☐	☐	☐	☐
Food with the Heart Check symbol	☐	☐	☐	☐	☐
Vegetable Grain-Fed meat	☐	☐	☐	☐	☐
Free-Range products	☐	☐	☐	☐	☐
Genetically Engineered or Genetically Modified Food	☐	☐	☐	☐	☐

S3. As I mentioned earlier you are being invited to a group discussion with approximately 10 other people. How comfortable are you in participating and speaking out in group discussions of this size?

- ☐ Very Comfortable
- ☐ Somewhat Comfortable
- ☐ Not very comfortable **[THANK AND TERMINATE*]**
- ☐ Not at all Comfortable **[THANK AND TERMINATE*]**
- ☐ Don't Know **[THANK AND TERMINATE*]**

S4. Over the past six months, which of the following describes your major activity?
[Recruit a good mix]

- ☐ Working Full-Time – **Get Occupation** _____ **Ensure not a sensitive occupation**
- ☐ Working Part-Time
- ☐ Retired
- ☐ Unemployed
- ☐ Unable to work

S5. Can you tell me roughly what range does your total household income before taxes fall?
[RECRUIT A MIX]

- | | |
|---------------------|--------------------------|
| Less than \$20,000 | ☐ |
| \$20,000 - \$34,999 | ☐ |
| \$35,000 - \$49,999 | ☐ |
| \$50,000 - \$69,999 | ☐ |
| \$70,000 - \$74,999 | ☐ |
| \$75,000 + | ☐ |
| Don't Know/ Refused | ☐ |

S6. As I mentioned earlier you are being invited to a group discussion with approximately 10 other people. How comfortable are you in participating and speaking out in group discussions of this size?

- | | |
|---|------------------------|
| ☐ Very Comfortable | |
| ☐ Somewhat Comfortable | |
| ☐ Not very comfortable | [THANK AND TERMINATE*] |
| ☐ Not at all Comfortable | [THANK AND TERMINATE*] |
| ☐ Don't know | [THANK AND TERMINATE*] |

S7. Have you ever attended a discussion or focus group?

- ☐ Yes
☐ No [skip to Q.S8]

If yes, how long ago? _____ [TERMINATE* IF LESS THAN SIX MONTHS]

If yes, how many have you attended in the past five years? _____ [TERMINATE* IF MORE THAN FIVE]

If yes, what was the topic(s) of that focus group(s) _____
[TERMINATE* IF TOPIC _____RELATED]

S8. Are you familiar with the concept of research discussion groups?

- ☐ Yes [SKIP EXPLANATION OF FOCUS GROUP]
☐ No

The purpose is to gather the opinions of the participants on a particular subject. Participation is on a completely voluntary basis and comments made during the discussion will remain confidential. During the session, participants are asked to discuss issues related to the topic being examined and will follow a scripted line of questioning and probing of key issues.

S9. Based on the answers you have provided, we would like to invite you to participate in our focus group which will last approximately 2hours and for which you will receive \$50 for your participation.

Are you interested in helping out by attending this research discussion group?

Yes **That's great.**

No **[thank and good bye]**

Would you be comfortable in writing-out answers to some questions and reading materials that relate to the research. Again, we are not selling anything – rather, we just want to make sure that you are comfortable during the research and stating your opinions on things you may read or see in the groups.

Yes – **Continue**

No – **Thank and Terminate**

Would you be able to participate in the discussion group, which will be held on **Wed March 16 @ 4:00pm – 6:00pm?**

Wed March 16 @ 4:00pm – 6:00pm: Seniors Group

The group will be held at:

Toronto Focus (Yonge St, North of Sheppard, in the Madison Centre)
4950 Yonge St, Suite 306
416-221-9450

Directions:

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Please arrive about 15 minutes prior to the beginning of the group. If you arrive late, we will not be able to include you in the group, and will not be able to provide you with the incentive. Also, please bring with you Photo ID of some sort so that we can confirm your identity prior to entering the group.

If you have any questions or are unable to attend, please call our office as soon as possible so we will have time to recruit a replacement. Our office number is 1-888-265-2422. Thank you very much for your time and cooperation. Someone from our office will call prior to the groups to confirm your attendance.

What time of day would be good to call you the day before the group? _____ What ph. #?

We look forward to seeing you.

**When terminating someone, say "Thank you for your cooperation. We already have enough participants who have a similar profile to your, so we are unable to invite you to participate."*

APPENDIX B: MODERATORS GUIDE

GUIDE #1

To be used in:

- Ottawa, 6pm – General Population
- Portage, 5:30pm – General Population
- Montreal, March 14 6pm – Low SES
- Montreal, March 15 6pm – Teens
- Calgary, 8pm – General Population
- Toronto, March 16 4pm – Seniors
- Toronto, March 16, 8pm – High SES
- Toronto, March 17, 8pm – General Population
- Trois Rivières, 6pm – General Population
- Vancouver, March 16, 6pm – Low SES
- Vancouver, March 17, 6pm – Teens
- Halifax, 6pm – General Population

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(1)

Interview Guidelines

- Use this document as a guide, it is meant to be a semi-structured discussion with focus group participants
- Ask additional questions for clarification
- It is not necessary to answer the questions in order
- Keep discussion informal and conversational
- Summarize notes, comments and conclusions at the end of the discussion
- Avoid judgments about “healthy vs. unhealthy” foods. Steer participants discussion away from these value judgments.
- Avoid discussion/debate about “genetically engineered foods”
- Avoid discussion of a general nature. Participants should be talking about themselves, their behaviours and attitudes. They should not be expressing opinions about the general population or others.

Introduction (5 min)

- ☐ Introduce the moderator.
- ☐ Introduce assignment and role of the focus group:
 - . Talking with Canadians regarding their opinions about labels that could appear on food.
 - . This is part of a multi-faceted research project. Only talking with two dozen groups of Canadians, thus your observations and opinions are important.
 - . No right or wrong answers.
 - . Want to get individual thoughts and opinions—we’re not looking for a consensus
 - . Assure participants we are not selling anything; this meeting is strictly for research purposes.
 - . Audio recording and presence of observers.
 - . Encourage individual group members to participate.
 - . The moderator is not an expert.
 - . Confirm that individual responses will be kept confidential. The purpose is not to report on individuals, but instead to get a better understanding of the needs across different types of Canadians.
 - . Again, not trying to reach a consensus; individual opinions are very important

Discussion should take 120 minutes

Initial GE Labels (15 minutes)

- 1ab First, can you tell me what information you look for when you read food labels? That is, what helps you decide whether or not to purchase food? 1b
- 2 Now, I'm going to show you some products. I'd like you to pass them around and look at them. You'll see a sheet in front of you, and I'd like you to write-down if the label has information you normally look for on it, what's missing, what's confusing, and anything that you have not seen before. Due to timing, you may not look at all the packages, which is fine. [Discuss findings with group]
- Disclaimer: Please note that these products/statements are not real but have been developed for this focus group.
- What was common about all these labels is that they had statements about Genetic Engineering on them.

- 3a → c Who specifically noticed the labels? What made them stand-out to you? That is, why do you think you noticed them? 3c
- 4ab For those who did not notice them or write them down – is GE something that you look for? Is it something that you want to know about? 4b
- 5ab Now for those who did not notice the labels or cannot remember them – just pass them around so that everyone has a good look at them. [Wait a few minutes]
- 6ab How do you interpret these label statements? That is, what meaning do these label statements give to you? 5b
- 7ab Is the wording clear? If not, what is not clear? 6b
- Did you have to look elsewhere on the label to fully understand the GE label you saw? If so, where did you look and how easy was it to gather this type of information? 7b

Introduction Of Labels

The Canadian General Standards Board announced a voluntary standard that food manufacturers could use to inform consumers about the use of genetic engineering in food. As manufacturers start using these labels, it is important to get consumer's views.

These labels could talk both about the use of Genetic Engineering or the non-use of genetic engineering in the food or its ingredients. The purpose of these labels is to assist consumers, in making informed food choices. These labels could appear on just about any type of food product including packaged food, baked goods and fresh fruits and vegetables. However, it is important to note that what we are looking at are examples – they do not appear on any food.

We're going to spend most of the group looking at example labels. The goal is to look at each in very specific ways – and it is likely that we'll look at and examine specific aspects of the labels in much more detail than people may normally do when purchasing food. However, for this type of focus group it is what I want to happen. There are three reasons for this. The first is that label wording is actually a very

detailed process, and this is the first time we're testing these label statements, so it's like we're looking at "rough drafts" of statements that may appear. Looking at rough drafts requires different thinking than looking at a final product.

Second, I mentioned that there is a Standard that governs how these labels can be worded. In some cases we are testing certain aspects of The Standard. Rather than asking about specific rules, we thought we would show statements produced by what the Standard says to give insight into it.

Third, we want to assess the type of information that may be needed to get people to use the labels to their fullest effect. You may see things on the labels tonight that are not familiar to you, or I may ask you questions like "Why would the label say that?" The goal is not to quiz you. We really want to know if what you see is understandable, and if it isn't how we can make it clearer.

1) Non-Genetically-Engineered Papaya

2) Not Genetically Engineered (Corn)

- 8 • What impact do they have if you were purchasing these foods?
- 9ab • What's missing from these labels, if anything? [If mentioned, probe "Tested", "Certified"]
- 10a → d Do you need more information than what these labels say? If so what? Where would you get it? [If mentioned, probe 1-800 or Website] 10c
- 11a → c • Do these statements say the same thing? Besides the product used, what's the difference? If there is a difference, does it impact the meaning, or your opinion? 11b

3) Certified Non-Genetically Engineered Papaya

4) Non-Genetically Engineered Corn (tested)

- 12 • How do they differ from the previous ones?
- 13a • How important is it to have a word like tested/certified on the label compared to the previous statements? Is it necessary? 13b
- 14 • Would this influence your decision compared to the other ones we saw previously? 15a
- 15a → c • N- Is there a difference between the term "tested" and "certified"? Are there other terms you can think of? [NB - "Tested" means that it has been examined somehow. "Certified" means that it has been tested and passed a specific standard.] 15c
- 16 • B- What, if anything, do you know about current testing and certification? 15c

5) Like All Other Oranges, These Oranges Are Not A Product Of Genetic Engineering

- 17ab • What does this statement mean to you? Is it understandable? 17a
- 18ab • N- Is it necessary to have "like all other oranges..." on the label? What is the meaning? 18a
- 19ab • N- Given this label, what implications could be drawn for:
o Papayas and corn, as per the previous example. 19a
o Oranges without this label on it? 19b

6) Papaya (Product Of Genetic Engineering)

7) Genetically Engineered Corn

- 20 • What impact do they have if you were purchasing these foods?
- 21 • Can you think of reasons why a manufacturer would want to say that their product is one of Genetic Engineering?
- 22a • Do you need more information than what these labels say? (Probe Reasons - Do they want external references, reasons why, testing sources, affects on Human Beings, etc...) 22b
- 23a → c • N- Do these statements say the same thing? Besides the produce used, do you notice a difference in either statement? If there is a difference, does it impact the meaning, or your opinion? 23c

21

8) Corn (Partly A Product Of Genetic Engineering). See www.thisurl.com For More Information

9) Orange Juice (combination of genetically engineered and non-genetically engineered)

- 24a → c • What impact do they have if you were purchasing these foods? What would you do with this information [Probe - What concerns or issues does this raise?] 24a
- 25 • What do you think of purchasing a food with a combination of GE and Non-GE components in it? 26a
- 26ab • What concerns or issues does it raise for you (probe - are you concerned about the manufacturing process or quality control)? 26b
- 27 • N- Is there a difference in the meaning of these statements? 28
- 28 • Do you need more information than what these say?
- 29a • Now, tell me your opinions about seeing a website on here. How does this impact your opinion of the statement? 29b
- 30 • Who do you think would be providing the information? 31a
- 31a → c • What information do you want to find? What information would you expect to find? 31b
- (Probe - Would you expect it just about this label, about GE in general, about how the manufacturer uses GE products?) 31c
- 32a → c • How likely would you be to visit? What would prompt you to visit? If not this claim, what other types of claims or statements would prompt you to look for more information? 32b

10) Corn Genetically Engineered To Reduce The Use Of Pesticides

- 33 • What impact does this have on purchasing food with this label?
- 34 • Do you need more information?
- 35 • Do you know any other claims that could be made about GE?
- 36ab • Is this too much information on the label? Would you prefer this information be provided on an external source, such as a 1-800 number or website.

29

37. We're moving on to another set of statements now, but before I do, I want to ask a question. Whether you've heard of the term or not, can you tell me what you think the term "Genetic Material" means?

- 11) Corn Syrup. Product Of Genetic Engineering (GE). Contains no GE Material
 12) Canola Oil. Product Of Genetic Engineering (GE). Contains less than 0.1% GE Material

- 38a → c
 39
 40
 41ab
 42a → d
 43
- What, if anything do you find confusing about the statements? N- (Probe - Can you see the link between the fact that the original product is GE, but the by-product has no GE material? Is it necessary to know that the source product is GE or non-GE?)
 - What do you think Genetic Material means in this context?
 - Do you need more information than what is provided here?
 - [Read GE Material Statement On Last Page] Now that you've heard what GE material is, what is your understanding of these statements?
 - N- Is there a difference between "less than 0.1%" versus "no GE material"? What is the difference? Does one give you more confidence than the other? Which do you prefer?
 - Given what you know, does this help you with your purchase decisions?

13) Bread made with flour from non-genetically engineered sources

- 44a → c
 45ab
- What does the label say about the bread? [Probe - are people saying bread or flour, are people asking what about the other ingredients besides flour?]
 - What does this say about the other ingredients in the bread? Do you think they are GE or non-GE?

14) Made from non-genetically engineered ingredients

- 46a → d
 47ab
 48a → d
- What does the statement mean to you? N- [Probe - Does anyone see a difference between this example and the last example which said "Bread made from non-genetically engineered flour"?... If necessary state "This statement says that all the ingredients in the food are GE-free" - Did you get this from the label that I've shown?]
 - What information, if any, is missing from the label? What is unclear?
 - If there was anything you wanted to see added to this label to make it more clear, what would it be, especially given that this is a multi-ingredient food? [Probe - Do you want to know whether it is some ingredients, or all ingredients? Is it implied that this is about all ingredients? Do you want to know about particular ingredients in specific?]

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15) This corn bread is made completely from non-genetically engineered ingredients

- 49a → c
 50
 51
- What differences are there in this statement compared to the other one that you saw? What in here makes things more confusing or more clear to you (probe on "completely" - Does it give you more reassurance?)
 - Does this make it clearer that this is for the entire product?
 - How does this impact your purchase decision, if at all?

16) Made entirely from non-genetically engineered ingredients

- 52ab
 53
 54a → c
- Show 16 and 14 together
 - Tell me about "entirely" here. How important is it?
 - If #16 says "entirely", what's the implication for #14?
 - [Read 5% Adventitious Presence Statement On Last Page] [If they don't understand, say "using entirely means that no part has GE in it. That means even the 5% adventitious presence does not apply"]
 - Can you see how this applies to these two statements?

17) Soy beverage, made from non-genetically engineered soybeans. Identity preservation...

- 55
 56a → c
 57ab
 58
- What information is this telling you?
 - Is it useful to know this detail? Does it make sense? Do you need more information?
 - Does it provide you with more confidence than say a label that says "made from non-Genetically Modified Ingredients"? Is this something that should appear on every label?
 - Is this something that you would prefer to see on the label or on a website?

18

18) This sandwich contains tuna fish, which like all other tuna fish, is not...

19) This sandwich contains non-genetically engineered tuna fish (also...)

- 59ab
- Read these two statements. Tell me what they mean to you and which one would you want to appear on the front label or panel of the food package? Tell me more about your decision... 59b
 - 60 • How important is it for you to know the "like all other tuna fish" [even though you know about the "like all other..." phrase]
 - 61 • When it tells you to look at the list of ingredients, what detail would you expect to see on the list of ingredients?
 - 62ab • [SHOW LIST OF INGREDIENTS - Poster #18/19-ING] Look closely at the list of ingredients. What is it saying? Is there anything that is unclear to you? 62b
 - 63ab • What do you think the different categories mean? What does it mean when an ingredient does not have anything beside it? 63b
 - 64 • Do you need to know more information, either for the products of non-genetic engineering or of genetic engineering?
 - 65ab • Tell me about "like all of these ingredients" - is it clear or confusing? Is it necessary? 65b
 - 66ab • Is this too much information? If you were shopping would you use it? 66a 66b

21) This soup contains corn genetically engineered to reduce the use of pesticides NB:

SHOW 21-ING

- 67a → c
- What does this statement say about the soup? What does it mean (probe - is it the entire soup, is it just the corn?) 67c
 - 68a → c • How does the fact that one portion of the soup is GE influence your opinion? That is, how does it influence your opinion towards the entire soup? (Probe - Would you buy it, not buy it, buy it and avoid the corn, something else...) 68b 68c
 - 69 • How does "reduced pesticide use" influence your opinion
 - On the other side of the label with the ingredients ask:
 - Take some time to read this list. 70a
 - What does + "GE and non GE sources not segregated" mean? Is this useful to know? How does it impact your purchase decision? 70b 70c

22) Soya Margarine

- 71
- In this list, the GE statement is right in the list of ingredients. What do you think of this approach?
 - 72ab • What does the statement "made from genetically engineered (GE) soybeans, contains no GE material" mean to you? Does it help you decide whether to purchase the product or not? 72a 72b

GE-Material Statement

See 41a

These claims provide two pieces of information. The first tells you about the original canola and corn and the process used to derive them. The second describes the end product, in this case the canola oil and corn syrup after they have undergone additional processing to make the canola oil and corn syrup.

The statement "Product of GE" tells you that the canola and corn came from seeds that were produced with GE techniques. The second statement "contains no GE material" describes the end product - that is, what is left after processing the corn and canola, which is corn syrup and canola oil. This statement describes the protein and rDNA and rRNA left in the oil and syrup, that is, the residual changed material left in the finished product. In highly refined products, such as canola oil and corn syrup, very little or none of this residual material is left in the finished product due to the high degree of processing required to get the oil out of the canola or the syrup out of the corn.

5% Adventitious Presence

I want to describe a concept called adventitious presence. A good example of this is when you are at a grocery store where someone picks up a can or box from one shelf and sets it back in another place. The person did not plan to mix-up the displays.

See 5Aa

Adventitious presence is a term to describe the accidental inclusion of approved GE ingredients or food that can happen anywhere along the line, during planting, harvest, transport or storage. This can be the result of a bird carrying and dropping a soybean into another field that is being harvested, or a kernel of corn stuck to the inside of a truck after it has been cleaned, which is then used to carry apples.

Every member of the food chain is required to exercise good care and document every step of the way to ensure that accidental inclusion of something else doesn't occur. However, should it happen, no more than 5% of a particular source of a food or ingredient, such as a train car full of corn, could be something that is not that kind of corn. In order to meet this 5% level, the industry always needs to aim for 0%, although with the current production and distribution systems in Canada, trying to achieve a level lower than 5% is unrealistic for a number of commodities at this time.

The developers of The Standard agreed to review the percentage over time, to take into account segregation, identity preservation, testing and sampling systems throughout the agriculture and food chains as they are developed.

(10)

GUIDE #2

To be used in:

- Ottawa, 8pm – General Population
- Portage, 7:30 – General Population
- Montreal, March 14, 4pm – Seniors
- Montreal, March 14, 8pm – High SES
- Montreal, March 15, 8pm – General Population
- Calgary, 6pm – General Population
- Toronto, March 16 – Low SES
- Toronto, March 17 – Teens
- Trois Rivières, 8pm – General Population
- Vancouver, March 16, 4pm – Seniors
- Vancouver, March 16, 8pm – High SES
- Vancouver, March 17, 8pm – General Population
- Halifax, 8pm – General Population

13

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Introduction (5 min)

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- ☐ Introduce assignment and role of the focus group:
 - Talking with Canadians regarding their opinions about labels that could appear on food.
 - This is part of a multi-faceted research project. Only talking with two dozen groups of Canadians, thus your observations and opinions are important.
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 - Again, not trying to reach a consensus; individual opinions are very important

Discussion should take 120 minutes

Initial GE Labels (15 minutes)

- 1ab. First, can you tell me what information you look for when you read food labels? That is, what helps you decide whether or not to purchase food? 1a 1b
- 2. Now, I'm going to show you some products. I'd like you to pass them around and look at them. You'll see a sheet in front of you, and I'd like you to write down if the label has information you normally look for on it, what's missing, what's confusing, and anything that you have not seen before. Due to timing, you may not look at all the packages, which is fine. [Discuss findings with group]
- 2. Disclaimer: Please note that these products/statements are not real but have been developed for this focus group.
- 2. What was common about all these labels is that they had statements about Genetic Engineering on them.

- 3a → c
 - 1ab. Who specifically noticed the labels? What made them stand-out to you? That is, why do you think you noticed them? 3c
 - For those who did not notice them or write them down – is GE something that you look for? Is it something that you want to know about? 4b
 - Now for those who did not notice the labels or cannot remember them – just pass them around so that everyone has a good look at them. [Wait a few minutes]
 - How do you interpret these label statements? That is, what meaning do these label statements give to you? 5b 5a
 - Is the wording clear? If not, what is not clear? 6b
 - Did you have to look elsewhere on the label to fully understand the GE label you saw? If so, where did you look and how easy was it to gather this type of information? 7b

Introduction Of Labels

The Canadian General Standards Board announced a voluntary standard that food manufacturers could use to inform consumers about the use of genetic engineering in food. As manufacturers start using these labels, it is important to get consumer's views.

These labels could talk both about the use of Genetic Engineering or the non-use of genetic engineering in the food or its ingredients. The purpose of these labels is to assist consumers, in making informed food choices. These labels could appear on just about any type of food product including packaged food, baked goods and fresh fruits and vegetables. However, it is important to note that what we are looking at are examples – they do not appear on any food.

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detailed process, and this is the first time we're testing these label statements, so it's like we're looking at "rough drafts" of statements that may appear. Looking at rough drafts requires different thinking than looking at a final product.

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Third, we want to assess the type of information that may be needed to get people to use the labels to their fullest effect. You may see things on the labels tonight that are not familiar to you, or I may ask you questions like "Why would the label say that?" The goal is not to quiz you. We really want to know if what you see is understandable, and if it isn't how we can make it clearer.

- 1) Non-Genetically-Engineered Papaya
- 2) Not Genetically Engineered (Corn)

- 8. What impact do they have if you were purchasing these foods?
- 9ab. What's missing from these labels, if anything? [If mentioned, probe "Tested", "Certified"] 9a 10b
- 10a → d. Do you need more information than what these labels say? If so what? Where would you get it? [If mentioned, probe 1-800 or Website] 10a 10b
- 11ab. Do these statements say the same thing? Besides the product used, what's the difference? If there is a difference, does it impact the meaning, or your opinion? 11a 11b

3) Certified Non-Genetically Engineered Papaya

4) Non-Genetically Engineered Corn (tested)

- 12 • How do they differ from the previous ones?
- 13a • How important is it to have a word like tested/certified on the label compared to the previous statements? Is it necessary? 13b
- 14 • Would this influence your decision compared to the other ones we saw previously? 15a
- 15a → c • N- Is there a difference between the term "tested" and "certified"? Are there other terms you can think of? [NB - "Tested" means that it has been examined somehow. "Certified" means that it has been tested and passed a specific standard.] 15b
- 16 • B- What, if anything, do you know about current testing and certification? 15c

6) Papaya (Product Of Genetic Engineering)

7) Genetically Engineered Corn

- 17 • What impact do they have if you were purchasing these foods?
- 18 • Can you think of reasons why a manufacturer would want to say that their product is one of Genetic Engineering? 19a
- 19a • Do you need more information than what these labels say? (Probe Reasons - Do they want external references, reasons why, testing sources, affects on Human Beings, etc...) 19b
- 20a → c • N- Do these statements say the same thing? Besides the produce used, do you notice a difference in either statement? If there is a difference, does it impact the meaning, or your opinion? 20c

15

8) Corn (Partly A Product Of Genetic Engineering). See www.thisurl.com For More Information

9) Orange Juice (combination of genetically engineered and non-genetically engineered)

- 21a → c • What impact do they have if you were purchasing these foods? What would you do with this information [Probe - What concerns or issues does this raise?] 21b
- 22 • What do you think of purchasing a food with a combination of GE and Non-GE components in it? 21c
- 23 • What concerns or issues does it raise for you (probe - are you concerned about the manufacturing process or quality control)? a b.
- 24 • N- Is there a difference in the meaning of these statements?
- 25 • Do you need more information than what these say?
- 26a • Now, tell me your opinions about seeing a website on here. How does this impact your opinion of the statement? 26b
- 27 • Who do you think would be providing the information? 28a
- 28a → c • What information do you want to find? What information would you expect to find? (Probe - Would you expect it just about this label, about GE in general, about how the manufacturer uses GE products?) 28b
- 29a → c • How likely would you be to visit? What would prompt you to visit? If not this claim, what other types of claims or statements would prompt you to look for more information? 29c

We're moving on to another set of statements now, but before I do, I want to ask a question. Whether you've heard of the term or not, can you tell me what you think the term "Genetic Material" means?

30

11) Corn Syrup. Product Of Genetic Engineering (GE). Contains no GE Material

12) Canola Oil. Product Of Genetic Engineering (GE). Contains less than 0.1% GE Material

- 31a → c • What, if anything do you find confusing about the statements? N- (Probe - Can you see the link between the fact that the original product is GE, but the by-product has no GE material? Is it necessary to know that the source product is GE or non-GE?) 31b
- 32 • What do you think Genetic Material means in this context? 31c
- 33 • Do you need more information than what is provided here? 34a
- 34a • [Read GE Material Statement On Last Page] Now that you've heard what GE material is, what is your understanding of these statements? 34b
- 35a → d • N- Is there a difference between "less than 0.1%" versus "no GE material"? What is the difference? Does one give you more confidence than the other? Which do you prefer? 35b
- 36 • Given what you know, does this help you with your purchase decisions? 35c

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13) Bread made with flour from non-genetically engineered sources

- 370b • What does the label say about the bread? [Probe – are people saying bread or flour, are people asking what about the other ingredients besides flour?] 37c
- 38ab • What does this say about the other ingredients in the bread? Do you think they are GE or non-GE? 38a 38b

14) Made from non-genetically engineered ingredients

- 39a → d • What does the statement mean to you? N- [Probe – Does anyone see a difference between this example and the last example which said “Bread made from non-genetically engineered flour”?... If necessary state “This statement says that all the ingredients in the food are GE-free” – Did you get this from the label that I’ve shown?] 39b 39c
- 40ab • What information, if any, is missing from the label? What is unclear? 40a 40b
- 41a → d • If there was anything you wanted to see added to this label to make it more clear, what would it be, especially given that this is a multi-ingredient food? [Probe – Do you want to know whether it is some ingredients, or all ingredients? – Is it implied that this is about all ingredients? Do you want to know about particular ingredients in specific?] 41a 41b 41c 41d

15) This corn bread is made completely from non-genetically engineered ingredients

- 42a → c • What differences are there in this statement compared to the other one that you saw? 42a
- 43 • What in here makes things more confusing or more clear to you (probe on “completely” – Does it give you more reassurance?) 42c 42b
- 44 • Does this make it clearer that this is for the entire product?
- 45 • How does this impact your purchase decision, if at all?

16) Made entirely from non-genetically engineered ingredients

- 45ab • Show 16 and 14 together 45a
- 46 • Tell me about “entirely” here. How important is it? 45b 47a
- 47a → c • If #16 says “entirely”, what’s the implication for #14? [Read 5% Adventitious Presence Statement On Last Page] [If they don’t understand, say “using entirely means that no part has GE in it. That means even the 5% adventitious presence does not apply] 47b
- 47c • Can you see how this applies to these two statements?

(26)

20) This lentil salad contains non-genetically engineered soybeans – NB: SHOW 20-ING AT SAME TIME

- 48a → d • For the front panel:
- What is the label saying? What, if anything is confusing about it (probe – does anyone wonder why they’re talking about the soybeans when it is a lentil salad? Should there be a statement about the lentils?) 48b 48c 48d
- 49a → c • For the rear panel:
- When you look at the list of ingredients, what do you think? Do you find this information useful? 49b
 - Ask what each point means. That is, ask specifically, What does... mean: 49a
- 50a → c • * like all of these ingredients, not genetically engineered 50a
- 50b • ** product of genetic engineering 50b
- 50c • + mixture of product of and not of genetic engineering 50c
- 50d • ++not product of genetic engineering 50d
- 50e • +++ product of genetic engineering. Contains less than 0.1% GE material 50e
- 51 • Why do you think that soybeans are separated out from other non-GE foods?
- 52a → c • How would your purchase decision be impacted by seeing all this information? 52a
- 52b • Is there one piece of information that impacts you more than others? What is it? 52c
- 53 • Can you think of other ways to present the information?
- 54 • The front only talks about soybeans, but as you can see there are a number of other ingredients that have statements about GE. Should there have been a different statement on the front?
- 55a → c • Should some of the information that is on this label be taken off of it and put on a secondary source? If so, what should be done specifically? Does the 1-800 number reassure you in buying the product – that is, will you buy first and ask questions later? 55a 55b 55c

21) This soup contains corn genetically engineered to reduce the use of pesticides NB: SHOW 21-ING

- 56a → c • What does this statement say about the soup? What does it mean (probe – is it the entire soup, is it just the corn?) 56a 56b 56c
- 57a → c • How does the fact that one portion of the soup is GE influence your opinion? That is, how does it influence your opinion towards the entire soup? (Probe - Would you buy it, not buy it, buy it and avoid the corn, something else...) 57a 57b 57c
- 58 • How does “reduced pesticide use” influence your opinion
- 59a → c • On the other side of the label with the ingredients ask:
- Take some time to read this list.
 - What does + “GE and non GE sources not segregated” mean? Is this useful to know? How does it impact your purchase decision? 59a 59b 59c

Benefit Claims Section

Show order is 23, 24, 25 together (all deal with nutrition benefits of the food) and 26, 27 together (all deal with production issues)

(3d)

The following are in reference to all statements:

- o Which claims appeal to you? Why? Will these be of benefit to you to make an informed choice? Which ones are unclear? Which ones did you not know about?
- o How do they make you feel about the individual food? Do you think the food has been altered in any way (probe - that may be uncomfortable to you)? Do these make you feel comfortable in choosing these foods?

23) Made with canola oil from canola which has been genetically engineered to reduce trans fat:

- o What does the claim say? Who knows about trans-fatty acids? How much of a concern are they? How does this impact your purchase decision? How important is it that the label conveys this benefit of GE?
- o If you saw two products, one regular (i.e. with trans-fats) and one with this label on it, which would you purchase?

24) Made from genetically engineered soybeans which removes need to hydrogenate soy during processing. See www.this.com ...

- o What does the claim say? Who knows about hydrogenation? Is this a concern? How does this impact your purchase decision? How important is it that the label convey this benefit of GE?
- o If you saw two products, one regular (i.e. with hydrogenation) and one with this label on it, which would you purchase?

25) Soya beverage, made from soyabeans genetically engineered to be a good source of protein. See www.thisurl.com for more information

- o What does the claim say? How does this impact your purchase decision? What is the benefit of increased protein content? How important is it that the label conveys this benefit of GE?
- o If you saw two products, one regular (i.e. with normal amounts of protein) and one with this label on it, which would you purchase?

26) Corn chips made with canola oil from canola which has been genetically engineered to increase crop yield.

- o What is the claim saying? How does this impact your purchase decision? What is the benefit of improved crop yield? How important is it that the label convey this benefit of GE?
- o If you saw two products, one regular and one with this label on it, which would you purchase?

27) This corn bread contains corn genetically engineered to use less pesticide

- o What is the claim saying? Is it useful that GE can address this issue? How does this impact your purchase decision? What is the benefit of "reduced pesticide"?
- o If you saw two products, one regular and one with this label on it, which would you purchase?

GE-Material Statement

These claims provide two pieces of information. The first tells you about the original canola and corn and the process used to derive them. The second describes the end product, in this case the canola oil and corn syrup after they have undergone additional processing to make the canola oil and corn syrup.

The statement "Product of GE" tells you that the canola and corn came from seeds that were produced with GE techniques. The second statement "contains no GE material" describes the end product - that is, what is left after processing the corn and canola, which is corn syrup and canola oil. This statement describes the protein and rDNA and rRNA left in the oil and syrup, that is, the residual changed material left in the finished product. In highly refined products, such as canola oil and corn syrup, very little or none of this residual material is left in the finished product due to the high degree of processing required to get the oil out of the canola or the syrup out of the corn.

5% Adventitious Presence

I want to describe a concept called adventitious presence. A good example of this is when you are at a grocery store where someone picks up a can or box from one shelf and sets it back in another place. The person did not plan to mix-up the displays.

Adventitious presence is a term to describe the accidental inclusion of approved GE ingredients or food that can happen anywhere along the line, during planting, harvest, transport or storage. This can be the result of a bird carrying and dropping a soybean into another field that is being harvested, or a kernel of corn stuck to the inside of a truck after it has been cleaned, which is then used to carry apples.

Every member of the food chain is required to exercise good care and document every step of the way to ensure that accidental inclusion of something else doesn't occur. However, should it happen, no more than 5% of a particular source of a food or ingredient, such as a train car full of corn, could be something that is not that kind of corn. In order to meet this 5% level, the industry always needs to aim for 0%, although with the current production and distribution systems in Canada, trying to achieve a level lower than 5% is unrealistic for a number of commodities at this time.

The developers of The Standard agreed to review the percentage over time, to take into account segregation, identity preservation, testing and sampling systems throughout the agriculture and food chains as they are developed.

**APPENDIX C: NATIONAL STANDARD FOR THE VOLUNTARY
LABELLING AND ADVERTISING OF FOODS THAT ARE AND ARE
NOT PRODUCTS OF GENETIC ENGINEERING**