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**Sensory analysis — Methodology —  
General guidance**

*Analyse sensorielle — Méthodologie — Lignes directrices générales*



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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 on 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 the following URL: [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*.

This third edition cancels and replaces the second edition (ISO 6658:2005), which has been technically revised. The following changes have been made:

- the definition of “sensory analysis” was updated;
- a tetrad test was added to the discrimination tests as [5.2.7](#);
- the descriptive test in [5.4](#) was expanded by new methods;
- [Clause 6](#) was updated;
- Table A.1 was deleted from [Annex A](#);
- the Bibliography was updated and expanded.

## Introduction

This document constitutes a general introduction to the methodology of sensory analysis and should be read before undertaking the more detailed test procedures described in other International Standards. It covers the general area of methodology and is intended to fulfil the following functions:

- to provide a brief background of the essential features of methods of sensory analysis for the user of specific tests;
- to provide details of general requirements, procedures and interpretation of results common to all or most tests;
- to provide sufficient guidance on requirements, procedures and interpretation of results for the different specific tests to allow choice of the most appropriate procedure(s) for solution of a particular problem.

It comprises three main aspects, covered in [Clauses 4, 5](#) and [6](#).

It is essential that [Clause 4](#) “General requirements” be read first. [Clause 5](#) “Methods of test” describes, in a general manner, all the main tests. [Clause 6](#) is concerned with some general principles of data collection and analysis of sensory data and also briefly covers general principles of statistical treatment of the results.

# Sensory analysis — Methodology — General guidance

**WARNING** — This document does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

## 1 Scope

This document gives general guidance on the use of sensory analysis. It describes tests for the examination of foods and other products by sensory analysis, and includes some general information on the techniques to be used if statistical analysis of the results is required.

Generally these tests are intended only for objective sensory analysis. However, if a test can be used for determining preference in hedonic test, this is indicated.

A hedonic test aims to determine the acceptability of the products and/or to determine preferences among two or more products by the specified consumer population. The methods are effective for determining whether a perceptible preference exists (difference in degree of liking), or whether no perceptible preference exists (paired similarity test). General guidance for hedonic tests is given in ISO 11136.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 3.1

#### **sensory analysis**

science involved with the assessment of the organoleptic attributes of a product by the senses

## 4 General requirements

### 4.1 Basic information

This clause covers the general requirements common to all situations encountered in sensory analysis. The information basic to these requirements is as follows.

- a) The human response to one stimulus cannot be isolated from previous experiences or from other sensory stimuli received from the environment. Nevertheless, influences arising from these two sources can be controlled and the effect standardized.