Docket Number: AMS-TM-17-0050
Docket Clerk, 1400 Independence Ave., AS, Room 4543-S,
Washington, DC 20250

INTERNATIONAL
FOOD INFORMATION
COUNCIL FOUNDATION

Dear Madam or Sir,

The International Food Information Council (IFIC) Foundation appreciates the opportunity to submit public comments on National Bioengineered Food Disclosure Standard as requested by the Agricultural Marketing Service (AMS).

The IFIC Foundation (www.foodinsight.org) is a §501(c)(3) nonprofit educational organization with a mission to effectively communicate science-based information about health, nutrition, and food safety for the public good.

One of the objectives of the IFIC Foundation is to elevate the understanding of Americans' eating habits – and future food choices - through consumer research. It is the belief of the Foundation that consumer research is a critical first step in determining Americans' understanding of nutrition and food information and examining how consumer knowledge, perceptions and attitudes can impact behavior.

Our comments below focus specifically on research designed to test consumer attitudes and perceptions as they relate to AMS's proposed Bioengineered Food Disclosure rule. In May 2018, immediately following the release of the proposed rule, the IFIC Foundation conducted an online survey of 1,002 consumers ages 18-80 using ResearchNow's online panel. Respondents were representative of region, gender, age, education, race/ ethnicity and household income. The survey took approximately 15 minutes to complete.

More specifically, this new consumer research was designed to test the following elements of AMS's proposed bioengineered food (BE) disclosure standard rule:

- Measure consumers' general awareness and understanding of genetically modified/ bioengineered foods;
- Understand how consumers' attitudes and perceptions vary when viewing different methods of expressing the presence of bioengineered ingredients in food products; and
- Measure reactions to both visual (logo) and textual formats.

A summary of the findings is below, and a link to the complete report can be found here.

1. **General BE Food Questions.** A series of general BE food questions were asked, including questions that focused on consumer knowledge of BE foods, whether BE foods are considered as part of purchasing decisions as well as the importance of distinct front-of-pack food labels. In addition, this section framed questions as both genetically modified/bioengineered so that after a few questions, survey participants were told that for purposes of the study, bioengineered foods referred to both genetically modified foods and bioengineered foods.

Knowledge of BE foods: The same percentage of consumers that know very little or nothing at all (36%) say they know a great deal or fair amount (36%) about bioengineered foods.

Consideration of BE foods: Nearly half of consumers do not consider whether foods are genetically modified (47%) when making decisions about buying foods and beverages. Two in five consumers consider the genetic modification of foods when buying them (41%). This is consistent with previous IFIC Foundation research, showing that 42% of shoppers either are not sure or do not express a preference about avoiding or consuming GMOs.

Avoidance of/Concern about BE foods: Nearly half of those surveyed avoid at least somewhat genetically modified foods (47%). Slightly less do not avoid (40%). Avoiders tend to be younger, from the Northeast and West, have children at home and be African-American. When consumers avoid BE foods, it's primarily due to human health concerns (85%), followed by environmental concerns (43%) and animal health concerns (36%).

- Nearly three-quarters (72%) of consumers are either very concerned or concerned about BE foods and human health. 67% of consumers are either very concerned or concerned about BE foods and the environment. 64% are very concerned or concerned about animal health.
- Uncertainty about which foods are genetically modified is the primary reason consumers don't avoid BE foods (49%). Other top reasons include the belief that BE foods are comparable in healthiness (29%) and BE foods are comparable in safety (26%). Those 35-44 and 55-65 have the highest percentage of consumers who state that the reason not to avoid BE foods is because they are unsure which foods contain BE ingredients.

Important Labeling/Claims: The top five labeling claims that consumers seek out when buying food include: "All Natural", "100% Natural" or "Natural" (71% for yourself, 72% for your family); "Raised without Antibiotics" (71% for yourself, 72% for your family); "Sustainable" (62% for yourself, 63% for your family); "Locally Sourced" (61% for yourself, 63% for your family); and "USDA Certified Organic" (60% for yourself, 60% for your family). "Not Made with Genetically Modified Ingredients" and "Non-GMO Project Verified" were also important, each over 55%.

2. **Testing Proposed Disclosure Symbols + Text.** The three proposed disclosure symbols were assessed, as well as both the "bioengineered food" and "may be bioengineered food" text disclosure. In addition, we tested whether adding text to the disclosure symbol changed attitudes and perceptions about the disclosure and BE foods.

This survey assessed levels of concern associated with the following:

1) Bottle of canola oil without any BE food disclosure

2) Bottle of canola oil with one of the BE food disclosure symbols ("plant", "sun" or "smile")[1]

3) Bottle of canola oil with BE food disclosure symbol plus either the bioengineered text or may be bioengineered text underneath the symbol.

4) Bottle of canola oil with just the text (no symbol).

We assessed concerns using the list in the table below. The "control" is simply the canola oil with no BE food disclosure symbol or text.

[1] The plant, sun and smile symbols can be found on slide 5 in the report.

Summary - Consumer Reactions to Text / Labels / Claims

(% Concerned + Very Concerned - %s Averaged Across Images)

	Words Shown on Image			Logo Shown on Image		
	CONTROL	BIO-ENGINEERED	MAY BE BIO-ENGINEERED	PLANT	SUN	SMILE
Human health concerns	33%	54%	53%	52%	48%	49%
Environmental concerns	32%	49%	46%	48%	44%	45%
Agricultural / farming concerns	32%	47%	45%	48%	44%	47%
Animal health concerns	31%	47%	45%	41%	42%	45%
Don't want to give to children in the household	31%	47%	46%	46%	42%	43%
Don't know enough about BE foods	28%	45%	45%	47%	41%	44%
Technology concerns	24%	41%	36%	36%	32%	35%
Religious / spiritual / ethical concerns	21%	34%	31%	26%	28%	31%

Below is a summary of the findings, comparing just human health concerns (the primary reason consumers seek to avoid BE foods). The "sun" symbol tends to generate the least amount of human health concern. And in general, the "may be bioengineered food" language generates either equal (in the case of just the text) or less concern (when used with a symbol and compared to the symbol + "bioengineered food").

Summary - Consumer Reactions to Text / Labels / Claims

(% Concerned + Very Concerned)

	Control (no logo)	Sun	Sun + Bioengineered	Sun + May Be Bioengineered
Human Health Concerns	34%/34%*	48%/47%*	50%	47%

	Control (no logo)	Plant	Plant + Bioengineered	Plant + May Be Bioengineered
Human Health Concerns	30%/32%*	50%/53%*	51%	57%

	Control (no logo)	Smile	Smile + Bioengineered	Smile + May Be Bioengineered
Human Health Concerns	40%/36%*	52%/45%*	57%	53%

	Control (no logo)	N/A	Bioengineered – No Logo	May Be Bioengineered – No Logo
Human Health Concerns	28%		56%	56%

*the number following the "/" corresponds to the visual seen with the "may be" language. Survey participants saw either the "bioengineered" text with the disclosure symbol OR the "may be bioengineered" text with the disclosure symbol

3. **Testing "Willingness to Pay" for Different Front-of-Pack Labels:** This study also assessed "willingness to pay" for food that did not include a BE food disclosure, one that included a disclosure and one that included a disclosure as well additional front-of-pack language, in this case either "all natural" or "sustainable." This allowed us to see how a consumer's willingness to pay for a particular food was impacted by the disclosure as well as the addition of another front-of-pack label. The example used in the study was a single-serve container of squash soup.

   In summary, consumers would pay the least for squash soup with just the BE food disclosure symbol. "All natural," alongside the BE food disclosure symbol, raised consumers' willingness to pay for the squash soup. In one case, the "all natural" language alongside the BE food disclosure resulted in a willingness to pay equal to that of the control (ie. No BE food disclosure).

Summary - Most Consumer is Willing To Pay

(Average Price; Average Includes Zero)

Highest is Shaded in Yellow; Lowest is Shaded in Gray

	Logo Only	All Natural	Sustainable
Control (no logo)	$2.96	~	~
Plant Logo	$2.61	$2.86	$2.93
Sun Logo	$2.51	$2.82	$2.86
Smile Logo	$2.83	$2.96	$2.89

4. **Multi-Ingredient Foods and Highly Refined Ingredients:** This study used pizza as an example to test the proposed AMS multi-ingredient thresholds. We first asked whether consumers would eat a pizza, as shown via a pizza box image. We then asked whether consumers would eat a pizza with BE ingredients right above and right below each of the proposed AMS thresholds for disclosure. The major takeaway: while consumers are less inclined to eat the pizza including any BE ingredients

versus a food without BE ingredients, the variation is relatively small. Furthermore, there is no correlation between the amount of BE ingredient and a consumer's likelihood to eat it.

Summary - Consumer Would Eat this Food

(%)

Control (no BE ingredients or weights mentioned)	55%
1 oz. ingredient made from BE cornmeal which weighs 0.01 oz.	46%
Several ingredients are BE which all together weigh 1 oz.	44%
Several ingredients are BE which all together weigh 0.5 oz.	43%
1 oz. ingredient made from BE cornmeal which weighs less than 0.01 oz.	43%
1 oz. ingredient made from BE cornmeal which weighs 0.06 oz.	41%
1 oz. ingredient made from BE cornmeal which weighs 0.04 oz.	40%

When asked whether highly refined foods that may or may not contain trace amounts of genetic material should be labeled as BE, just over half said yes (53%). However, 17% oppose labeling these foods, and 30% are not sure.

5. **Assessing Which Symbols and/or Text Provides the "Right" Amount of Information:** This study asked consumers, using each of the disclosure symbols, the text disclosure as well as the symbol + text disclosure, whether they felt that method of disclosure provided either "too much," the "right amount," or "not enough" information. They also had the option of choosing "don't know." In general, consumers were in favor of the disclosure symbol + text, with higher percentages stating that these options provided the right amount of information. Text only was generally less favored; the word "contains" was viewed more favorably compared to "may contain" among survey participants.

Summary - Extent Labels Provide Enough Information

(% Provides "Right Amount" of Info)

Highest is Shaded in Yellow; Lowest is Shaded in Gray

	Logo Only[1]	Bioengineered	May Be Bioengineered
No logo (text only)	~	51%	24%
Plant Logo	23%	65%	62%
Sun Logo	23%	59%	50%
Smile Logo	24%	59%	55%

6. **Method of Disclosure and Additional Information:** Consumers have a strong preference for BE labels on food packaging. 73% of consumers rank 1st or 2nd (out of 6 options) having a symbol or visual representation on a food package, while 63% of consumers rank 1st or 2nd text on a food package. Text messages, internet websites, telephone numbers and electronic or digital links were all far behind, with each of them less than 20% (when looking at rank 1st or 2nd). Additionally, the survey showed that consumers would look for information about BE foods from the following sources (top three): health-focused website (38%), reading a scientific study (29%) and news article or headline (21%).

The IFIC Foundation believes that these insights provide important context for the development and implementation of AMS's final bioengineered food disclosure rule. It also provides ample room for additional research, including qualitative focus groups or other methods that can more fully assess consumer behavior. This quantitative assessment sheds new light on consumer attitudes and perceptions about the proposed symbols, text and various methods of disclosure.

Sincerely,
Joseph Clayton
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Alex Lewin-Zwerdling, PhD
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