



Australian Government

MSL975038 Conduct sensory analysis

Release: 1

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Modification History

Release	Comments
Release 1	This version was released in <i>MSL Laboratory Operations Training Package Release 2.0</i>. Supersedes and equivalent to MSL975005 Conduct sensory analysis. Foundation skill information added. Range of conditions removed. Assessment requirements amended.

Application

This unit of competency describes the skills and knowledge to set up and coordinate sensory analysis and assess the results obtained from a routine sensory analysis.

This unit applies to laboratory technicians and technical officers working in the food industry. Although a supervisor may not always be present, the technician will follow standard operating procedures (SOPs) that will clearly describe the scope of permitted practice in modifying testing procedures and for communicating results to people outside of the laboratory.

No licensing or certification requirements exist at the time of publication. However, regulations and/or external accreditation requirements for laboratory operations exist, so local requirements should be checked. Relevant legislation, industry standards and codes of practice within Australia must also be applied.

Pre-requisite Unit

Nil

Competency Field

Testing

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 **Select panellists/individ**

1.1 Perform initial screening of potential panellists/individuals based on the testing brief

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
	uals for sensory analysis	1.2	Use information to select suitable people
		1.3	Analyse and report the results used to establish a panel
2	Prepare panellists for sensory analysis	2.1	Prepare panellists for sensory analysis
		2.2	Conduct any training required to detect test characteristics
		2.3	Instruct panellists on recording and reporting requirements of test data
3	Prepare samples for sensory analysis	3.1	Prepare reference samples to be used for the sensory analysis specification
		3.2	Prepare evaluation samples to sensory analysis specification
		3.3	Apply food safety procedures in the preparation and presentation of samples
		3.4	Identify and report on any defects or abnormalities in samples
4	Conduct routine sensory analysis	4.1	Select appropriate test materials for the information required
		4.2	Ensure tests are conducted according to workplace procedures
		4.3	Analyse data
		4.4	Report on process and results in accordance with workplace procedures
5	Evaluate and report findings	5.1	Assess the possible effects of group attributes
		5.2	Review reliability of results for group bias

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.	
	5.3	Complete all relevant documentation and present findings
6 Maintain a safe work environment	6.1	Use established work practices to ensure personal safety and that of other personnel
	6.2	Minimise the generation of waste and environmental impacts
	6.3	Safely collect laboratory waste for subsequent disposal
	6.4	Care for and store equipment and reagents as required

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

- Writing skills to develop questionnaires
- Oral communication skills to interact effectively with panellists including those who have diverse cultural and social backgrounds.

Other foundation skills essential to performance are explicit in the performance criteria of this unit.

Unit Mapping Information

Equivalent to MSL975005 Conduct sensory analysis, Release 1.

Links

Training Package Companion Volumes -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>

Assessment Requirements for MSL975038 Conduct sensory analysis

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- established and coordinated at least 1 sensory analysis test that includes a minimum of 5 panellists.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- anatomy, physiology and functions of taste and smell to determine sample appearance, texture, aroma and flavour
- the primary flavour characteristics of sweet/sour, umamic and bitter/salty
- interaction of sensory activity, such as the interaction between taste and smell, and effect of temperature on samples
- associated characteristics of mouth feel and appearance
- consumer research methods
- information used to select suitable panellists
- principles of descriptive, discriminative and affective sensory analysis methods
- principles of effective control of the sensory testing environment, such as conditions that can dull sensitivity
- principles and purpose of test methods implemented (why they are used and what they demonstrate)
- attributes of panellists which could affect the results, such as:
 - age, gender and ethnicity
 - smoking
 - medications
 - qualifications and trained/untrained

- random panel
- cultural food preferences/food styles
- likely causes of variation in results and their control
- typical samples include:
 - raw materials, ingredients, final products, packaging materials, and materials which come in contact with the product
 - materials at stages of production
 - process aids and adjuncts
- common testing methods:
 - triangular test, duo-trio test, ranking test, paired comparison test and blending test
 - flavour profile
 - threshold analysis
 - discriminative testing, descriptive testing and affective testing
- typical uses of the results obtained from the sensory analysis:
 - marketing studies
 - purchasing requirements
 - quality assurance at various stages of production
 - quality control and troubleshooting
 - research and development of new products
 - customer returns
 - product recalls
- awareness of environmental sustainability issues as they relate to the work task
- legal, ethical and work health and safety (WHS) requirements specific to the work task including traceability, confidentiality and security requirements of all client information, and laboratory data and records.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - statistical data sheets and charts, logbooks and scientific calculators
 - relevant ISO Standards and Australian Standards
 - a sensory evaluation panel room and group of panellists.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

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