



# CLEAN FOOD STANDARD

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## 1.0. Introduction

The Clean Food Standard is a voluntary best-practice standard for food producers aimed at identifying fresh grown foods that meet exceptional standards of product purity. The standard extends the concept of purity embodied in national Clean Air and Clean Water regulations into the food arena. Specifically, the standard addresses four areas of potential concern: 1) pesticide residues, 2) food pathogens, 3) industrial contaminants and heavy metals; and 4) GMOs.

## 2.0 Intended Uses of the Standard

- 2.1. The Clean Food Standard is intended to assist commercial, government and institutional buyers as well as consumers make better informed decisions about the fresh grown foods they purchase in terms of product purity considerations, thereby protecting the health and welfare of consumers by limiting their risk of exposure to potentially harmful residues and pathogens in the food supply.
- 2.2. The Clean Food Standard is intended to provide marketplace recognition to food producers who are voluntarily taking exceptional measures to protect the purity of the food they produce, thereby encouraging food producers to adopt pest management regimes, growing practices and food handling methods that minimize potential harm to human health and the environment from pesticide exposure, food pathogens, and other contaminants.
- 2.3. The Clean Food Standard is intended to serve as the basis for specific market claims, to be certified by recognized independent third parties who have no ownership or brokerage interest in the foods being certified, and who have no vested interest in the outcome of a given certification.
- 2.4. The Clean Food Standard is intended to serve as the basis of a Draft National Standard for the U.S. market, to be finalized in accordance with the requirements of the American National Standards Institute (ANSI), thereby ensuring: 1) a multi-stakeholder consensus process; 2) transparency in the standards setting process; and 3) non-proprietary standards available on a non-exclusive basis.
- 2.5. The Clean Food Standard is intended to define product purity requirements that can be used to inform the development of broader national standards for sustainable agricultural practices.

## 3.0 Definitions

- 3.1. Clean Food.** A fresh grown food product that complies with the requirements set forth in this Standard.
- 3.2. Crop Risk Level.** The level of risk attributed to a specific crop, from 1 to 4 (where 1 represents the highest risk), that reflects the number of reported outbreaks of food-borne illness, as follows:
- **Level 1: Highest Risk** — 10 or more confirmed outbreaks, where test(s)<sup>1</sup> confirmed the presence of pathogen(s) in product consumed raw, or risk level is established by the FDA or CDC.
  - **Level 2: Moderate to High Risk** — 2-9 confirmed outbreaks.
  - **Level 3: Low Risk** — 1 confirmed outbreak in product consumed raw.
  - **Level 4: Negligible Risk Level 4** — Negligible Risk

Crop risk levels can be further adjusted based on consideration of the following additional factors: suspected incidents linked to source of outbreak within crop/region based on assessments by SCS and external consultants; examination of test data directly from fields or facilities that show presence of pathogen(s); changing conditions on the ground in any given growing season (e.g., sewage overflow, flooding, chemical spill, animal activities); severity of outbreak (e.g., death, illness, mild response); and recency of the outbreak.

- 3.3. *de Minimus* Risk Level.** For carcinogenic and oncogenic pesticides, this level ensures a risk level of no more than  $1 \times 10^{-6}$ , in accordance with EPA negligible risk standards. For remaining pesticides, this level meets child-adjusted risk levels, in accordance with methods defined by the National Research Council, Board on Agriculture and Board on Environmental Studies and Toxicology (1993).
- 3.4. Food Safety Management Performance Rating.** A rating assigned to a grower that integrates: 1) the relative crop risk level; and 2) the food safety performance score.
- 3.5. Food Safety Performance Score.** A score between 0-100 that takes into consideration the thoroughness of existing on-site food safety management programs, and the thoroughness and level of performance indicated by food safety audits and analytical tests conducted.
- 3.6. GAP Audit.** A food safety audit of a field crop, conducted in accordance with Good Agricultural Practice standards, consistent with the US FDA Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables and US FDA Guide to Minimize Microbial Food Safety Hazards for Fresh-Cut Fruits and Vegetables.
- 3.7. GMO.** A genetically modified organism used as seedstock, rootstock or seedling.

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<sup>1</sup> The number of fields to be included in the auditing plan should reflect both the overall scores as well as the auditing protocols in place. Testing should occur at the highest-risk control point that can be identified.

- 3.8. GMP Audit.** A food safety audit of a food storage, processing, handling, or distribution facility, consistent with US FDA Code of Federal Regulations 21.110.
- 3.9. Grower.** An individual or company producing a field, orchard, vine or greenhouse crop.
- 3.10. HACCP Program.** A food safety management program built upon recognized HACCP (Hazard Analysis Critical Control Point) principles.
- 3.11. Heavy Metals.** Cadmium, mercury, selenium, arsenic and other metals that either occur naturally in the environment or are introduced into the environment through agricultural or industrial activities, identified in Annex 1.
- 3.12. Industrial Chemicals.** Chemical residues that are present in the environment as a result of industrial activities other than direct agricultural activities associated with a specific food crop, identified in Annex 1.
- 3.13. LOD.** The “limit of detection” below which a laboratory cannot confirm the presence of a specific residue in a given commodity, as shown in Annex 1. For pesticides, LODs are established in accordance FDA PAM II protocols for pesticides. For heavy metals, LODs are established in accordance with EPA protocols for ICP-MS. For other industrial chemicals, LODs are established in accordance with EPA 600-series protocols.
- 3.14. Pathogen.** A microbial organism present in food at a level that can cause illness in humans.
- 3.15. Pesticide.** Any of the following agricultural chemicals: insecticides, herbicides, fungicides, fumigants, miticides, rodenticides, nematocides, repellents, algicides, molluscicides, defoliant, inoculants, bactericides, virucides, plant growth regulators, insect growth regulators, and other chemical agents used in the production of agricultural products, identified in Annex 1.
- 3.16. Residue.** Any amount of pesticide, industrial contaminant, or heavy metal that is found in a food, soil, or water matrix.

## **4.0 Requirements for Certification**

- 4.1. Disclosure.** The Grower shall provide a signed full disclosure of: 1) any pesticides used, including the formulation, date of use, application rate, and application method; 2) the use of any GMO seedstock or planting stock; 3) existing food safety management protocols and the most recent audit results; and 4) information about potential sources of contamination from prior land uses or adjacent land uses. If the Grower is in transition to organic, and wishes to make an added “Grown Without Synthetic Pesticides and Fertilizers” claim in accordance with §5.3, then the Grower shall provide a signed full disclosure of all pest control, fertilization and production practices related to the product to be certified, which shall be reviewed by a licensed pest control advisor approved by SCS.

**4.2. Permitted Pesticides.** Any pesticide registered for use on a given crop shall be allowed, except for pesticides classified by the World Health Organization as Category 1a substances (“extremely hazardous”). However, a grower who is certified as organic or in transition to organic may only use these substances permitted under the National Organic Program.

**4.3. Testing and Audit Requirements.**

**4.3.1. Pesticides Used.** A representative sample shall be collected and analyzed for the presence of any pesticide used for which a tolerance has been established by EPA (or the relevant country agency), with the following exceptions: 1) pesticides registered as “biopesticides”, which therefore have no tolerances and are allowed for use under the National Organic Program; or 2) synthetic pesticides which by design leave no residues, and which historically have shown no evidence of leaving residues in food.

**4.3.2. Background Contaminants.** A representative sample shall be collected and analyzed for the presence of any pesticides, industrial chemicals or heavy metals listed in Annex 1 that may be present in the background as a result of prior land use or localized drift.

**4.3.3. Transitional Growers.** A grower who is certified as organic or is in transition to organic, and who wishes to make an added “Grown Without Synthetic Pesticides and Fertilizers” claim as described in §5.3, shall permit SCS to collect field samples for analysis at any time during the production cycle, and in addition, shall permit an SCS inspector to conduct an on-site audit to verify organic production practices.

**4.4. Purity Requirements.**

**4.4.1. Synthetic Pesticides with USEPA Tolerances.** The product shall be shown to be free of pesticide residues based on LODs for all registered synthetic pesticides with established tolerances, as listed in Annex 1. For those crops that have a pulp-only tolerance (e.g., honeydew, cantaloupe, banana), or for those crops that are tested for edible portion only in accordance with FDA PAM II protocols (e.g., corn, avocado), only the edible portion shall be required to be free of pesticide residues, based on the laboratory LOD. By or before 2010, all LODs must, at a minimum, meet *de minimus* risk levels.

**4.4.2. EPA Designated Reduced Risk Pesticides.** For EPA-designated reduced risk pesticides, any remaining residues may not exceed the levels permitted under the National Organic Program (5% of US EPA tolerance levels).

**4.4.3. Industrial Chemicals and Heavy Metals.** The product shall be shown to be free of industrial chemical residues or heavy metals based on LODs, as listed in Annex 1. By or before 2010, all LODs must, at a minimum, meet *de minimus* risk levels.

#### **4.5. Food Safety Requirements.**

**4.5.1. GAP/GMP Audit Scores.** The Grower shall demonstrate that a food safety GAP/GMP audit was conducted during the most recent growing season in the relevant field(s) and/or facility(s) by a recognized third-party certifier, and shall show that the audit score(s) received was 80 points or higher on a scale of 0-100.

**4.5.2. Food Safety Performance Rating.** By or before the year 2008, the Grower's food crop shall be required to receive a Food Safety Management Performance Rating of "Good Food Safety Management Performance."

### **5.0 Allowable Claims based upon Certification**

**5.1. "Meets Clean Food Standards."** A Grower who is in compliance with the requirements of this Standard shall be allowed to make the claim, "Meets Clean Food Standards," with respect to the certified crop.

**5.2. "Pesticide Residue Free."** A Grower who is in compliance with the requirements of this Standard shall be allowed to make the additional claim, "Pesticide Residue Free," with respect to the certified crop, unless EPA-designated reduced risk pesticides were used and residues were detected above LOD levels (although still below the 5% of EPA tolerance limit).

**5.3. "Grown Without Synthetic Pesticides and Fertilizers."**

A Grower who is certified organic or is in transition to organic, and who is in compliance with the requirements of this Standard, including added requirements specified in §4.1, §4.2 and §4.3.3, shall be allowed to make the additional claim "Grown without Synthetic Pesticides and Fertilizers."

**5.4. "Meets [Country-of-Destination] Tolerances."** A Grower who is in compliance with the requirements of this Standard shall be allowed to make the additional claim, "Meets [Country-of-Destination] Tolerances," with respect to the certified crop, where the country of destination is identified by name, and where all LOD levels for any pesticides used are low enough to satisfy the target country's tolerances.

**5.5. "Good Food Safety Management Performance"** (with Corresponding Food Safety Performance Score). A Grower complying with the requirements of this Standard shall be allowed to make the additional claim, "Good Food Safety Management Performance," with respect to the certified crop, as well as the corresponding food safety performance score, provided that the food crop has been evaluated in accordance with §4.5.2 and has earned this performance rating.

**Annex 1**  
**Pesticides and Industrial Chemicals**  
**Addressed under the Clean Food Standard**

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