



Australian Government

FBPFST4013 Interpret and respond to food and/or beverage test results

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 interpret test results and make decisions about how to manage the production process in response to the results.

This unit applies to those workers who have responsibility for overseeing the production of food and/or beverages and the quality assurance requirements associated with those products.

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. Review food and/or beverage test results	1.1 Access and read test results 1.2 Compare test results to reference standards and expectations 1.3 Identify trends in data and/or results 1.4 Identify atypical results

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Source cause of food and/or beverage atypical data	2.1 Identify a range of possible causes for atypical results 2.2 Gather data and other information to eliminate or confirm possible causes
3. Act on results of analysis	3.1 Determine options to correct processing of food and/or beverage 3.2 Determine options to correct cause of atypical results 3.3 Select the most appropriate solution/s 3.4 Take action to correct atypical results in accordance with product specification 3.5 Record actions taken in response to analysis in accordance with workplace procedures

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
Numeracy skills	Interpret test results, including carrying out simple calculations
Get the work done	- Think through options to identify and respond to atypical results of tests - Trace and source obvious cause of artefact or malfunction

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPFST4013 Interpret and respond to food and/or beverage test results	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 FBPFST4013 Interpret and respond to food and/or beverage test results

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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 accurately interpreted and suitably responded to test results in a food production environment, including:

- at least four of the following test types most relevant to the job role:
 - pH
 - alcohol
 - bitterness
 - colour
 - microbiological counts
 - moisture
 - vicinal diketones (VDKs)
 - carbon dioxide (CO₂) and nitrogen (N₂)
 - dissolved oxygen (DO)
 - total packed oxygen (TPO)
 - water activity (Aw)
 - test type specific to food or beverage product
- performing calculations that include decimals and percentages, volume, ratios, dosage and concentration
- recording actions carried out in response to test results.

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:

- purpose of tests performed as part of job role and principles of the standard methods/specifications used
- typical basic tests, equipment and methods relevant to product

- measurements used for typical tests
- acceptable parameters for typical test results
- sources of uncertainty in measurement and methods for control
- workplace and/or legal traceability requirements
- numeracy skills relevant to job role:
 - convert units involving multiples and submultiples
 - use fractions, decimals, proportions and percentages to determine responses to results
 - use areas (m²) and volumes (ml, L, m³) to describe product quantities
 - calculate dose (mg), average mass, mass percentage, density, moisture, relative and absolute humidity
 - determine ratios, such as mass to mass, mass to volume and volume to volume percentages
 - calculate concentration, such as g/100mL, mg/L and dilution ml/L
 - analyse statistical data to identify processing issues
 - calculate food properties, such as % concentration (dry), % content of moisture, ash, fat, protein, alcohol, sulphur dioxide and trace metals
- methods for controlling atypical outcomes of tests, relevant to process.

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 or beverage process test results.

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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