

# Ingredient Transparency Standard (ITS)

A Machine-Readable Framework for Supplemental Food Information Disclosure

Version 1.0

Published February 2026

This document is published as an open, non-prescriptive specification. Implementation is permitted without restriction. Use of the “Ingredient Transparency Standard (ITS)” name or related certification marks is subject to separate authorization.

## Executive Summary

The Nutrition Facts label has been a central component of U.S. food labeling policy for decades. It was developed for a print-based environment and for generalized information disclosure. While it remains an essential consumer protection tool, it is constrained by physical space and static presentation formats that limit its ability to support modern information use.

Consumer food decisions increasingly rely on accessibility tools, digital systems, and individualized information processing that extend beyond the capabilities of physical packaging. At the same time, food manufacturers already maintain extensive formulation and disclosure data that cannot be meaningfully conveyed within existing label formats.

This paper proposes the Digital Ingredient Disclosure / Ingredient Transparency Standard (ITS) — an open, machine-readable framework for supplemental digital disclosure of food-related information via QR codes. The standard is designed to complement existing labeling requirements by enabling consistent, machine-readable access to disclosed information in digital form.

The ITS focuses exclusively on how food information is disclosed and structured. It does not evaluate, rank, interpret, or recommend food products, nor does it define nutritional adequacy, healthfulness, or dietary guidance.

## 1. Purpose and Scope

The purpose of the Digital Ingredient Disclosure / Ingredient Transparency Standard is to establish a uniform framework for the structured digital disclosure of food-related information.

The scope of this standard is limited to:

- Defining data categories eligible for digital disclosure
- Establishing formatting and interoperability requirements
- Supporting consistent, machine-readable access to disclosed information

The standard does not provide dietary advice, medical guidance, consumer warnings, or evaluative judgments. All interpretation of disclosed information occurs outside the scope of this standard.

## 2. Regulatory Context and Compatibility

The standard is intended to operate within existing statutory and regulatory authority governing food labeling and disclosure. It is designed as a supplemental digital disclosure framework and does not replace, modify, or supersede required physical labeling elements.

QR codes and digital access mechanisms are currently permitted as supplemental disclosures under existing guidance. The ITS leverages these mechanisms to improve accessibility, interoperability, and consistency without altering existing regulatory obligations.

Adoption of the standard is voluntary and does not imply regulatory approval, endorsement, or mandate.

## 3. Structure of the Standard

The ITS defines:

- Data categories that may be disclosed digitally
- Standardized terminology and identifiers
- Structural and formatting requirements for machine readability
- Versioning and consistency controls

The ITS does not define thresholds, scores, rankings, or interpretations of disclosed information.

## 4. Core Data Categories

The standard prioritizes data categories that materially influence consumer understanding while avoiding subjective or non-actionable detail.

## 4.1 Ingredient Identity and Composition

- Canonical ingredient names
- Synonym resolution
- Functional role descriptors
- Allergen disclosures consistent with existing regulations

## 4.2 Processing Information

- Descriptive disclosure of processing methods
- Identification of key processing techniques where applicable

Processing information is presented using factual, non-evaluative descriptors and does not imply quality, preference, or suitability.

## 4.3 Sourcing and Origin

- High-level geographic origin of primary ingredients where available
- Source classification (e.g., plant, animal, microbial, synthetic)

Source disclosures are informational only and do not imply comparative quality or preference.

## 4.4 Additives and Functional Components

- Identification of additives and processing aids
- Functional classification (e.g., preservative, emulsifier)
- Jurisdiction-specific regulatory status references

## 4.5 Nutritional Attributes

- Machine-readable representation of existing Nutrition Facts information
- Distinction between naturally occurring and added components where applicable

No derived nutritional scores or recommendations are included.

## 4.6 Dietary Compatibility Indicators

- Binary compatibility indicators based on defined criteria (e.g., allergen-free status)

Compatibility indicators do not imply endorsement of dietary patterns or suitability for any individual.

## 4.7 Ethics, Sustainability, and Certification References

- References to existing third-party certifications where applicable

The standard does not generate independent evaluations, scores, or comparisons.

## 4.8 Shelf-Life and Preservation

- Preservation method descriptors
- Shelf-life category information

No claims regarding freshness, superiority, or quality are implied.

## 4.9 Manufacturing Information

- Manufacturing country
- References to publicly available certifications or registrations

## 4.10 Version and Change History

- Disclosure version identifiers
- Dates of material formulation changes

## 5. Personalized Interpretation and Downstream Use (Non-Prescriptive)

This standard establishes requirements for structured digital disclosure of food-related information. It does not establish dietary guidance, nutritional recommendations, or health evaluations.

The standard defines what information may be disclosed and how it is structured, but does not define how that information should be evaluated, prioritized, or acted upon. All interpretation and application of disclosed information occurs outside the scope of this standard.

The standard does not:

- Assign scores, rankings, or warnings

- Recommend consumption or avoidance
- Provide medical, dietary, or behavioral guidance
- Incorporate individual health status into disclosures

Although non-prescriptive, the standard is designed to support external systems that may apply interpretive logic based on disclosed data. Examples of supported downstream uses include consumer preference filtering, retail product search and comparison, allergy identification, institutional food selection systems, and informational use by healthcare professionals.

The standard does not access, collect, store, or process personal health information and does not generate alerts or notifications based on individual health conditions.

The standard does not require, provide, or endorse a consumer application, reference implementation, user interface, or interpretation model.

## 6. Governance and Stewardship

Governance of the standard is limited to maintenance of the specification, version control, and consistency of published requirements.

Governance does not include enforcement authority, regulatory oversight, or evaluation of food products.

## 7. Certification and Conformance

Conformance with the ITS indicates alignment with the published specification for digital disclosure structure and content.

Certification signifies conformance only and does not imply endorsement, approval, or evaluation of food products by the governing body or any regulatory authority.

## 8. Adoption and Use

Adoption of the standard is voluntary and market-driven. Manufacturers, retailers, platforms, and other stakeholders may adopt the standard independently based on operational needs and consumer demand.

Use of the standard does not imply regulatory requirement or exclusivity.

## 9. Conclusion

The Digital Ingredient Disclosure / Ingredient Transparency Standard modernizes the structure and accessibility of food information disclosure by enabling consistent, machine-readable transparency.

By focusing exclusively on disclosure and interoperability, the standard supports diverse downstream uses while remaining neutral with respect to interpretation, evaluation, and consumer decision-making.