



Australian Government

Assessment Requirements for FBPTEC4022

Prepare starter cultures for fermentation

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.

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 prepared for fermentation by producing two different starter cultures from the following list, each on two separate occasions, that consistently meets specifications for the product:

- yeast
- bacteria
- fungi
- yeast and bacterial symbiotic culture of bacteria and yeast (SCOBY)
- combinations of fermentation organisms above relevant to product.

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:

- general fermented products that require a starter culture to begin the fermentation process
- ideal temperature to promote enzyme activity, relevant to starter culture
- specific starters used for different products, including yeast, bacteria, fungi, and yeast and bacterial SCOBY, or combinations of these relevant to product
- contaminants that may affect different types of starters
- natural starters versus commercial starters, including mothering process
- typical basic tests, equipment and methods relevant to starter culture preparation, such as temperature, pH and humidity
- sanitation requirements and purpose
- instruments and measurements used for typical tests relevant to product, such as thermometer probe, pH meter, hygrometer and calibration requirements for each
- acceptable parameters for typical test results
- anaerobic and aerobic pathogen risks associated with starter culture preparation

- air circulation requirements of specific starter cultures
- possible effects of temperature fluctuations, relative humidity and air circulation on starter culture
- workplace and/or legal traceability requirements
- interpretation of test results, including simple calculations
- 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 fermented food or beverage production environment
- resources, equipment and materials:
 - raw materials and equipment to produce starter
 - test equipment
- specifications:
 - specification for product.

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

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>