



VERSION 1.3

The Non-UPF Verified Standard (Version 1.3)

The Non-GMO Project

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# Foreword

Ultraprocessed foods (UPFs) have been the focus of growing scientific research and public concern, with a wide and rapidly expanding body of research linking them to a range of adverse health outcomes, including obesity, metabolic disorders, heart disease, cancer, cognitive decline, anxiety, and depression. But what defines a UPF isn't just what's in it, it's how it's made: the degree of industrial processing, the use of engineered additives, and formulation strategies designed to override natural satiety signals, drive addiction, and distort the structure of real food.

**The Non-UPF Verified Standard offers a clear, evidence based framework rooted in scientific findings and aligned with consumer expectations. It identifies products that avoid the core hallmarks of ultraprocessing, including both engineered additives and industrial processes that degrade food structure and function.** While some emerging policies focus narrowly on specific ingredients, ultraprocessing by definition demands that we evaluate processing itself. The Standard does exactly that—recognizing that how a food is made is just as important as what goes into it. Grounded in current research, consumer interest, and real-world feasibility, it is designed to support innovation without compromising integrity, helping both manufacturers and consumers navigate a food system in urgent need of repair.

Rather than relying on a single definition, the Standard approaches ultraprocessing through two essential dimensions:

- 1. Ingredient Integrity & Formulation**

The Standard restricts ingredients that are either widely recognized as harmful or characteristic of ultraprocessed formulations—especially those used to create hyperpalatable textures and flavors or replace the structure and function of real food. This includes a prohibition on non-nutritive sweeteners and limits on refined added sugar.

- 2. Processing Limits**

Not all processing is equal. The Standard distinguishes between minimal, conditional, and prohibited processing methods, requiring that products be composed primarily of minimally processed ingredients and free from high-impact chemical, structural, thermal, and biological modification. These limits are applied both to individual ingredients and to the product as a whole.

Together, these two dimensions create a practical, rigorous, and achievable pathway for reshaping how food is made and marketed. By protecting what matters most—structural integrity, nourishment, and transparency—the Non-UPF Verified Standard helps identify food that is real, nourishing, and designed with integrity.

# 1 Introduction

The Non-UPF Verified Standard is a practical tool for distinguishing non-ultraprocessed foods in a food system increasingly dominated by highly industrial processes and formulations. Rather than relying on vague health claims or subjective definitions, this Standard provides clear, actionable criteria that evaluate foods based on processing methods and ingredient integrity.

This document defines the scope of the Standard, the classification of processing methods, and the methodology used to assess compliance. It establishes firm limits on industrial processing techniques, ensures ingredient transparency, and sets guardrails against hyperpalatable formulations that distort natural satiety signals. Additionally, it prohibits a range of concerning additives and synthetic ingredients that have been flagged by health experts and regulatory bodies worldwide, and that consumers increasingly identify as markers of ultraprocessing. In this way, the Standard reflects both the emerging science and consumer expectations.

By offering a structured framework, the Non-UPF Verified Standard empowers brands, retailers, and consumers to align with food choices that prioritize ingredient integrity and reduced reliance on industrial processing techniques.

## 2 Purpose

The Non-UPF Verified Standard exists to provide a clear and enforceable framework for identifying foods that avoid excessive industrial processing and certain manufactured additives. It is designed to:

- Set measurable criteria for defining non-ultraprocessed foods based on processing methods, ingredient integrity, and formulation thresholds.
- Eliminate harmful and unnecessary additives by prohibiting certain ingredients under investigation for metabolic dysfunction, gut microbiome disruption, and other health concerns.
- Offer a practical, science-informed tool for food manufacturers, retailers, and consumers to navigate an increasingly complex food landscape.
- Support innovation in food production that prioritizes whole, minimally processed ingredients while maintaining feasibility for real-world application.
- Respond to consumer demand for trusted guidance in navigating a marketplace where ultraprocessed foods are both widespread and poorly understood.

This standard is not intended to evaluate nutrient content claims, overall nutrient adequacy, or dietary suitability; dictate dietary choices; or endorse any specific diet. Instead, it establishes firm guardrails that help preserve food integrity and reduce exposure to processing characteristics associated with adverse health outcomes.

## 3 Scope

The Non-UPF Verified Standard applies to foods intended for human consumption and is designed to evaluate their processing methods, ingredient integrity, and formulation thresholds.

The Standard:

- Defines clear criteria for determining whether a food is non-ultraprocessed, based on how its ingredients are sourced, processed, and combined.
- Classifies processing methods as permissible, conditional, or prohibited, ensuring food integrity is maintained.
- Establishes ingredient restrictions, prohibiting additives and synthetic substances that compromise food quality and health.

The Standard does not:

- Evaluate or endorse specific diets, eating patterns, or nutrient content claims.
- Address the environmental, ethical, or economic aspects of food production.
- Assess claims related to medical, functional, or performance benefits of foods.

By focusing on processing and ingredient compliance, the Non-UPF Verified Standard serves as a foundational tool for improving transparency in the food supply while allowing for ongoing scientific and regulatory advancements.

All criteria within the Standard are normative and mandatory. Compliance with the Standard requires adherence to all applicable requirements across ingredient integrity, processing methods, and whole-product formulation. Partial or selective compliance is not sufficient for verification.

The Standard shall be applied in good faith to uphold both its specific requirements and its overall intent. Reformulation or process changes undertaken for the purpose of meeting the requirements of the Standard are encouraged. However, reformulating products, altering manufacturing processes, or selecting novel ingredients with the primary intent of avoiding or circumventing these requirements or the spirit of the Standard is prohibited.

## 4 Terms and Definitions

**added sugar** – The portion of total sugars in a finished food that must be declared as “added sugars” under FDA nutrition labeling regulations, whether contributed by single-ingredient sweeteners or formed through the combination or concentration of ingredients during processing. Added sugars include free mono- and disaccharides, sugars from syrups and honey, and sugars from concentrated fruit or vegetable juices that provide more sugars than would be expected from the same volume of 100% juice of the same type. (Adapted from US Food and Drug Administration (FDA) regulations on Nutrition Facts labeling [21 CFR §101.9](#)).

**adjusted weight percentage** – The proportion, expressed as a percentage, of the weight of a specific ingredient relative to the total weight of the final food, excluding added water, CO<sub>2</sub>, and salt.

Note: The term “adjusted weight percentage” is defined for the purpose of the Standard and is not used as formal terminology in U.S., Canadian, or Mexican food labeling regulations. It is intended to support consistent and transparent application of the Standard’s processing eligibility criteria.

**biotransformed sweetener** – A sweetener produced through enzymatic, microbial, or chemical transformation of carbohydrates, resulting in compounds that do not occur in meaningful quantities in whole foods and differ structurally from their source material.

**food** – Any substance, whether processed, semi-processed, or raw, which is intended for human consumption, and includes beverages, as well as any substance used in the manufacture, preparation, or treatment of food. This definition does not include cosmetics, tobacco, or substances used only as drugs. (Adapted from Codex Alimentarius, FAO/WHO)

**gum** – A water-soluble or water-dispersible polysaccharide typically sourced from plant exudates, seeds, seaweed, or microbial fermentation that functions as a hydrocolloid to thicken, gel, stabilize, or otherwise modify the physical properties of foods.

**ingredient** – Any material or substance that is a component in the creation of a consumer good and present in said good in either its original or altered form.

**may** – Permissible under the Standard.

**medical food** – A food which is formulated to be consumed or administered enterally under the supervision of a physician and which is intended for the specific dietary management of a disease or condition for which distinctive nutritional requirements, based on recognized scientific principles, are established by medical evaluation. ([21 U.S.C. § 360ee\(b\)\(3\)](#); see also [21 CFR § 101.9\(j\)\(8\).](#))

**minimally processed** – A food product that has undergone minimal alteration from its natural state, using simple mechanical or physical techniques that do not substantially change its original structure or composition. Such techniques include, but are not limited to, washing, cutting, peeling, drying, pasteurization, or freezing.

**moderately processed** – A food product that has undergone processing techniques that involve some level of transformation while maintaining the fundamental characteristics of the food. These techniques include, but are not limited to, fermentation, baking, roasting, curing, dehydration, and smoking.

**non-nutritive sweetener** – A substance having less than 2% of the caloric value of sucrose per equivalent unit of sweetening capacity. ([21 CFR Section 170.3\(o\)\(19\) Definitions](#))

**processing aid** – A substance used during the processing of a food for a technical or functional effect that is either removed, transformed, or present at insignificant levels in the final product and has no technical or functional effect in the finished food.

Note: This definition aligns with criteria described in [21 CFR §101.100\(a\)\(3\)](#), which exempts substances from labeling if they are: (a) removed from the food before final packaging; (b) converted into constituents normally present in the food without significantly increasing those constituents; or (c) present at insignificant levels in the finished food and have no technical or functional effect in that food.

**shall or shall not** – A mandatory requirement under the Standard.

**should or should not** – A non-mandatory recommendation under the Standard.

**synthetic biology (precision fermentation)** – The development of novel, artificial nucleic acid sequences, biological pathways, organisms, or devices or the redesign of existing natural biological systems.

Note: Adapted from [The Non-GMO Project Standard Version 16.1](#) Appendix A – Terms and Definitions: Synthetic Biology.

**total weight percentage** – The proportion, expressed as a percentage, of the weight of a specific ingredient relative to the total weight of the final food, including all ingredients.

Note: The term “total weight percentage” is defined for the purpose of this Standard and is not used as formal terminology in U.S., Canadian, or Mexican food labeling regulations. It is intended to support consistent and transparent application of processing eligibility criteria.

**whole food** – A food that remains in or close to its natural state, meaning it has undergone minimal alteration from its original form. This includes retaining its natural composition, fiber, and essential nutrients without excessive separation, fractionation, recombination, extraction, isolation, purification, significant refinement, enzymatic modification, or artificial texturization. Whole foods are free from added synthetic ingredients, preservatives, and artificial substances, preserving their inherent structure and nutritional value.

## 5 Symbols and Abbreviated Terms

**Table 5-1 – Symbols and Abbreviated Terms Used in This Standard**

| Symbol / Abbreviation | Term                     |
|-----------------------|--------------------------|
| %                     | Percent                  |
| ≥                     | Greater than or equal to |
| ≤                     | Less than or equal to    |
| g                     | Grams                    |
| UPF                   | Ultraprocessed Food      |
| Non-UPF               | Non-Ultraprocessed Food  |

## 6 Standard Criteria and Requirements

The requirements in this section are interdependent and collectively determine whether a product qualifies for verification. All applicable criteria must be met; compliance with one section or requirement does not justify noncompliance in another.

### 6.1 Product Eligibility

#### 6.1.1 Eligible Goods

Goods that meet the definition of food under the Standard and are intended for human consumption, and are not otherwise prohibited from verification under the Standard, are eligible for verification.

## 6.1.2 Ineligible Goods

6.1.2.1 Goods that do not meet the definition of food under the Standard, as well as goods that are not intended for human consumption, are not eligible for verification. This includes, but is not limited to:

6.1.2.1.a Household and industrial products

6.1.2.1.b Body care and cosmetic products

6.1.2.1.c Pharmaceuticals and non-food supplements

6.1.2.1.d Feed, beverages, vitamins, and dietary supplements intended for farm or companion animals

6.1.2.2 Additionally, the following types of goods are not eligible for verification:

6.1.2.2.a Produce

6.1.2.2.b Vitamins and dietary supplements

6.1.2.2.c Controlled substances under U.S. or Canadian law

6.1.2.2.d Alcoholic beverages

6.1.2.2.e Substances restricted as specified in Sections 6.3.3, 6.3.4, and 6.3.5

6.1.2.2.f Medical foods, as defined in Section 4 Terms and Definitions, and products that are functionally equivalent to medical foods

6.1.2.3 Goods for which no ingredients are evaluated for compliance with the Standard are not eligible for verification.

6.1.2.4 Goods making a voluntary or mandatory disclosure under The National Bioengineered Food Disclosure Standard ([7 CFR § 66](#)) are not eligible for verification.

## 6.2 Processing Requirements

### 6.2.1 Processing Classification

6.2.1.1 Food processing methods covered by the Standard shall be classified as either prohibited, conditional, or permissible. Detailed normative classifications and specific requirements are provided in Annex A.

6.2.1.2 Prohibited methods shall not be used at any stage of the finished food product or ingredient production.

6.2.1.3 Conditional methods may be used only if explicitly defined conditions specified within the Standard are fully met.

6.2.1.4 Permissible methods may be used without restriction within the conditions provided. These methods are further classified as:

6.2.1.4.a Minimal processing, which preserves the food's natural structure and integrity.

6.2.1.4.b Moderate processing, which alters the texture, flavor, or shelf life of food while maintaining its fundamental characteristics.

6.2.1.5 Notwithstanding the prohibitions outlined in the Standard, any processing method that is demonstrably essential for ensuring food safety, mitigating potential health hazards, or meeting mandatory regulatory requirements shall be allowed. This exception is applicable only when no viable alternative method exists that can achieve equivalent food safety outcomes, and its use must not compromise the nutritional integrity or overall quality of the final food.

## 6.2.2 Criteria for Processing Applied to Ingredients

6.2.2.1 For the purpose of determining ingredient-level processing requirements, adjusted weight percentage shall be used.

6.2.2.2 Ingredient processing requirements apply only to ingredients declared on the product's ingredient panel. Sub-ingredients or processing aids that are not required to appear on-pack under applicable labeling regulations are excluded from processing classification and assessment.

6.2.2.3 At least 70% of the food, calculated as the sum of the adjusted weight percentage of the ingredients, shall be minimally or moderately processed using permissible food processing methods (as listed in Annex A).

6.2.2.4 The total proportion of conditionally processed ingredients shall not exceed 30% of the product formulation, using adjusted weight percentage calculations.

6.2.2.5 Single-ingredient products verified under the Standard shall be classified as the result of permissible processing for the purpose of compliance with Sections 6.2.2.3 and 6.2.2.4 when submitted for evaluation as an ingredient in another product.

6.2.2.6 Multi-ingredient products verified under the Standard shall have constituent ingredients evaluated individually in accordance with Sections 6.2.2.3 and 6.2.2.4 when submitted for evaluation as an ingredient in another product. The evaluation pathway for verified multi-ingredient products used as ingredients in another product submitted for verification may be addressed in later revisions of the Standard.

## 6.2.3 Criteria for Processing Applied to Finished Products

6.2.3.1 Only processing methods classified as permissible under the Standard (as listed in Annex A) shall be applied to the combined ingredients during the transformation of ingredients into the finished good.

6.2.3.2 Even if Section 6.2.1.5 would otherwise apply, no processing method classified as conditional shall be applied to more than 30% of the finished product formulation, calculated using adjusted weight percentage.

# 6.3 Formulation Requirements

## 6.3.1 Prohibited Ingredients

6.3.1.1 To ensure comprehensive protection against ingredients inconsistent with the objectives of the Non-UPF Verified program, the Standard establishes a normative and authoritative list of prohibited ingredients: the Harmonized Prohibited Ingredients List (Annex B). This list comprises a selected collection of prohibited ingredients from quality standards and governmental regulations, including European Union regulations, PCC Community Markets, Whole Foods Market, and applicable U.S. state legislation.

6.3.1.2 Any substance listed on the product's ingredient panel and explicitly banned by the list shall be prohibited, regardless of whether other sources or regulations allow their inclusion in food products.

## 6.3.2 Added Sugar Limits

6.3.2.1 Unless otherwise specified in Section 6.3.2.2, products containing sweeteners that are the result of conditional processing per Annex A shall comply with the limits on added sugar specified in the Product Type and Added Sugar Limits table (Table 6-1).

6.3.2.2 When a product contains sweeteners that are the result of conditional processing as well as sweeteners that are the result of permissible processing, the product's added sugar content shall not exceed 150% of its corresponding product type limit when meeting both the following criteria:

6.3.2.2.a The product's most prominent sweetener is the result of permissible processing; and

6.3.2.2.b The sum of any sweeteners that are the result of conditional processing does not exceed the amount of the most prominent permissible sweetener by weight.

Note: This calculation is made using the adjusted weight percentage.

6.3.2.3 Products are not subject to the limits specified in Table 6-1 when one of the following criteria applies:

6.3.2.3.a The product does not contain sweeteners or added sugars; or

6.3.2.3.b The product only contains sweeteners that are the result of permissible processing.

**Table 6-1: Product Type and Added Sugar Limits**

| <b>PRODUCT TYPE</b>                                                                                                                                                  | <b>Maximum<br/>Added sugar by<br/>Weight</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Confectionery (candy, chocolate)                                                                                                                                     | 40%                                          |
| Creamers (dairy and non-dairy) (serving size 2 tbsp or less)                                                                                                         | 25%                                          |
| Desserts (cookies, ice cream, snack bars, cakes, pastries, popsicles)                                                                                                | 20%                                          |
| Nutrition Bars (protein bars, fiber bars, meal replacement bars, performance bars)                                                                                   | 18%                                          |
| Breakfast Foods (cereal, granola, instant oatmeal, french toast, crêpes)                                                                                             | 15%                                          |
| Breads, Tortillas, Buns, Bagels<br>Note: Bread products containing 3g or more of dietary fiber per serving may be eligible for an added sugar limit of 12% by weight | 8%                                           |
| Dairy & Dairy Alternatives (yogurt, milk, cream cheese)                                                                                                              | 7%                                           |
| Beverages (juice, coffee, tea, soda, kombucha)                                                                                                                       | 5%                                           |

|                                                                                    |                               |
|------------------------------------------------------------------------------------|-------------------------------|
| Nut Butters & Spreads                                                              | 5%                            |
| Protein Powders (whey, pea protein)                                                | 5%                            |
| Condiments (ketchup, dressing, mayonnaise)                                         | 3%                            |
| Prepared Meals (frozen or shelf-stable)                                            | 3%                            |
| Soups & Savory Sauces (tomato sauce, broth)                                        | 2%                            |
| Snack Foods (chips, crackers, popcorn)                                             | 2%                            |
| Meat & Plant-Based Protein (jerky, sausage, deli meat)                             | 2%                            |
| Baby & Toddler Foods (any food marketed towards children younger than 4 years old) | 2%                            |
| Dry Mixes (baking mixes, dried soups, ready-to-mix beverages, etc.)                | Variable; see Section 6.3.2.8 |

6.3.2.4 For the purposes of the Standard, “added sugars” shall be determined in accordance with the US Food and Drug Administration (FDA) regulations on Nutrition Facts labeling ([21 CFR §101.9](#)). For products marketed in jurisdictions with stricter or more specific definitions, the stricter definition shall apply.

6.3.2.5 Compliance shall be determined by calculating the percentage by weight of “added sugars” in the finished product. This is calculated as the grams of added sugars per serving (or per 100 g) divided by the total serving size (or 100 g), based on the Nutrition Facts panel.

Note: This contrasts with calculations requiring adjusted weight percentage elsewhere in the Standard.

6.3.2.6 Products shall be assigned under the most relevant type listed in the Product Type and Added Sugar Limits table (Table 6-1). When a product does not clearly correspond to a single type, participants shall use their judgment and act in good faith to determine the most suitable type, documenting the rationale for the classification.

6.3.2.7 Calculations shall be performed on unrounded values prior to applying nutrition labeling rounding rules, except where compliance is clearly evident using Nutrition Facts values. When limits are low (5% or less) or results based on rounded values are close to the limit, unrounded data shall be used to confirm compliance.

6.3.2.8 For dry mix products, the percentage of added sugar by weight shall be determined and classified based on the finished weight of the product as prepared, following the manufacturer's directions for standard preparation. Dry mix products shall comply with the added sugar limit applicable to their corresponding product type.

### 6.3.3 Non-Nutritive and Biotransformed Sweeteners

6.3.3.1 The use of non-nutritive sweeteners and biotransformed sweeteners, as defined in Section 4 Terms and Definitions of the Standard, is prohibited in all Non-UPF Verified products.

6.3.3.2 Many substances that meet these definitions, including, but not limited to, aspartame, acesulfame K, sucralose, saccharin, neotame, and steviol glycosides, are already listed in Annex B Harmonized Prohibited Ingredient List, and are therefore banned from inclusion as ingredients per Section 6.3.1 of the Standard.

6.3.3.3 Beyond those explicitly named in Annex B, any sweetener that meets the definition of either a non-nutritive sweetener or a biotransformed sweetener is prohibited from use at any level in a Non-UPF Verified product. This includes, but is not limited to, brazzein, thaumatin, monk fruit extract, sorbitol, xylitol, and erythritol.

### 6.3.4 Gums, Thickeners, and Texturizers

6.3.4.1. All gums, thickeners, and texturizers identified in Annex B are prohibited.

6.3.4.2 Gums, as defined in Section 4 Terms and Definitions, are not allowed in Non-UPF Verified products unless listed in the Eligible Hydrocolloids List (Table 6-2) and when corresponding to one or more of the following use cases:

6.3.4.2.a Used to suspend vitamins in a liquid product;

6.3.4.2.b Used in gluten free products where the binding action of gluten is replaced by the use of a gum;

6.3.4.2.c Used in vegan products where the binding action of connective tissue in meat, the structural function of milkfat, casein or whey in solid or semi-solid dairy products, or the binding or stabilizing function of egg white proteins is replaced by the use of a gum.

Note: The use of gums for the addition of dietary fiber or prebiotics to a product does not qualify as an eligible use case.

**Table 6-2: Eligible Hydrocolloids List**

| <b>Hydrocolloid Common Name (Alternative Name)</b> |
|----------------------------------------------------|
| Agar (agar-agar)                                   |
| Fenugreek gum                                      |
| Guar gum                                           |
| Gum arabic (gum acacia, acacia fiber)              |
| Gum ghatti                                         |
| Karaya gum                                         |
| Konjac (konjac glucomannan, konjac flour)          |
| Locust bean gum (carob bean gum)                   |
| Tamarind seed gum                                  |
| Tara gum                                           |
| Tragacanth gum                                     |

6.3.4.3 Starches required to be labeled as modified ([21 CFR §172.892](#)), dextrinized starch derivatives, and modified derivatives of cellulose are not allowed in Non-UPF Verified products. This includes, but is not limited to dextrin, maltodextrin, soluble fibers, methylcellulose, carboxymethylcellulose, and hydroxypropyl methyl cellulose.

6.3.4.4 Isolated animal-based hydrocolloids used as texturizers are not allowed in Non-UPF Verified products. The use of animal-based hydrocolloids is limited to collagen, casein, and whey, only when used for casing or functional protein applications.

6.3.4.5 Ingredients used as allowed in Sections 6.3.4.2, 6.3.4.4, and Table 6-2 shall be evaluated as ingredients based on processing and usage rate in accordance with Sections 6.2.2.3 and 6.2.2.4.

6.3.4.6 The use of inorganic emulsifying salts and modified phospholipids may be revisited in later revisions of the Standard.

## 6.3.5 Natural Flavors

### Note:

The use of natural flavors represents a complex and often opaque area of food formulation. Because of this variability, and to avoid creating unnecessary barriers to participation or innovation, compliance with this section is optional for Version 1.3 of the Standard. Participants are still required to provide information related to natural flavor use to support data collection and inform the development of more specific and mandatory requirements in a future version of the Standard.

6.3.5.1 Natural flavors shall not be used to imply the presence of an ingredient that is absent or present only in trace amounts. Natural flavors shall only be used when a corresponding ingredient derived from the same food, issued from a permissible processing method, is also present in the product.

6.3.5.2 The weight of the corresponding ingredient (from a permissible processing method) must exceed that of the associated natural flavor in the finished product formulation.

6.3.5.3 Flavor names used on the product label, ingredient list, or marketing claims must reflect the inclusion of a corresponding ingredient in the product formulation.

6.3.5.4 Natural flavors that simulate or enhance the sensory profile of a specific food ingredient are prohibited when no corresponding ingredient from a permissible processing method is present in the formulation.

6.3.5.5 Natural flavors shall be used only in support of a clearly identifiable flavor profile linked to a corresponding ingredient. Use of natural flavors for purposes other than flavor contribution—including masking, enhancement, or sensory modification—is not allowed.

6.3.5.6 Natural flavors should not each exceed 0.5% of the product formulation, calculated using adjusted weight percentage.

6.3.5.7 Extracts and food-grade essential oils used for the purpose of providing flavor are exempt from the natural flavor limitations of the Standard when produced via traditional food or botanical preparation methods such as maceration, percolation, distillation, or pressing. Eligible extracts must be derived exclusively from the named source material and may not contain any additional substances, including other flavor components, carriers, preservatives, or stabilizers. Extracts meeting these criteria must be declared on product labels by their common or usual name, identifying the source material.

## 6.3.6 Refined Oils

6.3.6.1 Many refined or processed oils are listed in Annex B Harmonized Prohibited Ingredients List, and are therefore prohibited from inclusion in verified products in accordance with Section 6.3.1 Prohibited Ingredients. This includes, but is not limited to, partially or fully hydrogenated oils, interesterified oils, solvent extracted oils, and brominated vegetable oil.

6.3.6.2 Oils that are the result of processing classified as conditional per Annex A (e.g., refined, bleached, and deodorized [RBD] oils) are subject to the requirements of Section 6.2.2 Criteria for Processing Applied to Ingredients.

6.3.6.3 Refined or conditionally processed oils as defined above shall not collectively comprise more than 30% of the finished product, calculated on an adjusted weight percentage basis.

## 6.3.7 Sodium

6.3.7.1 Many sodium-contributing ingredients are listed in Annex B Harmonized Prohibited Ingredients List and are therefore prohibited from inclusion in verified products in accordance with Section 6.3.1 Prohibited Ingredients. This includes, but is not limited to, sodium-based preservatives, flavor enhancers, leavening agents, chelators, emulsifiers, and functional salts.

6.3.7.2 Naturally occurring sodium from unprocessed or minimally processed ingredients is allowed when used in accordance with applicable requirements of the Standard.

# Annex A – Classification of Food Processing Methods

## (Normative)

For clarity, processing methods in the Standard are grouped under the informative heading "Processing Method Type," which includes biological, chemical, mechanical, thermal, and other processes. These groupings support understanding of food production practices. The specific classifications under "Prohibited Methods," "Conditional Methods," and "Permissible Methods" are normative.

Processes not explicitly listed in Table A-1 shall be reviewed and classified by the Non-GMO Project in accordance with the principles and classification criteria of the Standard.

Table A-1 is not exhaustive. The absence of a processing method shall not be interpreted as permissibility.

**Table A-1 – Classification of Food Processing Methods**

| Processing Method Type | Prohibited Methods                                                                                   | Conditional Methods                                                                                                 | Permissible Methods<br>(Minimal / Moderate)                                                        |
|------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Biological             | 1) Precision Fermentation<br><br>2) Enzymatic Interesterification<br><br>(Reserved)                  | 1) Industrial Fermentation (highly modified ingredients)<br><br>(Reserved)                                          | 1) Traditional Fermentation (Moderate)<br><br>2) Biomass Fermentation (Moderate)<br><br>(Reserved) |
| Chemical               | 1) Decolorization using ion exchange resin containing nanomaterials<br><br>2) Hydrogenation (full or | 1) Enzymatic, Acid, or Alkali Hydrolysis<br><br>2) High temperature refining of oils ( $\geq 200^{\circ}\text{C}$ ) | 1) Ethanol Extraction (Moderate)<br><br>2) Supercritical CO <sub>2</sub> Extraction (Moderate)     |

| Processing Method Type | Prohibited Methods                                                                                                                                                                                                        | Conditional Methods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Permissible Methods (Minimal / Moderate)                                                                                                                          |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <p>partial)</p> <p>3) Chemical Interesterification</p> <p>4) Enzymatic Synthesis (cross-linking, transglucosylation, glycosylation, isomerisation)</p> <p>5) Hazardous VOC-based extraction methods</p> <p>(Reserved)</p> | <p>3) Bleaching (chemical absorbents) for oil refining</p> <p>4) Deodorizing (high heat vacuum steam distilled) for oil refining</p> <p>5) Carbonatation (lime and carbon dioxide clarification)</p> <p>6) Phosphatation (lime and phosphoric acid clarification)</p> <p>7) Decolorization using bone char or activated carbon</p> <p>8) Decolorization or purification using ion exchanging resin</p> <p>9) Recrystallization of isolated sugars</p> <p>10) Fumigation of spices with Ethylene Oxide (EtO)</p> | <p>3) Curing (Moderate)</p> <p>4) Smoking (Moderate)</p> <p>5) Nixtimalization (Moderate)</p> <p>6) Alkalization of cocoa powder (Moderate)</p> <p>(Reserved)</p> |

| Processing Method Type | Prohibited Methods               | Conditional Methods                                                        | Permissible Methods (Minimal / Moderate)                                                                                                                                                                                                                                                                                                                                               |
|------------------------|----------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |                                  | 11) Fumigation of spices with Propylene Oxide (PPO)<br><br>(Reserved)      |                                                                                                                                                                                                                                                                                                                                                                                        |
| Mechanical             | 1) 3D Printing<br><br>(Reserved) | 1) Agglomeration of powders for increased dispersibility<br><br>(Reserved) | 1) Cutting (Minimal)<br><br>2) High moisture extrusion, forming (Moderate)<br><br>3) Mechanical pressing (Moderate)<br><br>4) Peeling (Minimal)<br><br>5) Washing (Minimal)<br><br>6) Homogenization (Moderate)<br><br>7) High Pressure Processing (HPP) (Moderate)<br><br>8) Microfiltration and ultrafiltration, via membrane (Moderate)<br><br>9) Centrifugal separation (Moderate) |

| Processing Method Type | Prohibited Methods | Conditional Methods                                                                                                                                                                 | Permissible Methods<br>(Minimal / Moderate)                                                                                                                                                                        |
|------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |                    |                                                                                                                                                                                     | 10) Milling/Grinding (Moderate)<br>11) Cold press or expeller press (Moderate)<br>12) Winterization of oils (Minimal)<br>13) Filtration via diatomaceous earth (Moderate)<br>14) Winnowing (Minimal)<br>(Reserved) |
| Thermal                | (Reserved)         | 1) High Heat extrusion ( $\geq 200^{\circ}\text{F}$ )<br>2) Flavor extraction using distillation<br>3) Deep frying (when present as the sole cooking processing step)<br>(Reserved) | 1) Baking (Moderate)<br>2) Dehydration (Moderate)<br>3) Drying (Moderate)<br>4) Freezing (Minimal)<br>5) Pasteurization (UP, UHT) (Moderate)<br>6) Ultra High Heat Treatment (indirect steam) (Moderate)           |

| Processing Method Type | Prohibited Methods | Conditional Methods | Permissible Methods<br>(Minimal / Moderate)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------|--------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |                    |                     | <p>7) Roasting, cooking, grilling, braising (Moderate)</p> <p>8) Canning/Pressure cooking (Moderate)</p> <p>9) Smoking (Moderate)</p> <p>10) Pressure assisted thermal treatment (Moderate)</p> <p>11) Infrared Heating (Moderate)</p> <p>12) Deep frying (when another cooking step is included in the manufacturing process) (Moderate)</p> <p>13) Freeze Drying (Moderate)</p> <p>14) Spray Drying (Moderate)</p> <p>15) Blanching (Minimal)</p> <p>16) Microwaving (Moderate)</p> <p>17) Gun puffing of whole grains</p> |

| Processing Method Type | Prohibited Methods                  | Conditional Methods                                       | Permissible Methods<br>(Minimal / Moderate)                                                                                               |
|------------------------|-------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
|                        |                                     |                                                           | (Moderate)<br><br>18) Conching in chocolate making<br>(Moderate)<br><br>19) Tempering in chocolate making<br>(Moderate)<br><br>(Reserved) |
| Others                 | 1) Nanotechnology<br><br>(Reserved) | 1) Irradiation of spices for sanitation<br><br>(Reserved) | 1) Ultrasonic energy processing<br>(Moderate)<br><br>(Reserved)                                                                           |

**Notes to Annex A Table:**

- The classification provided in this Annex is normative; adherence is required for compliance.
- Methods marked "Reserved" indicate that future guidance or classifications may be provided.
- Minimal processing preserves the food's natural structure; Moderate processing maintains fundamental characteristics while altering certain aspects (flavor, shelf life, texture).

## Annex B – Harmonized Prohibited Ingredients List

### (Normative)

| Ingredient Name                             |
|---------------------------------------------|
| 2-Acetylaminofluorene                       |
| 2,4,5-trihydroxybutyrophenone (THBP)        |
| 4-Dimethylaminoazobenzene                   |
| 5-HTP                                       |
| Acesulfame-K (acesulfame-potassium)         |
| Acetoin (synthetic)                         |
| Acetone peroxides                           |
| Acetylated esters of mono- and diglycerides |
| Activated charcoal                          |
| Advantame                                   |
| Aerosol sprays with chlorofluorocarbon      |
| Algal flour                                 |
| Alkanna tinctoria                           |
| Allulose                                    |
| Allura Red AC (E129)                        |
| Aluminum ammonium sulfate                   |
| Aluminum potassium sulfate                  |
| Aluminum starch                             |
| Aluminum sulfate                            |
| Amaranth (E123)                             |
| Ammonium alum                               |
| Ammonium chloride                           |
| Ammonium hydroxide                          |
| Ammonium phosphate                          |
| Ammonium polyphosphate                      |
| Ammonium saccharin                          |
| Ammonium sulfate                            |
| Apples, Arctic GE                           |
| Apricot kernel extract                      |
| Arsenic                                     |

| Ingredient Name                    |
|------------------------------------|
| Artificial flavors                 |
| Aspartame                          |
| Astaxanthin (artificial)           |
| Auramine O                         |
| Azo dyes                           |
| Azodicarbonamide                   |
| Azorubine (Carmoisine, E122)       |
| Bacillus coagulans ProDURA UABc-20 |
| Bacillus coagulans Unique IS-2     |
| Bacopa                             |
| Bentonite                          |
| Benzoates                          |
| Benzoic acid                       |
| Benzophenone                       |
| Benzoyl peroxide                   |
| Benzyl alcohol                     |
| Benzyl benzoate                    |
| Beta-cyclodextrin                  |
| BHA (butylated hydroxyanisole)     |
| BHT (butylated hydroxytoluene)     |
| Bithionol                          |
| Black soldier fly                  |
| Bleached flour                     |
| Blessed thistle                    |
| Blue #1                            |
| Blue #2                            |
| Bromated flour                     |
| Brominated vegetable oil (BVO)     |
| Bryonia root                       |
| BST (bovine somatotropin)          |
| Burnt alum                         |
| Butane glycol                      |
| Butylene glycol                    |
| Butylparaben                       |

| Ingredient Name                                                         |
|-------------------------------------------------------------------------|
| Caffeine (extended release)                                             |
| Calamus oil                                                             |
| Calcium benzoate                                                        |
| Calcium bromate                                                         |
| Calcium disodium EDTA                                                   |
| Calcium hypochlorite                                                    |
| Calcium peroxide                                                        |
| Calcium propionate                                                      |
| Calcium saccharin                                                       |
| Calcium sorbate                                                         |
| Calcium stearoyl-2-lactylate                                            |
| Canthaxanthin                                                           |
| Caprocaprylobehenin                                                     |
| Caramel color                                                           |
| Carbon Black (Vegetable Carbon, E153)                                   |
| Carmine (cochineal)                                                     |
| Carrageenan                                                             |
| Certified colors                                                        |
| CBD/cannabidiol                                                         |
| Charcoal powder                                                         |
| Chlorine dioxide                                                        |
| Chlorofluorocarbon (CFC) propellants                                    |
| Chloroform                                                              |
| Citrus Red No. 2                                                        |
| Cobalt salts                                                            |
| Cochineal (carmine)                                                     |
| Cottonseed oil                                                          |
| Coumarin                                                                |
| Cyclamates                                                              |
| Cyclodextrin cysteine (l-cysteine)                                      |
| DATM (Diacetyl tartaric and fatty acidesters of mono- and diglycerides) |
| Diacetyl                                                                |
| Diethylpyrocarbonate (DEPC)                                             |
| Dimethicone                                                             |

| Ingredient Name                     |
|-------------------------------------|
| Dimethyl silicone                   |
| Dimethylpolysiloxane                |
| Diethyl sodium sulfosuccinate (DSS) |
| Disodium 5'-ribonucleotides         |
| Disodium calcium EDTA               |
| Disodium dihydrogen EDTA            |
| Disodium EDTA                       |
| Disodium guanylate                  |
| Disodium inosinate                  |
| Disodium iron EDTA                  |
| Dodecyl gallate                     |
| EDTA                                |
| Equal                               |
| Erythrosine (Red No. 3, E127)       |
| Ethoxyquin                          |
| Ethyl acrylate                      |
| Ethyl vanillin                      |
| Ethylene                            |
| Ethylene glycol                     |
| Ethylene oxide                      |
| Eugenyl methyl ether (synthetic)    |
| EverSweet                           |
| FD&C Blue No. 1                     |
| FD&C Blue No. 2                     |
| FD&C Colors                         |
| FD&C Green No. 3                    |
| FD&C Red No. 3                      |
| FD&C Red No. 40                     |
| FD&C Yellow No. 5                   |
| FD&C Yellow No. 6                   |
| Fluorocarbon gases                  |
| Foie gras                           |
| Gamma aminobutyric acid             |
| Garcinia cambogia                   |

| Ingredient Name                             |
|---------------------------------------------|
| Gardenia blue                               |
| Geptylparaben                               |
| Gexa-esters of sucrose                      |
| Ginkgo biloba                               |
| GMP (disodium guanylate)                    |
| Gold/gold leaf                              |
| Grapefruit seed extract                     |
| Green #3                                    |
| Green S (E142)                              |
| Hawaiian black salt                         |
| He shou wu                                  |
| Hepta-esters of sucrose                     |
| Hexa-esters of sucrose                      |
| Hexane                                      |
| High fructose corn syrup                    |
| Highly branched cyclic dextrin              |
| Hijiki                                      |
| Hydrogen peroxide                           |
| Hydrogenated oils                           |
| IMP (disodium inosinate)                    |
| Inosine monophosphate                       |
| Insect Flour                                |
| Iron oxide                                  |
| Kava/kava kava                              |
| Lactic acid esters of monoglycerides        |
| Lactylated esters of mono- and diglycerides |
| Lead acetate                                |
| Ma huang                                    |
| Magnesium lactate                           |
| Mechanically separated meat                 |
| Melatonin                                   |
| Mercury compounds                           |
| Methyl eugenol                              |
| Methyl silicon                              |

| Ingredient Name                                         |
|---------------------------------------------------------|
| Methylparaben                                           |
| Microcrystalline cellulose                              |
| Microparticularized whey protein                        |
| Microparticularized whey protein derived fat substitute |
| Monoammonium glutamate                                  |
| Monosodium glutamate (MSG)                              |
| Mucuna pruriens                                         |
| Myrcene                                                 |
| Myrcene (synthetic)                                     |
| N,N-Dimethylhydrazine                                   |
| Natamycin                                               |
| Nature identical flavors                                |
| Neotame                                                 |
| Nisin                                                   |
| Nitrates and nitrites (synthetic)                       |
| NutraSweet                                              |
| Octa-esters of sucrose                                  |
| Octenylsuccinate                                        |
| Octyl gallate                                           |
| Oil of wormwood                                         |
| Olestra                                                 |
| Orange B                                                |
| P-Nitrosodimethylamine                                  |
| Parabens (methyl, propyl, butyl, etc.)                  |
| Partially hydrogenated oils                             |
| Patent Blue V (E131)                                    |
| Plant sterols                                           |
| Polydextrose                                            |
| Polylysine                                              |
| Polysorbates (60, 80, etc.)                             |
| Polyvinylpyrrolidone                                    |
| Polyvinylpyrrolidone                                    |
| Ponceau 4R (E124)                                       |
| Potassium alum                                          |

| Ingredient Name                                             |
|-------------------------------------------------------------|
| Potassium benzoate                                          |
| Potassium bisulfite                                         |
| Potassium bromate                                           |
| Potassium metabisulfite                                     |
| Potassium nitrate                                           |
| Potassium propionate                                        |
| Potassium sorbate                                           |
| Propane-1,2-Diol esters of fatty acids                      |
| Propionates propionic acid                                  |
| Propyl gallate                                              |
| Propylene glycol                                            |
| Propylene glycol esters of fatty acids                      |
| Propylene glycol mono- and diesters of fats and fatty acids |
| Propylene oxide                                             |
| Propylparaben                                               |
| Pulegone                                                    |
| Pyridine                                                    |
| Quinoline                                                   |
| rBGH (recombinant Bovine Growth Hormone)                    |
| Reb D                                                       |
| Reb M                                                       |
| Red #3                                                      |
| Red #40                                                     |
| Rhodamine B                                                 |
| Saccharin                                                   |
| Saccharin sodium salt                                       |
| Safrole                                                     |
| Salatrim (short and long chain acyl triglyceride molecule)  |
| Sassafras oil                                               |
| Shark cartilage                                             |
| Simplese                                                    |
| Smoke flavor (synthetic)                                    |
| Sodium acid sulfate                                         |
| Sodium alum                                                 |

| Ingredient Name             |
|-----------------------------|
| Sodium aluminum phosphate   |
| Sodium aluminum sulfate     |
| Sodium benzoate             |
| Sodium bisulfite            |
| Sodium cyclamate            |
| Sodium diacetate            |
| Sodium ferrocyanide         |
| Sodium glutamate            |
| Sodium hypochlorite         |
| Sodium lauryl sulfate       |
| Sodium metabisulfite        |
| Sodium nitrate              |
| Sodium nitrite              |
| Sodium propionate           |
| Sodium saccharin            |
| Sodium sorbate              |
| Sodium stearyl lactylate    |
| Sodium stearyl-2-lactylate  |
| Sodium sulfite              |
| Sodium tripolyphosphate     |
| Solvent extracted oils      |
| Sorbic acid                 |
| Soy leghemoglobin           |
| Stannous chloride           |
| Steviol glycosides          |
| Strychnine                  |
| Styrene succistearin        |
| Sucralose (Splenda)         |
| Sucroglycerides             |
| Sucrose acetate isobutyrate |
| Sucrose ester               |
| Sucrose polyester (olestra) |
| Sudan Dyes (I-IV)           |
| Sulfites                    |

| Ingredient Name                   |
|-----------------------------------|
| Sulfur dioxide                    |
| Sunset Yellow FCF (E110)          |
| Sweet 'n Low                      |
| Synthetic caffeine                |
| TBHQ (tertiary butylhydroquinone) |
| Tetrasodium EDTA                  |
| Thiodipropionic acid              |
| Thujone                           |
| Titanium Dioxide (E171)           |
| Titanium dioxide toluene          |
| Tonka bean/extract                |
| Trans 2,4 hexadienal              |
| Transglutaminase (TG)             |
| Trehalose                         |
| Truvia                            |
| Vanillin (synthetic)              |
| Vinyl chloride                    |
| Whale oil                         |
| Yellow (E104)                     |
| Yellow #5                         |
| Yellow #6                         |
| Zirconium compounds               |