



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **FDFST4010A Apply sensory analysis in food processing**

**Release: 2**

## **FDFST4010A Apply sensory analysis in food processing**

### **Modification History**

April 2012: Minor typographical corrections.

### **Unit Descriptor**

This unit covers the skills and knowledge required to identify sensory evaluation techniques and to use appropriate terminology when describing the organoleptic properties of food.

### **Application of the Unit**

This unit applies to quality managers, production supervisors and testing staff working for food and beverage processing companies.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

This unit contains employability skills.

### **Elements and Performance Criteria Pre-Content**

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify the organoleptic properties of food	<ul style="list-style-type: none"><li>1.1 The five basic tastes (sweet, salty, bitter, sour and umami) are recognised</li><li>1.2 The textual properties of food are identified</li><li>1.3 Aromas and flavours are identified</li><li>1.4 The effect of colour on the visual properties of food is recognised</li></ul>
2. Confirm the procedures to be used in the sensory evaluation of a food product	<ul style="list-style-type: none"><li>2.1 The purpose and procedures for various sensory evaluation tests are outlined</li><li>2.2 The methodology of the sensory evaluation tests are reviewed</li><li>2.3 The factors influencing sensory evaluation tests are identified</li></ul>
3. Coordinate a taste panel	<ul style="list-style-type: none"><li>3.1 Panellists are instructed on the procedure</li><li>3.2 Samples are prepared according to sensory testing protocols</li><li>3.3 Appropriate recording documentation is devised or accessed for the sensory evaluation test</li><li>3.4 Taste panel is organized and run to appropriate standards.</li><li>3.5 Results of the taste panel are recorded for analysis</li></ul>

## Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

### Required skills include:

#### Ability to:

- identify the organoleptic properties of food
- outline the various sensory evaluation tests used in the food processing industry
- select an appropriate sensory evaluation test method for a given product
- prepare samples for sensory testing
- record results in required format
- review results for evidence of discrepancies or bias
- communicate with and supervise panellists.

### Required knowledge includes:

#### Knowledge of:

- organoleptic properties of food
- sensory evaluation of foods
- interactions and associated characteristics of sensory abilities
- quality requirements for conducting a taste panel
- descriptive, discriminative and affective sensory methods
- organisational quality procedures for sensory testing.

## Evidence Guide

<p>The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<p>Overview of assessment</p>	<p>A person who demonstrates competency in this unit must be able to apply sensory analysis techniques in food processing</p>
<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<p>Critical aspects of assessment must include evidence of recognising the organoleptic properties of foods implementing procedures for sensory testing coordinating a taste panel and recording the results.</p>
<p>Context of and specific resources for assessment</p>	<p>Assessment of performance requirements in this unit should be undertaken within the context of food technology. Competency is demonstrated by performance of all stated criteria, including the critical aspects and knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statements applicable to the workplace environment.</p> <p>Assessment must occur in a real or simulated workplace where the assessee has access to:</p> <ul style="list-style-type: none"> <li>• Sensory testing procedures and related equipment and product for samples</li> <li>• Methods and related software systems as required for collecting data from sensory testing</li> <li>• An appropriate sensory testing environment</li> </ul>
<p>Method of assessment</p>	<p>The following assessment methods are suggested:</p> <p>Observation of candidate organising and running a range of tests and procedures</p> <ul style="list-style-type: none"> <li>• written and/or oral questioning to assess knowledge and understanding</li> <li>• completing workplace documentation for the conduct of sensory testing</li> <li>• third party reports from experienced practitioner</li> <li>• role play</li> <li>• case studies</li> <li>• field reports.</li> </ul>
<p>Guidance information for assessment</p>	<p>Evidence should be gathered over a period of time in a</p>

	range of actual or simulated environments.
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## Range Statement

<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b>Policies and procedures</b></p>	<p>Legislative requirements including national codes of practice and state food regulatory requirements</p> <p>Safety procedures and MSDS</p> <p>Australian and international standards including:</p> <ul style="list-style-type: none"> <li>• professional association regulations</li> <li>• industry guidelines and codes of practice</li> <li>• Federal and state food safety regulations</li> <li>• Food Standards Code</li> <li>• ISO Standards</li> <li>• codex alimentarius.</li> </ul>
<p><b>The purpose of sensory testing</b></p>	<p>Tests may be performed to determine the following aspects of a sample: flavour, appearance, aroma, texture.</p> <p>The primary flavour characteristics may include: sweet, sour, umamic, bitter, salty.</p>
<p><b>Testing methods</b></p>	<p>Testing methods may include:</p> <ul style="list-style-type: none"> <li>• triangular test, duo-trio test, ranking test, paired comparison test, blending test</li> <li>• flavour profile</li> <li>• threshold analysis</li> <li>• discriminative testing, descriptive testing, affective testing.</li> </ul>

## Unit Sector(s)

Technical.