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## Sensory analysis — General guidance for the application of sensory analysis in quality control

*Analyse sensorielle — Lignes directrices générales pour l'application  
de l'analyse sensorielle en contrôle qualité*

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ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Fax: +41 22 749 09 47  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 12, *Sensory analysis*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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# Sensory analysis — General guidance for the application of sensory analysis in quality control

## 1 Scope

This document gives guidelines for the implementation of a sensory analysis programme in quality control (QC), including general elements and procedures.

It is applicable to food and non-food industries.

It is limited to in-plant sensory analysis in QC.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 5492, *Sensory analysis — Vocabulary*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5492 and the following apply.

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

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

— IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1

#### **quality**

degree to which a set of inherent characteristics of an object fulfils requirements

Note 1 to entry: The definition of quality in this context includes consumer input.

Note 2 to entry: Quality has a multidimensional nature. The critical quality dimensions or inherent quality characteristics of the product should be determined.

Note 3 to entry: Satisfaction in this context includes consistent conformance to stated or implied needs. The product's degree of conformance and its reliability should be taken into consideration.

[SOURCE: ISO 9000:2015, 3.6.2, modified — The notes to entry have been replaced.]

### 3.2

#### **quality control**

#### **QC**

part of *quality* (3.1) management focused on fulfilling quality requirements

Note 1 to entry: QC is a procedure or set of procedures intended to ensure that a manufactured product adheres to a defined set of quality criteria or meets the requirements of the customer.

[SOURCE: ISO 9000:2015, 3.3.7, modified — Note 1 to entry has been added.]

### 3.3 quality assurance QA

part of *quality* (3.1) management focused on providing confidence that quality requirements will be fulfilled

Note 1 to entry: In developing products, QA is any systematic process of checking to see whether a product being developed is meeting specified requirements.

[SOURCE: ISO 9000:2015, 3.3.6, modified — Note 1 to entry has been added.]

### 3.4 specification document stating requirements

Note 1 to entry: A specification can be related to activities (e.g. procedure document, process specification and test specification), or products (e.g. product specification, performance specification and drawing).

Note 2 to entry: A specification is an exact statement of the particular needs to be satisfied, or essential characteristics that a customer requires and which a vendor must deliver. Specifications are written usually in a manner that enables both parties (and/or an independent certifier) to measure the degree of conformance.

[SOURCE: ISO 9000:2015, 3.8.7, modified — The example has been deleted and Note 2 to entry has been replaced.]

### 3.5 sensory specification/standard

document or product that defines the required sensory characteristics of an ingredient (raw material), a packaging material, an in-process or finished product (including its packaging) and their acceptable ranges of variation

Note 1 to entry: It may also be called "control standard".

Note 2 to entry: It may be a paper standard (paper or electronic document with written and/or pictorial descriptions) or reference samples (product standard), which is or are selected to represent the *quality* (3.1) of the product.

### 3.6 calibration reference

material that represents the possible range of deviations from the *specification* (3.4)

Note 1 to entry: For a finished product, calibration references can be created through formula modification or by aging or abusing the product to demonstrate minor, moderate and major variations from the control.

Note 2 to entry: Reference products with unacceptable deviations can be helpful in demonstrating issues arising from raw materials, processing and packaging.

Note 3 to entry: It is recommended to determine calibration references by experts from the R&D department and/or sensory group, but references should be checked against consumer's opinions.

### 3.7 in-out test

test to determine whether a test sample is within or outside a relevant sensory *specification* (3.4)

Note 1 to entry: It is also called "pass/fail method" or "accept/reject method".

[SOURCE: ISO 5492:2008/Amd.1:2016, 4.60, modified — Note 1 to entry has been added.]

### 3.8 difference-from-control test

test to indicate the degree of difference between a test sample and a control standard

Note 1 to entry: It is a comparison test. It is essential to establish and maintain a constant control standard.