



Australian Government

FBPFST4014 Apply sensory analysis in food and/or beverage production

Release: 1

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Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to carry out sensory analysis of food and/or beverages, and to use appropriate terminology when describing the organoleptic properties.

This unit applies to workers who have responsibility for overseeing the production of food and/or beverages and the quality assurance requirements, and who are responsible for making changes to processing based on the results of the sensory analysis.

No licensing or certification requirements apply to this unit at the time of publication. However, legislative and regulatory requirements for food processing exist, so local requirements must be checked. All work must comply with Australian food safety standards and relevant codes of practice.

Pre-requisite Unit

Nil

Unit Sector

Food Science and Technology (FST)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify the organoleptic properties of food or beverage	1.1 Recognise the five basic tastes (sweet, salty, bitter, sour and umami) 1.2 Identify the textural properties of food or beverage

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Identify aromas and flavours 1.4 Recognise the effect of colour on the visual properties of food or beverage 1.5 Recognise any personal sensory blind spots
2. Analyse food or beverage samples	2.1 Determine required organoleptic properties for specified product 2.2 Devise or access appropriate recording documentation for the sensory evaluation test 2.3 Prepare samples for analysis in accordance with workplace procedures 2.4 Analyse sensory properties of food or beverage 2.5 Identify any faults with product that do not fit product specification 2.6 Identify the factors influencing sensory evaluation tests 2.7 Identify differences between standard specified for product and sample
3. Act on results of analysis	3.1 Record details of analysis using predetermined format 3.2 Discuss outcomes of analysis with team 3.3 Determine action to be taken as a result of the analysis

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Oral communication	Use appropriate terminology and effective communication skills to discuss sensory analysis results and determine actions
Get the work done	Think through options to solve problems as they arise

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPFST4014 Apply sensory analysis in food and/or beverage production	Not applicable	New unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPFST4014 Apply sensory analysis in food and/or beverage production

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has effectively applied sensory analysis in a food and/or beverage production environment, including:

- analysing and describing the organoleptic properties of three different food products, or three different beverage products, including:
 - taste – sweet, salty, bitter, sour and umami (savoury)
 - texture
 - aroma
 - flavour
 - colour
 - visual properties
- identifying differences between the three products
- identifying product faults
- identifying any personal sensory blind spots.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- industry codes of practice relevant to industry sector
- anatomy, physiology and functions of taste and smell to determine sample appearance, texture, aroma and flavour
- the primary flavour characteristics of sweet/sour, umami (savoury) and bitter/salty
- frameworks for organoleptic evaluation, relevant to product
- clarity around what makes a quality product (style, context, specification)
- interaction of sensory activity, including the interaction between taste and smell, and effect of temperature on samples

- associated characteristics of mouth feel and appearance
- the various sensory evaluation tests used in the food processing industry
- principles and purpose of test methods implemented (why they are used and what they demonstrate)
- quality requirements for conducting a taste panel
- sensory panels and their makeup (and acknowledgement that people have different sensory skills)
- descriptive, discriminative and affective sensory methods
- typical samples used for sensory analysis, including:
 - raw materials, ingredients, final products, packaging materials, and materials that 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:
 - quality assurance at various stages of production
 - quality control and troubleshooting
 - research and development of new products
 - blending.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a workplace setting or an environment that accurately represents a real food or beverage production environment
- resources, equipment and materials:
 - food and/or beverage product samples for analysis.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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