Non-GMO Project Verification Guide
Introduction

ABOUT THE NON-GMO PROJECT
The Non-GMO Project believes everyone has the right to know what is in their food. As a mission-driven nonprofit organization, the Non-GMO Project is committed to preserving and building sources of non-GMO products, educating consumers, and providing Verified non-GMO choices. We offer North America’s most trusted third-party verification program for non-GMO food and products.

HISTORY
The Non-GMO Project was created in 2007 by two grocery stores, The Natural Grocery Company in Berkeley, California and The Big Carrot Natural Food Market in Toronto, Ontario—both of which had spent the preceding years working diligently to provide their customers with more information about GMOs. The Natural Grocery Company had rallied 161 stores in a letter-writing campaign asking manufacturers about the GMO status of their products. The Big Carrot Natural Food Market developed their own non-GMO purchasing policy after more than a year of research. They combined their efforts into the Non-GMO Project with the goal of creating a standardized definition for non-GMO products in the North American food industry.

THE NON-GMO PROJECT PVP
The Product Verification Program (PVP) evaluates products for compliance with the Non-GMO Project Standard. The Standard is a consensus-based document crafted with insight from a number of industry experts, reflecting a dynamic range of perspectives. This collaboration with engaged stakeholder groups makes the Non-GMO Project Verified label a meaningful and achievable way for suppliers and brands to show their commitment to transparent non-GMO choices in the marketplace.
Why Choose Non-GMO Project Verified?

CONSUMERS SEEK NON-GMO PRODUCTS

• Nearly half of consumers seek to avoid GMOs.¹

• As of 2018, 36 percent of consumers said they were buying more non-GMO products than they did the year previously.²

IN A CLASS OF ITS OWN

• Non-GMO Project Verified is rated “excellent”—the highest available rating—by Consumer Reports.³

RETAILERS SEEK NON-GMO PRODUCTS

• More than 14,000 retail stores in North America have signed on to the Non-GMO Project’s retailer program.

• Whole Foods Market compliance: WFM will require food products making a non-GMO claim to be third-party verified by 2022.⁴

• As the 2022 deadline for National Bioengineered Food Disclosure Standard compliance draws nearer, American retailers are seeking third-party assurance that non-GMO products are truly non-GMO.

THE NON-GMO MARKET IS GROWING

• Consumer demand for Non-GMO Project Verified products is still increasing at nine percent per year.

• The number of Non-GMO Project Verified products now exceeds 60,000. Sales topped $30 billion for the first time in 2019.

• Forty-seven percent of Non-GMO Project Verified products are also certified USDA Organic.
Non-GMO Project Basics

WHAT IS A GMO?
A genetically modified organism (GMO) is an organism in which the genetic material has been changed through biotechnology in a way that does not occur naturally by multiplication and/or natural recombination; cloned animals are included within this definition.

GMOs are changed through biotechnology, not through natural selection or traditional breeding methods.

BIOTECHNOLOGY IS THE APPLICATION OF:
a. in vitro nucleic acid techniques, including recombinant deoxyribonucleic acid (DNA) and the direct injection of nucleic acid into cells or organelles; or
b. Fusion of cells beyond the taxonomic family, that overcame natural physiological, reproductive, or recombination barriers and that are not techniques used in traditional breeding and selection.

Biotechnology means artificially altering DNA in a context where only the genetic material of an organism is altered or artificially merging DNA from different species that would not reproduce on their own. Biotechnology includes new genetic engineering techniques such as CRISPR and RNAi; all products of these and similar new breeding techniques are GMOs.

INGREDIENT CLASSIFICATION
The Non-GMO Project Standard classifies inputs and ingredients according to three attributes: weight percentage represented in or present in the product (weight percentage), likelihood that they are derived from a GMO (risk level), and whether a testable precursor exists at any point in the supply chain (testability). These important classifications will determine the type and rigor of evaluation for each input and ingredient, which will impact the cost and length of the evaluation process.
MAJOR, MINOR, AND MICRO INGREDIENTS
Ingredients are classified by their weight percentage as present in the product.

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<th>Weight Percentage Classifications</th>
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<td>Major Ingredients</td>
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<td>Minor Ingredients</td>
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<td>Micro Ingredients</td>
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Weight percentages impact the depth of evaluation of each ingredient; the more of an ingredient is used, the more intensely it will be examined. For example, major ingredients require testing or affidavits when they are high-risk. Minor ingredients may require affidavits. Micro ingredients may require affidavits or be eligible for micro exemptions in some cases.

RISK LEVELS
The Technical Administrator will classify inputs and ingredients to products by how likely they are to be (or be derived from) GMOs. The Non-GMO Project Standard defines five risk levels:

**Verified-status:** Products that have been verified under the PVP at wholesale or retail and are purchased for use as inputs or ingredients to different products enrolled in the PVP.

**High-risk:** Organisms and the inputs and ingredients derived from them for which GMO counterparts are widely commercially available.

**Monitored-risk:** Organisms and the inputs and ingredients derived from them for which GMO counterparts are in the research and development stages, which have been developed but are not widely commercially available, or for which known GMO contamination has occurred.
**Low-risk:** Organisms and the inputs and ingredients derived from them that are not classified as monitored-risk or high-risk.

**Non-risk:** Inputs and ingredients that are not derived from biological organisms and are not, therefore, susceptible to genetic modification.

**HIGH RISK INPUTS AND INGREDIENTS**

High-risk inputs and ingredients are subject to the highest level of scrutiny during a Non-GMO Project product evaluation because they are most likely to be derived from GMOs. Products that use high-risk inputs or ingredients will require additional evaluation and are likely to require laboratory testing. A Technical Administrator will determine if testing is necessary.

**High-Risk Inputs**

Alfalfa, canola, corn, cotton, papaya, soy, sugar beets, zucchini and yellow summer squash, potato, microorganisms and enzymes, animal-derived products.

Enzymes and microorganisms are high-risk because they are commonly genetically modified. In many cases, a yeast, bacterium, or alga is genetically modified so that it produces a compound that can be used.

Animal-derived inputs and ingredients, including those from apiculture and aquaculture products, are high-risk due to the prevalence of GMOs in feed and forage. When used as minor ingredients, major ingredients, or evaluated as products, animal-derived inputs require traceability and evaluation all the way back to the feed. The Non-GMO Project Standard requires that animals be fed a compliant, non-GMO diet.

For more information on animal-derived inputs and ingredients, please review the Animal-Derived Inputs: FAQ guide.
TESTABILITY

Some inputs and ingredients are testable: they have a testable precursor somewhere in their supply chain and the required test is available. For example, the corn used to make a cornstarch can be tested with commercially available tests before it is processed.

Other inputs and ingredients are non-testable: there is no testable precursor in the supply chain or the required tests are not commercially available. For example, it is not currently possible to test for GM potatoes due to the lack of available testing methodologies.

Testable high-risk inputs and ingredients require testing when they are classified as majors. Non-testable high-risk inputs and ingredients may require signed affidavits when they are major ingredients.

Some inputs can be both testable and non-testable. Beginning January 1, 2022, apple, eggplant, and pineapple must also be compliant as non-testable high-risk crops.

<table>
<thead>
<tr>
<th>Testable Inputs</th>
<th>Non-Testable Inputs</th>
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<tr>
<td>Alfalfa, canola, corn, cotton, papaya, soy, sugar beets, zucchini and yellow summer squash, and animal-derived inputs and ingredients.</td>
<td>Canola, soy, potato, microorganisms and enzymes, animal-derived inputs and ingredients, and microorganism and enzyme inputs and ingredients.</td>
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ELIGIBILITY
The following types of wholesale or retail goods are eligible for verification:

- Seed and vegetative propagation materials
- Wholesale or retail goods for human or pet use that are either ingested or topically applied over-the-counter (OTC) drugs and homeopathic remedies
- Wholesale or retail goods for human or pet use that are not ingested or topically applied
- Livestock, poultry, bee, and seafood feed and supplements

The following types of goods are ineligible for verification:

- Prohibited inputs and ingredients listed in the Standard
- Goods that are not sold in the US or Canada (regardless of where they are grown or produced)
- Certain medicines and other medical goods
- Live animals
- Synthetic pesticides
- Goods that are composed entirely of non-risk inputs and ingredients and are also part of a non-risk category
Get Verified!

**STEP ONE: CHOOSE A TECHNICAL ADMINISTRATOR**

The Non-GMO Project’s integrity is reinforced by the credibility of our Standard and the expertise of third-party Technical Administrators (TAs). While the Non-GMO Project sets and controls the Standard, four independent TAs evaluate products to determine whether they comply with the Standard. Each TA has a unique pricing model and selection of additional services.

The Project encourages participants to research each TA and contact them directly to find the one that best suits their needs. It is possible to work with multiple TAs so long as different products are submitted to each. Some participants choose to have different product lines evaluated by different TAs.

Learn more about each TA and download their outline of fees at nongmoproject.org/ta.

**Where Food Comes From**
wherefoodcomesfrom.com  (866) 395-5883

**FoodChain ID**
foodchainid.com  (641) 469-6181

**SCS Global Services**
scsglobalservices.com  (800) 326-3228 x6822

**NSF International**
sf.com  (619) 372-6309
STEP TWO: SIGN THE LICENSE AGREEMENT
Participants must sign a license agreement in order to participate in the PVP. The license agreement covers important elements of participation in the program, such as quality assurance requirements, confidentiality, insurance, and indemnification.

STEP THREE: COMPLETE A PRODUCT EVALUATION
Technical Administrators look at a product’s complete formulation, including inputs and processing aids that are not present on the final ingredient panel or supplement facts panel. During this evaluation, TAs will request documentation and/or test results to demonstrate that these inputs are not GMOs and are not derived from GMOs.

Every product is unique, so no two product evaluations will be exactly the same. Time to verification depends on the TA, the complexity of the product formulation, and how quickly the participant can provide the necessary documentation. On average, the process takes three to six months.

Most participants will benefit from gathering the following documents and materials before they begin the evaluation process with a TA:

**Document Checklist**
- Product formulation
- Specification sheets for each input
- Source and supplier information for each input
- Certificates of Verification for any Verified inputs
- Organic, IP, or other certifications as applicable
- Manufacturing facility information
- Sampling and testing plan (for products with high-risk inputs)
- Product label and/or packaging
Technical Administrators manage all of the fees associated with verification. Of the fees that are charged, the Project receives a $70 per-product fee. Costs vary depending on which TA is selected and how many products are being verified. Single-input products and products made without high-risk inputs are the least expensive, while multi-input products and products made with high-risk ingredients tend to incur more expenses.

**TESTING**

Major testable high-risk inputs usually require GMO testing in order to be compliant with the Non-GMO Project Standard. Testing may need to be performed on source material, such as the soy used to produce soy lecithin rather than the lecithin itself. When testing is required, participants must develop a sampling and testing plan and have it approved by a TA. Testing must be conducted by an approved laboratory.

Please visit nongmoproject.org/labs to view a current list of approved laboratories.

**AFFIDAVITS**

Major non-testable high-risk inputs require a signed affidavit in lieu of testing. TAs provide standard affidavits for non-testable inputs; these affidavits must be signed by someone who has sufficient knowledge of the supply chain to do so.

In some instances, an affidavit based on country of origin may be used to demonstrate compliance on a case-by-case basis when it can be sufficiently demonstrated that a high-risk input has a consistently low risk of GMO presence. Please consult a TA for more information.

**ORGANIC CERTIFICATIONS AND OTHER EQUIVALENCIES**

The Non-GMO Project Standard is designed to honor organic certification and build on it by requiring testing of major testable high-risk inputs at critical control points. Submitting organic certificates for inputs may reduce the work required to attain verification, but does not automatically replace testing requirements.
While sourcing inputs from countries that do not grow or import GMOs may streamline the verification process, the Non-GMO Project does not offer any formal equivalency with EU guidelines. Please consult a TA to explore options.

**REQUIREMENTS FOR PROCESSING FACILITIES**

A TA will evaluate facility documents and advise if an on-site inspection is required. Participants must demonstrate that their facilities have standard operating procedures covering traceability of ingredients, segregation and separate storage, and proper clean-outs of shared equipment. A TA will determine whether current protocols meet the requirements of the Standard.

Some participants will need to undergo on-site facility inspections as part of the verification process. At a minimum, producing facilities are required to be inspected annually when parallel processing of the same major high-risk input to a product is occurring. TAs determine when facility inspections are necessary.

**LABEL REVIEW**

Participants must submit a product label to their TA for review as part of the evaluation process. Labels must not make prohibited claims such as “GMO-free” or advertise high-risk inputs that have been micro-exempted. Please review the Non-GMO Project Trademark Use Guide for additional information.
STEP FOUR: PROMOTE YOUR VERIFICATION

Participants receive a helpful suite of marketing materials upon product verification. This includes both the Trademark Use Guide and the Managing the Non-GMO Message Communication Guide, both of which are designed to help participants highlight their commitment to GMO transparency.

The Non-GMO Project is also happy to help participants announce their verification and market Verified products. Upon verification, products become eligible to be listed on the Non-GMO Project websites, making them visible to more than one million site visitors each year. The Project can also post press releases related to verification on its website.

MARKET YOUR VERIFIED PRODUCTS

The Non-GMO Project marketing team is here to help. Resources include:

- Press releases posted on nongmoproject.org
- Optional post-verification reviews of labels and packaging
- Reviews of other marketing materials and advertisements
- Monthly newsletters with non-GMO trends, insights, and additional opportunities
- Opportunities to reach the Non-GMO Project’s audience of 1.2 million social media followers and 14,000 retail locations

PARTNERSHIP OPPORTUNITIES

The Non-GMO Project offers exclusive benefits to brands that have a heightened commitment to supporting the Non-GMO Project’s mission.

Contact verification@nongmoproject.org to learn more about ongoing opportunities and ways to work together to educate consumers.
STEP FIVE: ANNUAL RENEWAL

Verification must be renewed annually; the Technical Administrator will oversee the renewal process and inform the participant of any required documentation or testing. Participants should consult their TA before any change is made if they wish to change a formula, the source of an input, processing methods, or anything else that could be relevant.

The renewal process includes a product review to ensure that products and inputs remain compliant with the Standard. This means reviewing any changes to the product or its processing and confirming the resolution of any non-conformities discovered during the year. If changes to the Standard impact a product’s verification, these issues will be addressed at renewal as well.

Endnotes

2. Ibid.
Get in Touch to Get Started Today!

Schedule a call to talk about verification for your products!
Contact us at:

Verification@nongmoproject.org
(360) 255-7704 x1

Want more details on our Standard and program requirements?
Visit nongmoproject.org/resources.