NBFDS
What Non-GMO Project Participants Need to Know
Introduction

The National Bioengineered Food Disclosure Standard (NBFDS) is a federal rule that was published by the USDA Agricultural Marketing Service (AMS) in 2018. It requires some food manufacturers to place a “bioengineered disclosure” on some food products that are made with (or that may be made with) genetically modified ingredients.

The NBFDS uses a very narrow definition of “bioengineered,” which exempts many ingredients that are derived from biotechnology. This rule will allow many of the most pervasive GMOs to go unlabeled. Non-GMO Project Verified remains the most technically rigorous and the most trusted label for GMO avoidance; the consumers who care about true ingredient transparency will continue to look for the Non-GMO Project Verified seal.

It’s important to note that there are significant conceptual differences between the NBFDS and the Non-GMO Project Standard; the two standards do not align perfectly.

<table>
<thead>
<tr>
<th>NON-GMO PROJECT STANDARD</th>
<th>NBFDS</th>
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<tbody>
<tr>
<td><strong>Avoidance label (negative claim)</strong></td>
<td><strong>Presence label (positive disclosure)</strong></td>
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<tr>
<td>Process-based</td>
<td>Product-based</td>
</tr>
<tr>
<td>High-Risk List: a list of organisms with widely commercially-available GM counterparts</td>
<td>List of Bioengineered Foods: a list of specific GMOs</td>
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<tr>
<td>The origin of an input does not change its action threshold. The action threshold is 0.9% for all human foods.</td>
<td>The origin of an input determines the amount of allowable BE presence. This threshold can be as high as 5% per ingredient.</td>
</tr>
<tr>
<td>Detectability of modified genetic material does not impact GMO status</td>
<td>Detectability of modified genetic material impacts “bioengineered” status</td>
</tr>
<tr>
<td>Requires testing of major testable high-risk inputs</td>
<td>No mandatory testing</td>
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To address these incongruities and help participants prepare to comply with the NBFDS, the Non-GMO Project Standard made certain requirements even more rigorous in Version 15. This guide is meant to help participants understand what those changes to the Non-GMO Project Standard are and what they may need to know about the NBFDS. It is not an exhaustive guide to NBFDS compliance. For specific questions about the NBFDS or your products’ compliance with the NBFDS, please contact the USDA AMS.
What Participants Need to Know about the NBFDS

**COMPLIANCE DEADLINES**

**APPLICABILITY**
The NBFDS does not apply to all categories of products that the Non-GMO Project verifies.

*Examples of products the NBFDS applies to:*
Human food, chewing gum, vitamins and supplements, and some wine and beer.

*Examples of products the NBFDS does not apply to:*
Meat, eggs, multi-ingredient food with meat or egg as the first ingredient, prepared food, pet food, animal feed, distilled spirits, some wine and beer, body care products, cosmetics, other non-food items, and Certified USDA Organic foods.

Applicability rules are very complicated, especially for products that contain substantial amounts of meat or eggs. Please review NBFDS sections B and C under Section II: Applicability for full details. Please note, the Non-GMO Project cannot definitively determine whether the NBFDS will apply to or require a BE disclosure on specific products. For specific questions about your products’ compliance with the NBFDS, please contact the USDA AMS.

While Non-GMO Project Verified products are not automatically exempt from NBFDS disclosure, the Non-GMO Project is confident that Verified products will meet and exceed the requirements for compliance with the NBFDS.

The Project has worked closely with the AMS in order to understand and minimize any impact to our program. These extensive conversations affirm the Non-GMO Project’s position that documentation related to Non-GMO Project Product Verification will fulfill the necessary requirements to avoid disclosure. Per the USDA AMS, Non-GMO Project participants are not expected to incur costs in association with the NBFDS.
Detectable Modified Genetic Material

The NBFDS only requires a disclosure for foods that contain detectable modified genetic material. Many products of new genetic engineering techniques may not require a disclosure because they are not currently detectable.

- **Genetic material (e.g., DNA)** is found in the cells of all living things.

- **Modified genetic material** has been genetically modified using what the Non-GMO Project calls biotechnology or what the USDA calls bioengineering.

- **Detectable modified genetic material** is genetic material that was modified and can be tested to reveal the presence of that modification via a commercially available GMO test.

Details on detectability can be found in the NBFDS § 66.9.

LIST OF BIOENGINEERED FOODS

The NBFDS includes a List of Bioengineered Foods, which is analogous to the Non-GMO Project High-Risk List. These foods are known to the USDA AMS to be available in a bioengineered variety. Participants who use these foods in their products need to ensure that they are obtaining them from non-GMO sources and should be able to provide documentation of their non-GMO status. This list is not exhaustive.

**List of Bioengineered Foods**

Alfalfa, apple (ArcticTM varieties), canola, corn, cotton, eggplant (BARI Bt Begun varieties), papaya (ringspot virus-resistant varieties), pineapple (pink flesh), potato, salmon (AquAdvantage®), soybean, squash (summer), and sugarbeet.

Apples, eggplant, and pineapple are present on the List of Bioengineered Foods but are not currently on the Non-GMO Project High-Risk List because they do not meet the threshold for being widely commercially available. Non-GMO Project participants must be sourcing non-GMO apples, eggplant, and pineapple before 2022 in order to remain compliant. The Non-GMO Project encourages participants to begin preparing for compliance now.
Conceptual Differences Between the Non-GMO Project Standard and the NBFDS

DETECTABLE MODIFIED GENETIC MATERIAL
The NBFDS deals in terms of labeling foods containing detectable modified genetic material. It is primarily concerned with finished products rather than the processes and inputs used to create them. For example, under this rule, a cooking oil made entirely from GM canola is not considered “bioengineered,” and is therefore exempt from labeling simply because the processed oil does not contain detectable modified genetic material.

The Non-GMO Project deals in terms of avoiding products of biotechnology regardless of whether they are detectable—or even present—in the finished product. The Standard is both testing and process-oriented; it demands the examination of ingredients, other inputs, and even the processes that go into making products.

The Non-GMO Project Standard does not allow manufacturers to begin with a product of biotechnology (a GMO) and process it into something that is not considered a GMO. The NBFDS, on the other hand, does allow manufacturers to begin with a bioengineered food and process it into something that the NBFDS no longer considers a bioengineered food so long as a “validated refinement process” is used.

Allowing manufacturers to hide GMOs via processing fails the consumers who are looking for ingredient transparency. GMOs are especially prevalent in processed foods; an estimated 70 percent of which contain GMOs. The NBFDS makes it impossible for shoppers to tell whether a product lacks a BE disclosure because it is truly derived from non-GMO sources or because it has been heavily refined. This means the NBFDS does little to provide consumers with meaningful information and does nothing to help brands earn consumer trust. People who care about ingredient transparency will continue to choose Non-GMO Project Verified when they shop.

ACTION THRESHOLDS
Both the Non-GMO Project Standard and the NBFDS include some provisions for inadvertent or unavoidable GMO presence. The Non-GMO Project Standard accounts for these using an action threshold and micro exemptions. The NBFDS relies on intent to determine the threshold for permissible GMO content, which can be as high as five percent per ingredient.

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<tr>
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<td>Unintentional or unavoidable use</td>
<td>0.9% for each ingredient and for the whole product overall.</td>
<td>5% per ingredient</td>
</tr>
<tr>
<td>Avoidable use</td>
<td></td>
<td>No allowance</td>
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Non-GMO Project
Changes to the Non-GMO Project Standard Version 15

The Non-GMO Project made changes to Version 15 of the Standard in order to help participants demonstrate compliance with the NBFDS more easily. These changes increase the rigor of the Standard by adding new high-risk crops, tightening the rules regarding micro exemptions, and clarifying expectations for sourcing non-GMO inputs.

ADDITIONAL HIGH-RISK CROPS
The Non-GMO Project’s High-Risk List will include apple, eggplant, and pineapple by 2022. While the Non-GMO Project does not consider any of these crops or their derivatives to be widely commercially available (which is why they have not been on our High-Risk List before now), they will be proactively added in order to better align with the USDA’s List of Bioengineered Foods.

Participants who use these crops and their derivatives in their products should be preparing for these crops to become high-risk inputs, which means they should be intentionally sourcing them from non-GMO sources. This means that participants or their suppliers may be asked to sign affidavits attesting to the non-GMO status of these non-testable inputs and/or submit additional documentation to demonstrate compliance. Participants must be sourcing non-GMO apples, eggplant, and pineapple before 2022 in order to remain compliant.
MICRO EXEMPTIONS
The Non-GMO Project Standard was designed to encourage as much change as possible at the most impactful points in the supply chain. This requires a balance of meaningfulness and achievability. The Non-GMO Project Standard has always included provisions for micro exemptions because they help the Standard maintain that balance. The rules that govern those micro exemptions became more rigorous in Version 15.

All micro ingredients will now be examined to some degree even when they are not subject to a full evaluation. Participants may not micro exempt anything that is a “Bioengineered Food” according to the USDA’s definition; this includes microorganisms and enzymes. Participants may consult a TA to determine whether a given micro ingredient is a “Bioengineered Food” according to the USDA’s definition. Documents demonstrating that an input was intentionally sourced non-GMO and/or subjected to a validated refinement process may make some inputs less likely to be considered a “Bioengineered Food.” Participants are advised to retain such documents and consult their TA.

SOURCING NON-GMO INPUTS
Participants must source major, minor, and most micro high-risk inputs from non-GMO sources. This has always been true, but to avoid any doubt or confusion, the Non-GMO Project Standard now says so explicitly. When participants are sourcing an input or ingredient that is on the Bioengineered Food List, it must be sourced non-GMO.

Supply chain participants are advised to leverage this requirement in order to secure downstream clients. Advertising the Verified status of products and supplying a Certificate of Verification will help attract clients who seek to demonstrate a non-GMO attribute. These clients will be looking to source ingredients that comply with the Non-GMO Project Standard in order to avoid triggering disclosure under the NBFDS.

ACTUAL KNOWLEDGE
Regardless of all other rules in the Standard, if a participant knows that an input or ingredient not on the USDA’s List of Bioengineered Foods contains detectable modified genetic material, it may not be used in a Non-GMO Project Verified product regardless of amount. Micro exemptions will not be granted to such an input or ingredient. This may impact certain participants who currently micro exempt enzymes or yeasts in their products.
Frequently Asked Questions

HOW DOES NON-GMO PROJECT VERIFICATION HELP PRODUCTS COMPLY WITH THE NBFDS?

The Non-GMO Project Standard is intended to meet and exceed the requirements to avoid a “BE” disclosure under the NBFDS. Non-GMO Project participants subject their products to a rigorous evaluation and generate the test results and other documents they may need in order to support compliance with the NBFDS.

Individual brands are responsible for submitting documentation to the AMS if they are audited. Documentation related to Non-GMO Project product verification may assist brands in fulfilling the necessary requirements to avoid disclosure.

HOW IS THE NBFDS PERCEIVED BY THE PUBLIC?

Consumer groups have largely rejected the rule as insufficiently meaningful and transparent. Commonly cited concerns include the narrow definition of bioengineered food, the allowance of inaccessible disclosure methods (such as QR codes), and the use of opaque terminology.

According to Michael Hansen, Senior Scientist at Consumer Reports, “The overwhelming majority of consumers want genetically engineered food to be clearly labeled, but this rule fails to give consumers the information they deserve. Consumers can, however, rely on labels such as ‘Non-GMO Project Verified’ which will tell them if a food does not contain GMO ingredients.”

WILL PRODUCTS OF NEW GENETIC ENGINEERING TECHNIQUES SUCH AS CRISPR OR TALEN REQUIRE A DISCLOSURE?

The NBFDS limits its definition of bioengineering to recombinant techniques that result in detectable modified material in the finished food. It appears unlikely that most products of techniques like gene editing would be subject to disclosure under NBFDS, but the final rule is not explicitly clear.
IS THERE AN EXEMPTION FOR MY SMALL FOOD MANUFACTURING BUSINESS?

Very small food manufacturers, defined as those with annual receipts of less than $2.5 million, are exempt from the NBFDS. Such manufacturers may choose to make a voluntary disclosure if desired.

WHAT IS THE PENALTY FOR FAILING TO COMPLY WITH THE NBFDS?

The NBFDS does not provide for civil penalties such as fines. If a problem is discovered during an audit, regulated entities have the opportunity to have a hearing. The AMS can publish the results of an audit after such a hearing.

HOW DOES THE NBFDS IMPACT SUPPLY CHAIN PARTICIPANTS?

The NBFDS applies to food manufacturers, importers, and any other entity that labels food for retail sale. Some supply chain participants will be subject to the NBFDS; Non-GMO Project verification may help those participants demonstrate their non-GMO status to clients.

Supply chain participants should note that their customers will be looking to source additional inputs from non-GMO sources as they prepare for NBFDS compliance. Advertising their Non-GMO Project Verified status and making Certificates of Verification available may help drive business.

IF ONE OF MY PRODUCTS HAS A “BE” DISCLOSURE AND ANOTHER IS NON-GMO PROJECT VERIFIED, CAN I ADVERTISE THEM TOGETHER?

This is currently permitted as long as the Non-GMO Project Verified mark is only used in association with Verified products and/or the advertisement contains a disclaimer as to which product(s) are Non-GMO Project Verified. As a reminder, all marketing materials utilizing our trademarks must be sent to our marketing department for review and approval. If the advertisement needs to be altered in any way, our marketing team will let you know.

The information contained in this guide is provided for general informational purposes only, and should not be construed as legal advice on any subject matter. You should not act or refrain from acting on the basis of any content included in this guide without seeking legal or other professional advice. For specific questions about the NBFDS or your products’ compliance with the NBFDS, please contact USDA AMS.