



Australian Government

Department of Education, Employment and Workplace Relations

FDFST4005A Document processes and procedures for a food product

Release: 2

FDFST4005A Document processes and procedures for a food product

Modification History

April 2012: Minor typographical corrections.

Unit Descriptor

This unit covers the skills and knowledge required to document the operational steps and procedures in producing a processed food product.

Application of the Unit

This unit applies to quality assurance and technical staff who are required to document processes and procedures for a food product, and who have responsibility for monitoring and maintaining product safety and quality and the production environment.

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

ELEMENT	PERFORMANCE CRITERIA
1. Identify the stages and operations required in the processing of a food product	1.1 Inputs, production processes and outputs are identified 1.2 Each step in processing is examined and impacts, feedback and process adjustment in the production system is assessed 1.3 Hazards to food safety and product quality at each stage of production are identified
2. Identify the facilities, equipment, workflow and process controls for a processed food product	2.1 Functions of the major production stages are classified and analysed 2.2 Equipment used to perform each operation stage is identified 2.3 The facilities, workflow and layout of the workplaces, or technical work area, together with their core activities and links with other parts of the organisation are identified 2.4 Process controls are documented for a processed food product 2.5 The workforce structure and the roles and responsibilities of workplace personnel are established for a given food product 2.6 Information management processes are investigated for a food processing operation
3. Produce flow diagrams for nominated unit operations	3.1 Correct nomenclature and symbols are used to show processes, inputs and outputs 3.2 The completed flow diagram is reviewed and suggestions for improvements for product quality and operational efficiency are documented 3.3 Energy and resource usage, and environmental impacts, of production processes are quantified 3.4 Procedures for testing for yields and/or variances are identified at each stage 3.5 Areas for process improvement are identified for further analysis

Required Skills and Knowledge

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

Required skills include:

Ability to:

- identify major stages and operations, including: material transfer, separation, size reduction, combination, heat exchange, biochemical transformation, shaping and extrusion
- analyse the functions of the major operations, including purpose and application of each operation
- identify the range of equipment used to perform each major unit operation
- establish the function of each piece of equipment used to perform major operations
- review the resultant products of the major production operations on food, in accordance with quality control processes and procedures
- ascertain the affects of physical conditions e.g. temperature, pressure on the function of these unit operations
- prepare a process flow chart for each unit operations
- identify the process controls in place and how they ensure required production rate and consistent quality.

Required knowledge includes:

Knowledge of:

- the basic theory behind each major operation e.g. material transfer, separation, size reduction, combining, heat exchange, biochemical transformation and shaping
- selection criteria regarding the equipment used to perform each major operation
- the basic operating principles for the equipment used to perform each major operation
- process flow charts and process control.

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 document processes in a production system as part of system monitoring and continuous improvement.</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 the ability to document procedures for a food product, including identifying unit operations and representing a food processing operation in a diagrammatic form. Documented procedures must be able to be interpreted to review mechanisms for calculating variances and outputs that are outside of specification, and to identify areas for further refining and development under continuous improvement for a food product.</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"> • production process and related equipment, manufacturers' advice and operating procedures • methods and related software systems as required for collecting data and calculating yields, efficiencies and material variances appropriate to production environment • tests used to report relevant product/process information and recorded results.
<p>Method of assessment</p>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> • written and/or oral questioning to assess knowledge and understanding • completing workplace documentation • third party reports from experienced practitioner • case studies • field reports.

Guidance information for assessment	Evidence should be gathered over a period of time in a range of actual or simulated environments.
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Range Statement

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.

Occupational health and safety requirements	<ul style="list-style-type: none"> • Codes of practice, regulations, Material Safety Data Sheets (MSDSs) • Enterprise specific requirements • Relevant State/Territory/Commonwealth Occupational Health and Safety acts, regulations, national standards, codes of practice and guidance notes which may apply in jurisdiction • Examples of specific task related procedures may include: <ul style="list-style-type: none"> • handling of chemicals • use of personal protective equipment (PPEs).
Regulations	<ul style="list-style-type: none"> • Australian New Zealand Food Standards Code • AQIS • Local Authority standards • Symbols for process flow charts may be based on ISO 9000 Documentation, Quality Manual and 32 Operational Procedures (AQA ISO 9000 Series) • Acts of Parliament, regulations and statutes.
Materials, equipment and systems	<ul style="list-style-type: none"> • Heating and cooling equipment, size reduction systems, materials transfer equipment, heat exchangers, forming and shaping equipment • Major operations may include: material transfer, separation, size reduction, combining, heat exchange, biochemical transformation, shaping and extrusion operations. • Each operations may include preventative maintenance procedures.

Unit Sector(s)

Technical.