



## **Sensory analysis**

### **Part 1.3: Methodology—Selection, training and monitoring of selected assessors and expert sensory assessors**



This Australian Standard® was prepared by Committee FT-022, Sensory Analysis of Food. It was approved on behalf of the Council of Standards Australia on 18 November 2014. This Standard was published on 17 December 2014.

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The following are represented on Committee FT-022:

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  - Australian Institute of Food Science and Technology
  - Australian Society of Cosmetic Chemists
  - Brewers Association of Australia and New Zealand
  - Deakin University
  - Defence Science and Technology Organisation
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- 

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Australian Standard<sup>®</sup>

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## PREFACE

This Standard was prepared by the Standards Australia Committee FT-022, Sensory Analysis of Food, to supersede AS 2542.1.3—1995, *Sensory analysis of foods, Method 1.3: General guide to methodology—Selection of assessors*.

This Standard is identical with, and has been reproduced from ISO 8586:2012, *Sensory analysis—General guidelines for the selection, training and monitoring of selected assessors and expert sensory assessors*.

The objective of this Standard is to provide guidelines for the selection, training and monitoring of assessors participating in sensory analysis.

It is acknowledged that specific product sensory testing may require further specialized training beyond the scope of this Standard.

As this Standard is reproduced from an International Standard, the following applies:

- (a) In the source text ‘this International Standard’ should read ‘this Australian Standard’.
- (b) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian, as follows:

<i>Reference to International Standard</i>		<i>Australian Standard</i>	
ISO		AS	
5492	Sensory analysis—Vocabulary	2542	Sensory analysis
		2542.3	Part 3: Vocabulary
6658	Sensory analysis—Methodology— General guidance	2542.1.1	Part 1.1: Methodology—General guidance

Only normative references that have been adopted as Australian Standards have been listed.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

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## INTRODUCTION

A sensory analysis panel constitutes a true “measuring instrument”, and consequently the results of the analysis depends on its members.

The recruitment of persons willing to participate in a panel therefore needs to be carried out with care and to be considered as a real investment, both in time and money.

Sensory assessment can be performed by three types of assessors:

- sensory assessors;
- selected assessors;
- expert sensory assessors.

“Sensory assessors” are any people taking part in a sensory test. They can be “naive assessors” who do not have to meet any precise criterion, or “initiated assessors” who have already participated in sensory tests (see ISO 5492:2008, 1.5).

“Selected assessors” are chosen for their ability to perform a sensory test (see ISO 5492:2008, 1.6).

“Expert sensory assessors” are selected assessors with a demonstrated sensory sensitivity and with considerable training and experience in sensory testing, who are able to make consistent and repeatable sensory assessments of various products (see ISO 5492:2008, 1.8).

It is necessary to undertake a preliminary selection of the candidates at the recruitment stage, in order to eliminate those who would be unsuited for sensory analysis. However, the final selection can only be made after selection and training. The selection and training methods to be employed depend on the tasks to intend for the “selected assessors” and “expert sensory assessors”.

Sensory assessors work as a panel which is managed by a panel leader. In certain cases (especially for descriptive sensory analysis), the panel may be divided into specialized subgroups.

The recommended procedure involves:

- a) recruitment and preliminary screening of naive assessors;
- b) familiarization of naive assessors who are to become initiated assessors;
- c) selection of initiated assessors in order to determine their ability to perform particular tests, who then become selected assessors;
- d) possible training of selected assessors to become expert sensory assessors.

The exact procedures covered by a) and b) and the nature of the tests performed in c) and d) depend on the tasks intended for the panel.

Expert sensory assessors have demonstrated particular acuity and reproducibility in panel work, and have developed a good long-term sensory memory, allowing reliable comparative judgements, possibly in the absence of control samples.

The panel leader is responsible for the general monitoring of the group of expert sensory assessors and for their training. The expert sensory assessors are not responsible for the choice of tests used, the presentation of the samples or for the interpretation of results. These matters are the responsibility of the panel leader who also decides how much information is given to the panel.

The performance of selected assessors should be monitored regularly to ensure that the criteria by which they were initially selected continue to be met.

The entire process is illustrated in [Figure 1](#).

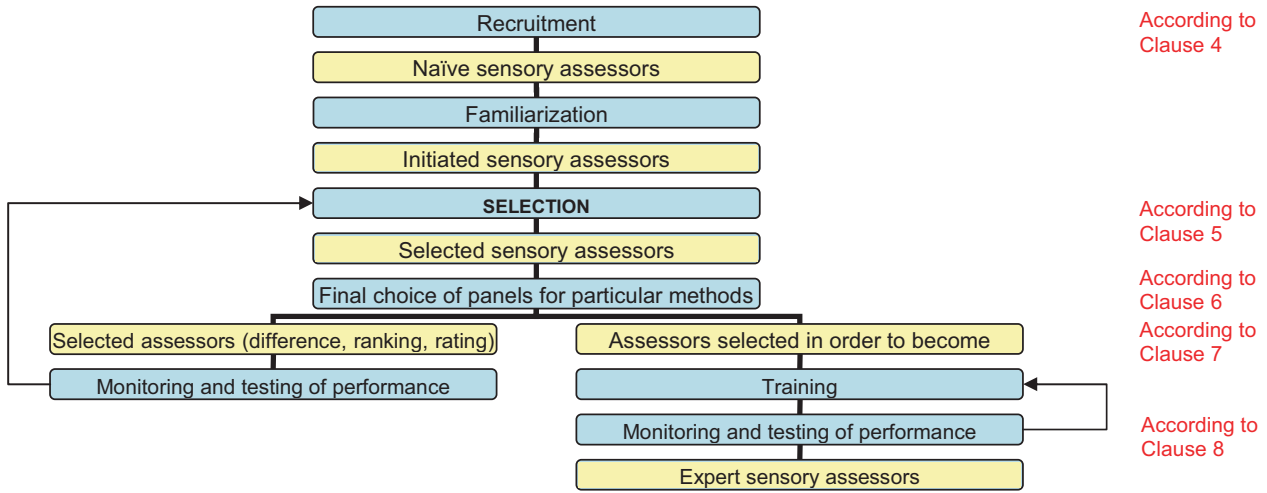


Figure 1 — Entire process

## AUSTRALIAN STANDARD

**Sensory analysis**

## Part 1.3:

**Methodology—Selection, training and monitoring of selected assessors and expert sensory assessors**

**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 International Standard specifies criteria for the selection and procedures for the training and monitoring of selected assessors and expert sensory assessors. It supplements the information given in ISO 6658.

**2 Normative references**

The following referenced documents are indispensable for the application 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 5492:2008, *Sensory analysis — Vocabulary*

ISO 6658, *Sensory analysis — Methodology — General guidance*

ISO 8589, *Sensory analysis — General guidance for the design of test rooms*

**3 Terms and definitions**

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

**3.1****repeatability**

precision under repeatability conditions

Note 1 to entry: Repeatability can be expressed quantitatively in terms of the dispersion characteristics of the results.

[SOURCE: ISO 3534-2:2006, 3.3.5]

Note 2 to entry: Repeatability related to sensory analysis is defined as a measure of the agreement between assessments on the same sample under the same conditions. See [Table A.1](#).

**3.2****repeatability conditions**

observation conditions where independent test/measurement results are obtained with the same method on identical test/measurement items in the same test facility or measuring facility by the same operator using the same equipment within short intervals of time

Note 1 to entry: Repeatability conditions include:

- the same measurement procedure or test procedure;
- the same operator;
- the same measuring or test equipment used under the same conditions;