Korea - Republic of

Post: Seoul

Korea's New Biotech Labeling Requirements

Report Categories:
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Biotechnology - GE Plants and Animals

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Report Highlights:
Beginning February 4, 2017, Korea’s Ministry of Food and Drug Safety began enforcing biotech labeling requirements that were finalized on February 3, 2016. This report summarizes the new requirements and includes translations of a guideline and Q and A document published by the ministry to provide additional clarity.
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I. Overview

The Ministry of Food & Drug Safety (hereinafter referred to as MFDS) implemented new biotech labeling requirements beginning February 4, 2017. In accordance with the revision of the Food Sanitation Act, which was finalized on February 3, 2016 with one year grace period, this new labeling requirement expanded mandatory biotech labeling to all detectable products. Please also see Post’s most recent reporting on this issue, included in our 2016 Biotechnology Annual KS1646. To provide guidance and details on the new biotech labeling requirements, MFDS also published the Guideline on Labeling of GM Food (hereinafter referred to as Guideline) on January 25, 2017. A translation of the Guideline and Q&A prepared by MFDS is provided in the appendix of the report.

Major changes in the new biotech labeling scheme include:

- Expansion of mandatory biotech labeling to all detectable products (i.e. detectable biotech proteins): Under the previous Act, biotech labeling was required for products that contain detectable biotech component as one or more of the top five ingredients. However, the new Act requires biotech labeling for products that contain any detectable biotech component even for a minor ingredient.

- Increase of the font size of biotech labeling: The font size was increased from 10 point to 12 points. The label shall be made on the principal display panel or an ingredient panel using stickers, printed label or stamp.

- Prohibiting Non-GMO or GMO Free claims: For products that do not have biotech counterparts, MFDS prohibits the use of Non-GMO or GMO-Free claims on the product label. For example, a claim of Non-GM rice or Non-GM banana is prohibited.

- Allowing Non-GMO or GMO Free claims: As for products that have biotech counterparts, if a Non-GM ingredient is the top ingredient or contents of Non-GM ingredient is 50% or more of total ingredients, Non-GMO or GMO Free claim are allowed. However, in this case, adventitious presence of GM component in the finished product is not accepted and a zero tolerance applies.

- Exempting non-detectable products from mandatory biotech labeling: MFDS continues to exempt mandatory biotech labeling for products that do not contain foreign DNA or protein. Exempted products are cooking oil, sugar (glucose, fructose, taffy, sugar syrups, etc.), soy sauce, modified starch, alcoholic beverages (beer, whisky, brandy, liqueur, distilled spirits, etc.). No supporting document is required to get exempted from biotech labeling requirements for the listed products.

- Exempting processing aids and carriers from mandatory biotech labeling: Processing aids (enzyme(s) made of GM microorganism), carriers, diluents, and stabilizers including emulsifiers are excluded from biotech labeling requirements. In this case, manufacturers are required to provide a document that proves the use of raw ingredients for the aforementioned purpose.
II. Legal Basis

<table>
<thead>
<tr>
<th>Food Sanitation Act</th>
<th>Revised on February 3, 2016, Implemented on February 4, 2017</th>
</tr>
</thead>
</table>

In response to strong demand from local NGOs and draft bills proposed to expand biotech labeling to all products made of biotech crops in previous years, lawmakers and MFDS made an alternative revision of the Food Sanitation Act on February 3, 2016. The revision expanded mandatory biotech labeling to food products that contain detectable biotech ingredients starting February 4, 2017 after one year grace period. To provide labeling details, MFDS revised the Guideline on Labeling of GM Food. In the meantime, two new draft bills to the Food Sanitation Act to expand mandatory biotech labeling to all products made of biotech crops have been submitted to the National Assembly in August and November 2016. These two bills are pending.

III. Products Subject to Biotech Labeling

Soy, corn, cotton, canola, sugar beet, and alfalfa and food products containing these crops are subject to biotech labeling requirement. The same requirement applies to both domestic and imported products.

IV. Products Exempted from Biotech Labeling

A. Processing aid, carriers, diluents, and stabilizers including emulsifiers are exempted from biotech labeling because it itself is not considered to be a raw ingredient for food as it is used in extremely small quantity as an inevitable component of raw ingredient. Definition is as follows:

a. Processing aids: It refers to an enzyme made of GM microorganism.
b. Carriers: It refers to a substance added to ensure uniformity of food ingredients.
c. Diluents: It refers to a substance added to lower concentration of food products without changing physicochemical attributes of food.
d. Stabilizers: It refers to a substance added to prevent physicochemical change of food. An emulsifier is also considered to be a stabilizer.

In this case, a manufacturer is required to submit a document that proves that it is used as one of the aforementioned purpose(s).

B. Non-detectable products: Cooking oil, sugar (classified under “sugar” category in the Food Code including glucose, fructose, taffy, sugar syrups, oligosaccharide, dextrin, etc.), soy sauce, modified starch, alcoholic beverages (classified under “alcoholic beverages” category in the Food Code including beer, whiskey, brandy, liqueur, distilled spirits, etc.) are exempted from biotech labeling without supporting documents.
If any products other than those listed above are non-detectable products, manufacturers may submit a document confirming that a product or a raw ingredient does not contain a foreign DNA or protein. The supporting document can be made based upon a test result or substance purification documents.

**Example:** When soy lecithin is used not as a stabilizer but as one of ingredients, if soy lecithin does not contain a foreign DNA or protein and it is confirmed by test, then biotech labeling is exempted.

### V. How to Make Biotech Label

Stickers, a stamp or printed label may be used. Labels shall be made in Korean while a foreign language may be used in parallel with Korean text.

If a product contains or may contain detectable GM raw ingredient, examples of labels are as follows:

<table>
<thead>
<tr>
<th>Cases</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>GM Grains</td>
<td>GM Corn or GM Soy</td>
</tr>
<tr>
<td>Products containing GM Grains</td>
<td>Containing GM Corn or GM Soy</td>
</tr>
<tr>
<td>Vegetable grown from GM Grains</td>
<td>Beansprout grown from GM Soy</td>
</tr>
<tr>
<td>Products containing vegetable from GM grains</td>
<td>Containing beansprout grown from GM soy</td>
</tr>
<tr>
<td>May contain GM Grains</td>
<td>May contain GM Corn or GM Soy</td>
</tr>
<tr>
<td>May contain vegetable from GM grains</td>
<td>May contain beansprout grown from GM soy</td>
</tr>
<tr>
<td>Food Products with detectable GM component (labeled on either principal display panel or ingredient panel)</td>
<td>Principal Display Panel</td>
</tr>
<tr>
<td>Food products contains GM raw ingredients from multiple sources</td>
<td>Principal Display Panel</td>
</tr>
<tr>
<td>Food products that is not certain if it contains detectable GM component</td>
<td>Principal Display Panel</td>
</tr>
</tbody>
</table>

- **Examples:**
  - Ingredient Panel: “GM” or “GM Soy” or “GM Corn” in parenthesis next to a name of raw ingredient on the ingredient panel
  - Principal Display Panel: “May contain GM Corn and Soy”
  - Principal Display Panel: “May contain GM Soy” or “May contain GM Corn”
VI. Non-GMO or GMO Free Claims

Non-GMO or GMO Free claims are permitted when the contents of raw ingredients subject to biotech labeling are 50% or higher or when such ingredient is the top ingredient in volume of the product.

Example: If a corn chip containing corn powder as the top ingredient is made of Non-GM corn, then it may have a claim of “NON-GM Corn Chip.” However, in this case, a zero tolerance standard applies. Any products testing positive for a biotech component will be a violation of labeling standards. When a Non-GMO ingredient is used as a minor ingredient (i.e. less than 50% and not the top ingredient), Non-GMO or GMO Free claims are not permitted even if it tests negative for GM components.

Non-GMO or GMO Free claims are not permitted for products that do not have biotech counterparts.

Example: “Non-GMO Wheat” or “GMO Free Cherries” are not permitted as such commodities do not have approved or commercially available biotech counterparts.

VII. Documents Required to Be Exempted from Biotech Labeling

A. Government issued certificate: A government issued certificate that proves that a product is made of IP handled ingredients or a raw material used in the finished product originated from a Non-GM crop. A notarized self-declaration for US origin processed food products is considered to be a government issued certificate. A sample of notarized self-declaration is provided in the Appendix II.

B. IP Document: IP documents refers to documentary evidence that foods are segregated from genetically modified foods, etc., in their handling process, covering seed procurement, production, manufacturing, storage, sorting, transportation, shipping steps, etc.

MFDS recently expanded the definition of IP documents to a manufacturer self-declaration if manufacturers can ensure segregation of GM foods from products that they are making and exporting to Korea. Manufacturers may use IP handled grains, testing, or others means to exclude the possibility of comingling GM ingredients with raw ingredients used for their products. Testing can be done by any of the laboratories in Korea or foreign countries. For import clearance, manufacturers may submit one-page document that illustrates how they ensure that Non-GM ingredients were used in making their products.

Example: When cookies include corn powder, corn starch, and soy lecithin as raw ingredients, manufacturers may have IP documents for corn powder, a negative test result for corn starch, and a manufacturer document for soy lecithin that includes soy lecithin specifications and proves it is used as an emulsifier. With all of the three supporting documents, manufacturers can make a one-page document stating that 1) we received IP documents for corn powder from XX supplier, 2) we tested our corn starch and tests confirmed no presence of GM component, and 3) soy lecithin is used as an emulsifier and the usage statement is attached. They can submit this one-page document to MFDS field inspectors first and if supporting documents are requested, they should provide supporting documents to MFDS.
Also, foreign manufacturers may test the finished products. If it tests negative, they can make a manufacturer statement certifying that this is Non-GM product based upon a test result. How to verify Non-GM is up to manufacturers. Any fraud detected in the creation of the statement will result in sanctions levied on the manufacturer.

**VIII. Adventitious Presence of GM Component(s)**

MFDS allows for up to three-percent unintentional presence of approved biotech components in unprocessed non-biotech products (e.g. conventional food grade soybeans or corn) which carry an IP or government certificate. This three-percent tolerance of biotech components in raw materials is the default threshold for processed food products that are subject to biotech labeling requirements. If a finished product is made of raw ingredients originating from non-biotech grain within this three-percent tolerance, it is exempted from biotech labeling if a supporting document is submitted. Please note that this three-percent tolerance is not the tolerance for the finished processed product.
Appendix I MFDS Labeling Standards

Labeling Standards for Genetically-Modified Foods, etc.

MFDS Notification No. 2014-114 (enacted on April 24, 2014)
MFDS Notification No. 2017-7 (amended on January 25, 2017)

Article 1 (Purpose) The purpose of this Notification is to provide consumers with accurate information by laying down labeling requirements in detail for genetically-modified foods, etc., including foods, etc. subject to the labeling requirements, persons/entities responsible for such labeling, and labeling methods pursuant to Article 12-2 of the Food Sanitation Act, Article 17-2 of the Health Functional Foods Act, Article 6 (Standards for Labelling of Livestock Products) of the Livestock Products Sanitary Control Act, and Article 20 of the Enforcement Decree of the Agricultural and Fishery Products Quality Control Act.

Article 2 (Definitions) For the purpose of this Notification, the following definitions shall apply:

1. "Genetically modified foods, etc. (GM foods, etc.)" refers to each of the following items:
   A. Genetically-modified (GM) foods and food additives defined under Article 12-2, Paragraph 1 of the Food Sanitation Act
   B. Genetically-modified (GM) functional health foods defined under Article 17-2 of the Health Functional Foods Act
   C. Livestock products in accordance with Article 6 of the Livestock Products Sanitary Control Act
   D. Genetically-modified agricultural and fishery products defined under Article 2, Subparagraph 11 of the Agricultural and Fishery Products Quality Control Act (Vegetables grown by germinating the seed of a food item, for example bean sprouts and bean leaves, are included. The same applies hereinafter.)

2. "Ingredient" refers to any substance, excluding water added intentionally, that is used to manufacture and process a food (Functional health foods as well as agricultural, livestock and fishery products are included; the same applies hereinafter) or food additive, which is present in the final finished product. However, materials used for the following purposes are excluded: processing aid (substance used intentionally in the manufacturing and processing of food to achieve a certain technical purpose), excipient (substance added to ensure uniformity in the composition of the food), diluent (substance added to lower the concentration without changing the physicochemical attributes of the food) or stabilizer (substance added to prevent physicochemical change in food).

3. "Identity Preservation Certificate" refers to documentary evidence proving that the food, etc. concerned has been segregated and handled separately from GM foods, etc. during the handling process including seed purchase, production, manufacturing, storage, sorting, transportation and shipping.

4. "Government Certificate" refers to documentary evidence showing that the government of the producing or exporting country acknowledges that the certificate has the same effect as defined under the Subparagraph 3 above.

5. "Impossible" refers to a case in which amplified fragments of an endogenous gene have not been detected in a PCR test.
6. "Adventitious presence" refers to the unintentional presence (expressed as a percentage) of any genetically-modified agricultural product in an agricultural product despite best efforts to segregate the product concerned in the process of producing, importing, distributing or handling it.)

7. "Principal display panel" refers to that portion of the container or packaging label on a food or food additive that bears the trademark and logo and is most likely to be seen by the consumer under customary conditions at the time of purchase.

Article 3 (Foods Subject to Labeling Requirements) ① A genetically-modified agricultural, livestock or fishery product approved as food as well as food, etc. manufactured and processed using a genetically-modified agricultural, livestock or fishery product as an ingredient shall be labeled as GM food if it is found as a result of a safety evaluation pursuant to Article 18 of the Food Sanitation Act that a genetically-modified DNA or a genetically-modified protein is present in it.
② Foods subject to the labeling requirements under Paragraph 1 above may not be labeled as GM food in any of the following cases:

1. An agricultural product with the adventitious presence of a genetically-modified agricultural ingredient at 3% or less or a food or food additive manufactured and processed using such an agricultural product. In this case, however, the Identity Preservation Certificate or Government Certificate is required.

2. Sugars, oils and fats, etc., which are considered impossible to test as there remains no genetically-modified DNA or genetically-modified protein in them after the end of a high-degree refining process.

Article 4 (Persons Responsible for the Labeling) Persons or entities who fall under any of the following categories shall be responsible for labeling GM foods, etc.:

1. Genetically-modified agricultural, livestock and fishery products: Person or entity who cultivates, produces, ships out and sells a genetically-modified agricultural, livestock and/or fishery product or who stores and displays a genetically-modified agricultural, livestock and/or fishery product for the purpose of sale

2. Genetically-modified foods: Person or entity who is engaged in the food manufacturing/processing business, spot-sale food manufacturing/processing business, food additive manufacturing business, food subdivision business, or distribution-specialized sales business as defined under Article 21 of the Enforcement Decree of the Food Sanitation Act; business of importing and selling imported food, etc. pursuant to Article 2 of the Enforcement Decree of the Special Act on Imported Food Safety Control; functional health food manufacturing business or distribution-specialized sales of functional health foods under Article 2 of the Enforcement Decree of the Health Functional Foods Act; or livestock product processing business or distribution-specialized sales of livestock products pursuant to Article 21 of the Enforcement Decree of the Livestock Products Sanitary Control Act

Article 5 (Labeling Methods) GM foods shall be labeled as described in the following sub-paragraphs:

1. Labeling shall be done in Korean. However, Chinese or other foreign characters may be used in parallel with Korean text to help consumers understand better. In this case, the size of Chinese or other foreign characters should be equal to or smaller than the Korean characters.

2. Labeling shall be done using non-erasable ink, seal or stamp, or it shall be done on a sticker or label sheet that does not come off. Label information shall be placed distinctively in 12-point or bigger font, using a color
clearly distinguishable from the background color of the container or packaging to ensure that consumers can easily see the information.

3. Genetically-modified agricultural, livestock and fishery products shall be labeled as "GM (agricultural, livestock or fishery product name)." A vegetable cultivated from a genetically-modified agricultural product(s) shall be labeled as "(vegetable name) cultivated from GM (name of agricultural product/products)."

4. If a food commodity contains a genetically-modified agricultural, livestock or fishery product, it shall be labeled as "contains GM (agricultural, livestock or fishery product name)." If a food commodity contains a vegetable cultivated from a genetically-modified agricultural product(s), it shall be labeled as "contains (vegetable name) cultivated from GM (name of agricultural product/products)."

5. If there is a possibility that the food commodity concerned may contain a genetically-modified agricultural, livestock or fishery product, it shall be labeled as "possibly contains GM (agricultural, livestock or fishery product name)." If there is a possibility that the food commodity concerned may contain a vegetable cultivated from a genetically-modified agricultural product(s), it shall be labeled as "possibly contains (vegetable name) cultivated from GM (name of agricultural product/products)."

6. To ensure that consumers can easily recognize a GM food, the phrase “GM food,” “GM food additive,” “GM functional health food,” “food containing GM (commodity name),” “food additive containing GM (commodity name)” or “functional health food containing GM (commodity name)” should be written on its principal display panel, or the phrase “GM” or “GM (commodity name)” shall be placed in parentheses right next to the names of the ingredients used in the product concerned.

7. If a product cannot be verified as to genetic modification, it shall have the phrase “possibly contains GM (commodity name)” written on its principal display panel or have the phrase “possibly contains GM (product name)” written in parentheses right next to the names of its ingredients.

8. In cases where a GM food, etc. is not used for a commodity subject to the labeling provisions of Article 3, Paragraph 1, the commodity may be labeled as “Non-GMO Food (in Korean),” “GMO Free Food (in Korean),” “Non-GMO” or “GMO-free” if the content of an ingredient subject to the labeling requirements is 50% or higher or if that ingredient is used the most in the product. In this case, an adventitious presence shall not be tolerated.

9. “Non-GMO,” “GMO-free” or a similar term or phrase shall not be used for an agricultural, livestock or fishery product that is not a GM product subject to the labeling requirements under Article 3, Paragraph 1 or a food manufactured or processed using such an agricultural, livestock or fishery product, lest it should cause misunderstanding or confusion among consumers.

10. In the case where a genetically-modified agricultural, livestock and fishery product is shipped or loaded in a mother ship or shipping container for import or sales in bulk, the required labeling details shall be specified on the letter of credit or invoice. In the case where a genetically-modified agricultural, livestock and fishery product is loaded in a cargo vehicle and distributed in Korea, the labeling details should be put on the vehicle and delivery note.

Article 6 (Exceptions to Labeling Requirements) Notwithstanding the provisions of Article 5, labeling can
be done as follows if any of the following sub-paragraphs applies:

1. In cases where a spot-sale food manufacturing or processing business operator displays and sells a genetically-modified food of his/her own making or processing, the operator may leave out a label on the individual units of the product if the required label information is placed on the display case or posted on a separate board.

2. In cases where soybean curds are sold using a sanitary crate or box, the business operator may leave out a label on the individual units of the product if the required label information is placed on the crate/box or posted on a separate board.

Article 7 (Review Period) Pursuant to Article 8 of the Framework Act On Administrative Regulations and the Regulations on the Issue and Management of Instructions and Established Rules, this Notification shall be reviewed for its reasonableness and necessary measures, such as making improvements thereto, shall be taken every three years (referring to the period until the day before January 1 of every third year) from January 1, 2014.

Addenda <No. 2014-114, April 24, 2014>

Article 1 (Enforcement Date) This Notification shall enter into force on the date of its announcement.

Article 2 (Transitional Measures) The GM foods, etc. manufactured, processed or imported (including those that have already been shipped for import) by a person or entity who has secured a business license or who has registered or reported as business operator according to the Food Sanitation Act and Health Functional Foods Act at the time when this Notification enters into force as well as GM foods, etc. of the same nature can be labeled following the previous labeling standards, provided that the date of manufacture or import date is not earlier than April 31, 2015. In this case, a product may be sold, displayed or transported for sales purposes, or used for business purposes until its expiry date.


Addenda <No. 2017-7, January 25, 2017>

Article 1 (Enforcement Date) This Notification shall enter into force on February 4, 2017.

Article 2 (Application Example) This Notification shall apply to genetically modified foods, etc. that are manufactured, processed or imported (on the basis of the shipping date) after this Notification enters into force.
This material is translated from Korean to English, and there may be translation errors in the translation process.
Appendix II  Labeling Q&As

◇ Regarding the amendments to the Notification

1. Main changes in the Amended Notification

- “Labeling Standards for Genetically-Modified Foods, Etc.” amended this year (January 25, 2017) has expanded the scope of foods subject to GM food labeling requirements from Top-five ingredients (raw materials) that are used the most in a food product to all ingredients regardless of their content.

- Key changes are as follows:

  ① Foods subject to GM food labeling requirements have been expanded from top-five ingredients to all ingredients.

  ② The font size has been increased from 10 points to 12 points.*

  * The required phrase shall be written on the primary display panel or in parentheses right next to the name of ingredients.

  ③ Foods in which a conventional breeding soybean or maize is used can be labeled as “Non-GMO Food (in Korean), “GMO-Free Food (in Korean), “Non-GMO” or “GMO-free.”

    - This applies only to foods that fall under the following cases: The content of an ingredient subject to the labeling requirements is 50% or higher or such an ingredient is used the most of all the ingredients. In this case, adventitious presence in the finished product shall not be tolerated.

  ④ It is forbidden to label rice, bananas, etc., which have not been developed or approved as genetically-modified foods, as Non-GMO food or to use other related labels for them.

  ⑤ Cooking oils, soy sauces, sugars, etc. in which no genetically-modified DNA (or protein) remains due to a highly refining process shall be excluded from labeling obligations, as is currently the case.

    - With regard to the need for applying the GM food labeling system to cooking oils, soy sauces, sugars, etc., it is planned to expand the labeling requirements to them once a social consensus is reached through sufficient discussions among stakeholders.

2. Labeling is required only for ingredients whose genetically-modified DNA (or protein) remains in the food

- In the case of cooking oils, soy sauces, sugars, etc., it is not possible to ascertain facts on compliance
with the labeling requirements if there is no genetically-modified DNA (or protein) remaining in the final product.

- However, if discussions with stakeholders in the future lead to a social consensus on the need for applying the GM food labeling system to such cases, we plan to expand the scope of the application accordingly (the relevant laws need to be amended).

3. Regarding the need for labeling even foods without any traces of genetically-modified DNA (or protein) to protect consumers’ right to know

- In order to have cooking oils, sugars, etc. labeled even when there remains no genetically-modified DNA (or protein) in the final finished product, the Food Sanitation Act needs to be amended. Therefore, this type of change requires further discussions.

- Labeling Standards for Genetically-Modified Foods, Etc. addressed herein is a revised version made to incorporate and enforce (on February 4, 2017) the amendments of the laws (Article 12-2 of the Food Sanitation Act and Article 17-2 of the Health Functional Foods Act) that passed the National Assembly on December 31, 2015.
  - Part of the provisions under Article 12-2 of the Food Sanitation Act was changed from “major raw materials whose genetically-modified DNA (or protein) remains in the finished product” to “raw materials.” This change has been incorporated in this Notification.

- Under the current circumstances, it is desirable to implement the amended Food Sanitation Act first (February 4, 2017) and then decide on whether the scope of labeling should be extended after a social consensus is reached through sufficient discussions with stakeholders including consumer groups, academic circles and the industry.

4. Why is the Non-GMO labeling restricted to food subject to the GM food labeling requirements, such as soybean and maize?

- If a Non-GMO labeling is put on rice, apples, bananas, oranges, etc. that have originally not been developed or approved as genetically-modified foods;
  - Consumers may mistake an agricultural product or processed food thereof that does not have a Non-GMO labeling on it for a genetically-modified food or confuse such a product or food with a genetically-modified food. This is why such a food is not allowed to have the labeling*
  - Foods subject to GM food labeling: Genetically-modified agricultural products (soybean, maize, cotton, canola, sugar beet and alfalfa) and processed foods thereof that have passed a food-safety assessment in Korea and subsequently have been approved for import into Korea
  - Considering Korea’s high dependence on imported agricultural products, imported products may benefit
more than domestic products. In addition to this, it will entail a monetary burden if labeling is required even for products for which it is a matter of fact that they are not genetically modified.

<Non-GMO Labeling Allowed by Major Countries>

<table>
<thead>
<tr>
<th></th>
<th>Korea</th>
<th>Japan</th>
<th>United States</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-GMO labeling allowed or not</strong></td>
<td>Allowed only for foods tested for safety and approved as food (6 foods)</td>
<td>Same as left (8 foods)</td>
<td>No regulations available on labeling genetically-modified foods</td>
<td>No regulations * Currently, there are no regulations harmonized at the EU level.</td>
</tr>
<tr>
<td><strong>Non-GMO labeling method</strong></td>
<td>&quot;Non-GMO Food (in Korean)&quot;, &quot;GMO-Free Food (in Korean)&quot;, &quot;Non-GMO&quot;, &quot;GMO-Free&quot;</td>
<td>For example, “what is not genetically-modified has been segregated”</td>
<td>Guidance: Non-GMO labeling is inappropriate for foods to which genetically-modified food has no relevance.</td>
<td></td>
</tr>
</tbody>
</table>

5 Why is adventitious presence not tolerated for Non-GMO labeling?

- Adventitious presence refers to the proportion of genetically-modified agricultural products that can be mixed inevitably in an agricultural product in the process of cultivating and distributing the agricultural product concerned. There is no need for tolerating adventitious presence for agricultural products produced in Korea because there are no genetically-modified crops cultivated or grown in Korea.

- Even for imported products, it is considered desirable to label a product as Non-GMO only if it is proven that the product concerned does not have any traces of genetically-modified agricultural products at all.

- We will improve the Labeling System through continuous discussions in the future.

<Reference> Threshold levels for adventitious presence in Non-GMO Labeling

<table>
<thead>
<tr>
<th>Adventitious presence in Non-GMO Labeling</th>
<th>Korea</th>
<th>Japan</th>
<th>U.S.</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0%</td>
<td>5%</td>
<td>No regulations available</td>
<td>No harmonized regulations in force. But tolerance levels vary with countries depending on their internal circumstances. * France (0.1%), Germany (allows the use of a label indicating “No Genetic Engineering,” not “Non-GMO”)</td>
</tr>
</tbody>
</table>

6 How are foods subject to labeling determined?
Foods subject to GM food labeling are selected from foods that can be imported, distributed and sold in Korea.

- For a food to be imported, distributed and sold in Korea, it should go through a food-safety assessment and obtain approval pursuant to Article 18 of the Food Sanitation Act.

- So far, soybean, cotton, maize, canola, sugar beet and alfalfa have been approved as food in Korea. These six agricultural products and foods that contain any of them are subject to the GM food labeling requirements.

Why are “food service providers” not included in the scope of persons responsible for labeling?

- Crops imported as genetically-modified agricultural products (mostly soybean and maize) are processed into cooking oils, sugars, etc. Therefore, these agricultural products themselves are not distributed for sale to consumers.

- Also, even in cases where they are distributed, ingredients used by food service providers tend to be different every day, making it difficult to check them every time.

- Therefore, it is considered not desirable to implement the Labeling System on food service providers for genetically-modified agricultural products that are not sold as genetically-modified agricultural products.

Why is the threshold level for adventitious presence for genetically-modified agricultural products not lowered from the current 3% to the European level of 0.9%?

- Different countries apply different threshold levels* depending on their production conditions for agricultural products and their self-sufficiency rates.
  - Europe: 0.9%, Japan: 5%, Taiwan and Korea: 3%, Australia and New Zealand: 1%, U.S.: Not defined

- A decision on lowering the adventitious presence level requires close examination on self-sufficiency rates of domestic agricultural products, secured import quantities of non-GMO agricultural products, comparison between consumer benefits, and economic effectiveness and threshold levels of other countries, among other things.

- Therefore, if a social consensus is formed through public hearings involving the National Assembly, the industry, consumers and other stakeholders or through "The GM-foods Labeling scheme Committee", we will proceed to implement the agreement accordingly.

Foods Subject to GM food Labeling Requirements
Reasons for excluding processing aids, excipients, etc. from ingredients subject to labeling requirements and methods of managing them

- Since foods subject to GM food labeling requirements have been extended from “major ingredients” to “all ingredients,” it is considered unreasonable to label substances that were used temporarily or in trace amounts during the food manufacturing process. This is why substances used for such purposes as processing aid, excipient, diluent or stabilizer have been excluded from the scope of ingredients subject to the labeling requirements.

- Processing aids refer to substances used intentionally in the manufacturing and processing of food to achieve a certain technical purpose. For example, an enzyme made from a genetically-modified microorganism falls under this category.

- An excipient (substance added to ensure uniformity in the composition of food), diluent (substance added to lower the concentration without changing the physicochemical attributes of food) or stabilizer (substance added to prevent physicochemical change in food) is a substance put in very small amounts into a food inevitably to form an ingredient (certain component or flavor, etc.). Examples include substances used for the purpose of stabilizing the flavor of on the air, for example, apple flavor.

- In cases where a substance is used as an excipient, diluent or stabilizer, documents* from the manufacturer proving the purpose of the substance should be provided
  - Product information (product name, etc.), the use (purpose) of the ingredient subject to the labeling requirements, etc. should be available in the document.

Foods exempt from labeling as they are impossible to test, such as cooking oils, sugars, etc.

- Cooking oils, sugars, etc., which are considered impossible to test as there remains no genetically-modified DNA (or protein) in them after the end of a high-degree refining process including heat treatment, fermentation, extraction and filtering are excluded from the GM food labeling obligations.

- Foods exempt from GM food labeling include “cooking oils, sugars (glucose, fructose, starch syrup, sugar syrup, oligosaccharides), soy sauce, modified starch, and alcoholic beverages (beer, whiskey, brandy, liqueur, distilled spirits, other alcoholic beverages, etc.)

- As for d-α-tocopherol, you should have documentary evidence from the manufacturer, proving that it was derived from edible plant oil.

- As for soybean lecithin, you should have a certificate* from the manufacturer, if it was not used as a stabilizer, etc. and it is impossible to test for traces of a GM ingredient.
  - e.g., Manufacturer’s Inspection Certificate, Product Specifications showing purity, etc.
Is a food that uses soybean or maize in very small amounts as an ingredient subject to GM food labeling?

- It is subject to the labeling requirements. If soybean or maize is used as an excipient, diluent or stabilizer, it is not subject to the GM food labeling requirements.

Regarding Required Documents

In addition to Identity Preservation Certificate and Government Certificate, Inspection Certificate has also been accepted as a document for labeling exemption. Why is it deleted from the Amended Notification?

- Until now, documents accepted for exemption from the GM food labeling requirements included “Identity Preservation Certificate,” “Government Certificate” and “Inspection Certificate.”

  o To administer the GM foods labeling scheme more stringently, the provisions have been strengthened to allow exemption from labeling obligations only if “Identity Preservation Certificate” or “Government Certificate” has been obtained. If either of the certificates is not available or if it is not possible to verify the presence of a genetically-modified element, the food concerned should be labeled as “genetically-modified food” or “possibly contains (product name).”*

  ➢ Labeling shall be done using ink, seal or stamp, or it shall be done on a sticker or label sheet. Label information shall be placed distinctively in 12-point or bigger font, using a color clearly distinguishable from the background color.

- In the case of processed foods, however, manufacturers may issue a certificate to the effect that the food concerned has been manufactured using ingredients segregated and handled separately from any genetically-modified foods, etc. This is intended to impose on manufacturers the responsibility for proving the identity preservation of their own products. In cases where such a manufacturer-issued certificate is in possession, that certificate can be considered as Identity Preservation Certificate.

  o In such cases, if a genetically-modified DNA (or protein) is detected as a result of a customs or distribution inspection, documentary evidence will be requested from the manufacturer concerned and verified. The food concerned will be checked for the use of any genetically-modified ingredient or any adventitious presence through overseas inspection, etc., if necessary. An administrative disposition, etc. shall be imposed depending on the results.
13. Why is the Notification enforced immediately without a grace period?

- The expansion from top-five ingredients (top-five ingredients used the most) to all ingredients was determined by the amendments to the Food Sanitation Act on February 3, 2016. This law already assigned a grace period of one year when it stated that the amendments shall be enforced on February 4, 2017.

14. Documents required to exempt products manufactured and processed in Korea from GM food labeling

- If a food is exempt from GM food labeling obligations at the time of import, relevant documents will be submitted to the Government. If a domestic manufacturer wants not to label its own products as GM food, they are required to be equipped with the same documents (copies acceptable) required at the import stage.

15. Where should a sticker or other GM food labels be placed?

- GM food labeling should be done in 12-point or bigger font on the principal display panel or in parentheses right next to the name of ingredients. In inevitable cases, however, it may be done in 12-point or bigger font on a panel that is easy for consumers to recognize, using a color clearly distinguishable from the background color.

16. Cases where one product contains more than one ingredient subject to GM food labeling requirements

- You can label the product as “possibly contains genetically-modified maize” or “possibly contains genetically-modified soybean and genetically-modified maize” on its principal display panel.
Appendix III Self Declaration Sample

Sample of Notarized Self Declaration for Non-GMO Processed Food Products

[DATE]

To: [X] Customer [Exporter]

[Address], Korea [Address], USA

To Whom It May Concern:

I hereby certify that the following product(s) [product name(s)] is (are) made by [company name] at its manufacturing facility in [city, state] using [name of ingredient] sourced from non-GM varieties with identity preserved (IP) systems. The crop(s) for [name of ingredient] were grown and managed with appropriate agricultural practices to maintain the integrity of the non-GM varieties from seed purchasing to manufacturing. The [name of ingredient(s)] supplier certifies that these ingredients are sourced from IP, non-GM varieties. Our manufacturing operation segregates this [name of ingredient(s)] to maintain its integrity.

This certificate covers the period between [date] and [date]. [List name of products as per attached invoice(s) [number(s)] and other identifying information considered relevant by the certifier].

I certify that the information submitted above is true and the above product complies with the Korean Government requirements that the level of accidental mixing of GM varieties in the raw ingredient used in the product is below the 3-percent threshold. Full documentation of identity preservation is available upon request after notification to our company of the GM ingredient(s) that have been detected in our product(s).

Sincerely,

[Name]
[Title]
[Company name]

State of [Name]
[City]

Subscribed and sworn to before me this [day] of [month, year]
[Expiration Date of the Commission]
[Signature of Notary Public] [SEAL]