SLOVENSKI STANDARD
oSIST prEN 17972:2023

01-junij-2023

Pristnost živil - Pristnost živil in goljufije - Načini, izrazi in definicije

Food authenticity - Food authenticity and fraud - Concepts, terms, and definitions

Lebensmittelauthentizität - Lebensmittelauthentizität und -betrug - Konzepte und Begriffe

Authenticité des aliments - Authenticité des aliments et fraude - Concepts, termes et définitions

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Ta slovenski standard je istoveten z: **prEN 17972**

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ICS:

01.040.67	Živilska tehnologija (Slovarji)	Food technology (Vocabularies)
67.020	Procesi v živilski industriji	Processes in the food industry

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2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

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April 2023

ICS 01.040.67; 65.120; 67.050

English Version

Food authenticity - Food authenticity and fraud - Concepts, terms, and definitions

Lebensmittelauthentizität - Lebensmittelauthentizität und -betrug - Konzepte und Begriffe

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 17972:2023) has been prepared by Technical Committee CEN/TC 460 “Food authenticity”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

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Introduction

The general dictionary definition of “authenticity” is “the quality of being authentic”, and the relevant dictionary definitions of “authentic” include “not false or copied; genuine; real” and “having an origin supported by unquestionable evidence; authenticated; verified”. This document defines various terms and concepts in relation to authenticity and fraud related to feed and food products, including what various terms mean and what they entail. The aim of this document is to provide an internally consistent set of definitions that to a large degree is also in line with other definitions and with common word usage.

The terms and concepts defined here are largely based on the relationship between food product characteristics and food product claims. Food products have characteristics of various types; these characteristics are the real and actual properties that the food product in question has. Examples can include various characteristics related to the origin of the food product, the processes undergone in making it, the composition of the food product, the presence of additives, the eco-label status, etc. Some of these characteristics, such as composition or presence of additives, are physically inherent in the food product, whereas some other characteristics, such as eco-label status or exact origin, are not. Food products also come with some explicit claims attached, at least if they are sold commercially, when a certain amount of product information is mandatory. Claims are statements made about the food product; either explicitly (“this is extra virgin olive oil, and the label says so”) or implicitly (“this food is safe”). Authenticity when it comes to food products is when there is a match between the actual characteristic of the food product and the claim made about it. Lack of authenticity can be deliberate, as when someone intentionally makes a false claim about a food product; then we refer to it as food fraud, and there are various types of food fraud identified in this document. Lack of authenticity can also be accidental, for instance when an error in the production process or in the documentation / labelling process has led to a mismatch between the product characteristic and the claim. Note that the term “claim” in this document refers to any explicit or implicit statement which implies that a food product has a certain characteristic, whether the provision of this information is legally required or not.

This document intends to provide a common ground upon which future work regarding the authenticity and fraud of food products can be based.

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1 Scope

This document provides technical definitions of terms relating to authenticity and fraud when referring to food products. All terms and definitions are in the context of food supply chains, but most of them can also be applied when referring to feed products and the feed supply chain.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp/

— IEC Electropedia: available at https://www.electropedia.org/

The terms and concepts defined in this section have a hierarchical relationship to each other which can be illustrated as follows in Figure 1:

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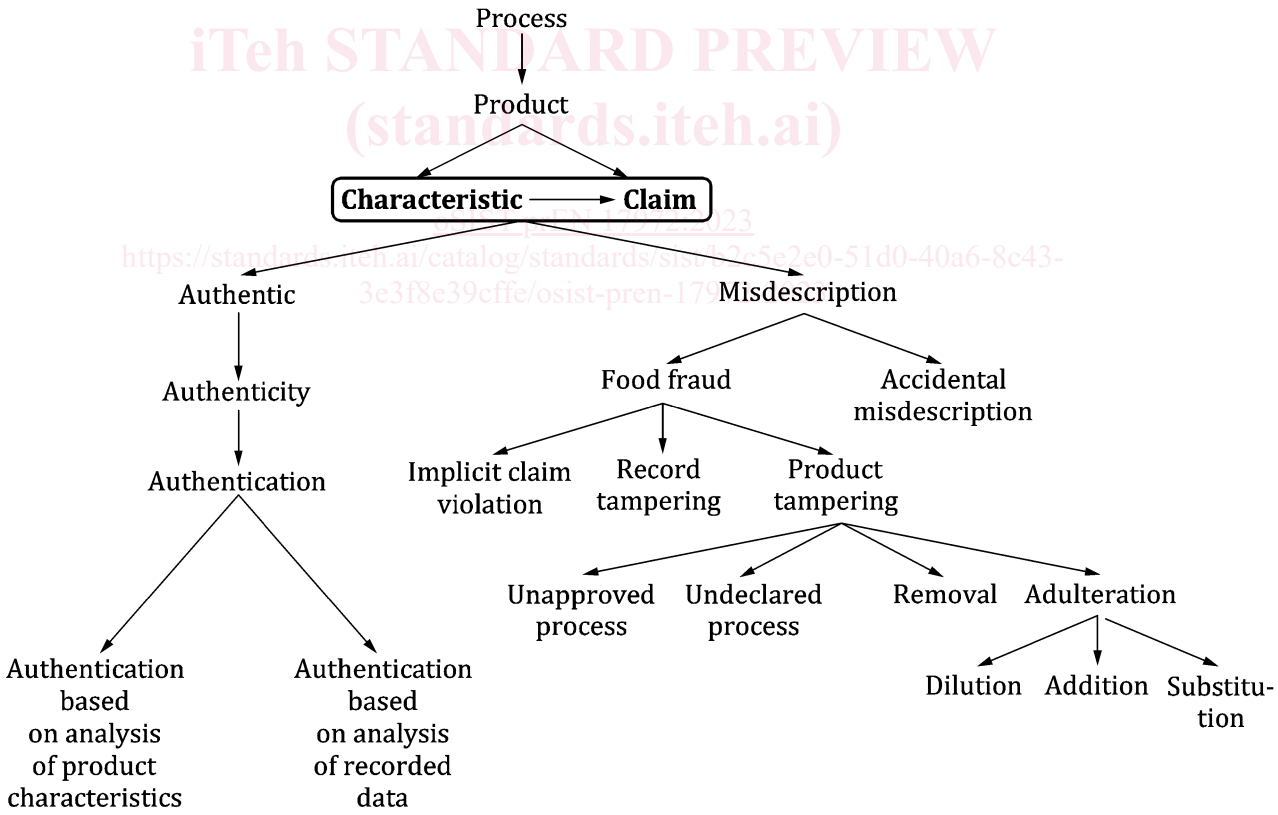

Figure 1 — Hierarchy of terms and concepts

This hierarchy is reflected in the clauses below by showing the domain to which each term or concept belongs in angle brackets (< >) before its definition.

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3.1
process
set of interrelated or interacting activities which transforms inputs to outputs

[SOURCE: EN ISO 22000:2018, definition 3.36]

3.2
product
<process> output that is a result of a process

Note 1 to entry: Products can be raw materials, intermediate/semi processed products, or finished products.

[SOURCE: EN ISO 22000:2018, definition 3.37, modified – Note 1 to entry has been replaced]

3.3
characteristic
<product> distinguishing feature of the product

Note 1 to entry: A product characteristic can be qualitative or quantitative.

Note 2 to entry: A product characteristic can be inherent in the product itself, or it can relate to the conditions under which the product was produced, or the environment in which it was produced.

Note 3 to entry: A product characteristic is sometimes referred to as a product attribute or a product property.

Note 4 to entry: There are various classes of product characteristics, such as the following:

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— product name, type, definition, category (e.g. coffee, beer, extra virgin olive oil);

— physical (e.g. size, weight, shape);

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— composition (e.g. moisture, protein, fat, vitamin content, species, specific breed, variety);

— sensory (e.g. related to smell, touch or taste);

— functional (e.g. nutritional quality of a food product);

— related to origin (e.g. geographic origin, identity of primary processor);

— related to production method (e.g. organic, free range);

— related to processing (e.g. quick-frozen, defrosted, irradiated, mildly processed, cooked at low temperature, location at a given time);

— related to other defined practices (including practices e.g. relating to halal or kosher production or animal welfare), certification schemes or regulations (e.g. produced according to some specification such as geographical indication).

This list includes direct (inherent) and indirect (associated) product characteristics.

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3.4
claim
<product> statement where a product is said or implied to have a certain characteristic

Note 1 to entry: The claim can be explicit, e.g. on the label or in the accompanying documentation.

Note 2 to entry: The claim can be implicit, for example that the food product is produced according to applicable rules and regulations.

Note 3 to entry: If the product is not safe, it will primarily be dealt with as a food safety issue, not as a food authenticity issue.

Note 4 to entry: Some jurisdictions use a narrower definition of the term "claim" where the term is applied only to nutritional claims or health claims. This document has a wider and more general definition of "claim"; both mandatory information required by law (including the product description) and additional voluntary information provided by the producer are considered claims, and they are normally explicit claims. The scope of this document also includes the entire supply chain, which includes business-to-business claims and business-to-consumer claims.

Note 5 to entry: There are claims that are subjective in nature ("contributes to a healthy diet", "tasty", "crispy", etc.); these are outside the scope of this document.

3.5
authentic
<characteristic – claim> state where there is a match between the food product characteristics and the corresponding food product claims

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3.6
authenticity
<authentic> quality of being authentic

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3.7
authentication
<authenticity> process of verifying the authenticity of the food product

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3.8
methods for authentication based on analysis of product characteristics
<authentication> procedures and techniques for analysing food product characteristics to authenticate claims

Note 1 to entry: Methods for the chemical, physical and sensory characterization of food products are commonly referred to as analytical methods. Examples of analytical methods, approaches and instruments include:

— DNA-based analyses;

— stable isotope and trace element analyses;

— liquid chromatography (LC);

— gas chromatography (GC);

— nuclear magnetic resonance (NMR) spectroscopy;

— vibrational spectroscopy, including near-infrared (NIR) or Raman spectroscopy;

— mass spectrometry;

— microscopy;

— general food chemistry analysis;

— sensory analysis.

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Note 2 to entry: These methods have many potential applications; what they all have in common is that they can perform measurements on the food product in question, and they can analyse some food product characteristics to evaluate the veracity or likelihood of the claim.

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3.9
methods for authentication based on analysis of recorded data
<authentication> procedures for investigating the veracity, consistency or likelihood of claims, based on recordings made in the supply chain for the food product in question

Note 1 to entry: These methods largely focus on identifying discrepancies in recorded data; that is, on identifying sets of claims that are mutually contradictory. These methods depend on explicit claims relating to the food product in question being available and accessible.

Note 2 to entry: The record-based methods for food product authentication can be applied on aggregate level, e.g. for countries, regions, or industry sectors, or they can be applied in specific supply chains or companies. When applied in specific supply chains or companies, the claims are normally extracted from the traceability system.

Note 3 to entry: A common record-based method for food product authentication is material flow analysis / mass-balance accounting, which is based on the mass balance principle, i.e. that matter is conserved in any system, and thus input mass is equal to output mass. Another common record-based method for food product authentication is input–output analysis, where claims relating to transactions between trading partners are examined for consistency.