



Australian Government

FBPFAV2002 Apply hydro-cooling processes to fresh produce

Release: 1

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Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to use hydro-cooling equipment and processes to cool fresh fruit or vegetables in preparation for storage or transportation.

This unit applies to individuals who apply hydro-cooling processes in a food processing environment or at a farm or production site where produce is processed directly after harvest to maximise longevity.

All work must be carried out to comply with workplace procedures, in accordance with state/territory health and safety and food safety regulations, legislation and standards that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Fruit and Vegetables (FAV)

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 hydro-cooling requirements	1.1 Identify produce for hydro-cooling and confirm specific cooling and transfer requirements 1.2 Conduct pre-start checks of cooling equipment, prepare and fit personal protective equipment

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 Check and adjust equipment performance to meet work requirements 1.4 Place goods in storage areas to meet storage temperature, stores handling and stock rotation requirements 1.5 Record stores information in required format
2. Conduct hydro-cooling	2.1 Check storage facility for readiness and allocation of space for produce 2.2 Transfer produce in a manner that is safe and maintains produce quality 2.3 Set operating parameters for hydro-cooling equipment to meet safety and cooling requirements 2.4 Apply hydro-cooling to produce according to cooling requirements 2.5 Transfer produce to storage according to workplace procedures 2.6 Record process information in required format 2.7 Maintain the work area according to workplace standards, food safety and health and safety requirements
3. Monitor hydro-cooling process	3.1 Check temperature to ensure required levels are maintained 3.2 Identify and act on non-compliance issues or problems

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
Reading	Interpret standard hydro-cooling information, including impacts of timing and temperature on fresh produce
Writing	Record product and processing information using digital and/or paper-based formats
Numeracy	Interpret temperature gauges (°C)

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPFAV2002 Apply hydro-cooling processes to fresh produce	FBPFAV2001 Apply hydro-cooling processes to fresh produce	Minor changes to Performance Criteria to clarify intent Foundation Skills refined Performance Evidence clarified Minor changes to Knowledge Evidence and Assessment Conditions	Equivalent

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 FBPFAV2002 Apply hydro-cooling processes to fresh produce

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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 applied hydro-cooling processes to at least one batch of fresh produce to meet specifications, including:

- applying safe work practices
- applying food safety procedures to work practices
- taking corrective action in response to typical faults and inconsistencies with cooling equipment.

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:

- health and safety hazards and controls, including the purpose and limitations of protective clothing and equipment
- hydro-cooling facilities and capacities available in the work area
- key steps in the hydro-cooling process, including impact of timing and temperature
- good manufacturing practices (GMP) relevant to work task
- temperature control requirements of produce handled in the work area, including acceptable temperature ranges, consequences of failing to meet these ranges, and requirements for gradual temperature change
- handling procedures for receiving and locating produce, including procedures for identifying, segregating and disposing of damaged or potentially unsafe stock
- stock handling procedures for transferring cooled stock from a temperature-controlled environment, including the maximum duration stock can be held outside a controlled environment
- food safety and quality consequences of stock temperature control requirements not being met

- monitoring procedures and instrumentation, including the use of thermometers or other temperature-measuring instrumentation
- notification, recording and reporting requirements and procedures for apply hydro-cooling processes
- operating procedures for goods handling equipment
- housekeeping requirements for work area
- procedures to track traceability of product.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - a fresh food processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - hydro-cooling specifications and facilities
 - produce requiring cooling
 - load-shifting equipment
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - stock information recording system and procedures.

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

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