



Australian Government

Department of Education, Employment and Workplace Relations

FDFRB3012A Diagnose and respond to product and process faults (pastry, cake and cookies)

Release: 1

FDFRB3012A Diagnose and respond to product and process faults (pastry, cake and cookies)

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to determine causes and address faults in pastry, cake and cookie products.
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Application of the Unit

Application of the unit	<p>This unit builds on the problem solving skills developed in operational units and provides technical competencies to support problem solving relating to pastry, cake and cookie production.</p> <p>Where recurrence of a problem cannot be prevented, procedures should be established to minimise the likelihood of recurrence and to identify any further incidents.</p>
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	FDFRB2001A	Form and fill pastry products
	FDFRB2002A	Prepare fillings
	FDFRB3001A	Produce pastry
	FDFRB3003A	Produce sponge, cake and cookie batter

Prerequisite units		
	FDFRB3004A	Decorate cakes and cookies
	FDFRB3006A	Bake sponges, cakes and cookies
	FDFRB3007A	Bake pastry products

Employability Skills Information

Employability skills	This unit contains employability skills
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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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify causes of unacceptable product quality	1.1. Unacceptable products are analysed to determine cause 1.2. Process parameters and reactions which occur during processing are monitored
2. Take corrective action according to workplace procedures	2.1. Corrective action is taken to remove unacceptable product and prevent recurrence of the problem according to workplace procedures 2.2. Corrective action is recorded according to workplace procedures and food safety program

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

Ability to:

- access workplace information relating to troubleshooting
- select, fit and use personal protective clothing and/or equipment
- use relevant observation and/or test methods to confirm raw ingredient characteristics
- remove/isolate and report ingredients/materials of unacceptable quality
- determine likely causes of unacceptable final product relating to raw ingredients
- determine likely causes of unacceptable final product relating to the process and/or storage conditions
- develop procedures to prevent or minimise the likelihood of recurrence of the problem
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- basic composition, characteristics and function of each main ingredient used, including:
 - form/grade of ingredient supplied
 - behaviour/changes occurring during processing
 - role and purpose
- preparation requirements for use, such as conditioning fruit and bringing ingredients to the required temperature
- styles, types and textures of finished products
- impact of ingredient cost and yields on profit margin
- the purpose and effect of each production stage for pastry, including:
 - all-in, French, rolled in and short dough methods
 - mixing
 - blocking
 - laminating
 - sheeting
 - shape forming
 - filling preparation

REQUIRED SKILLS AND KNOWLEDGE

- methods of assembly and finishing
- the purpose and effect of each production stage for cakes and cookies, including:
 - batter preparation methods, including flour batter, sugar batter, all-in and pre-mix methods
 - methods of aeration including mechanical and chemical methods
 - sponge preparation methods
 - baking methods, such as boiling, steaming and baking
 - browning and caramelisation
 - methods of assembly and finishing
- effect of typical reactions during mixing and baking for pastry, such as:
 - lift
 - shrinkage
 - dough development
 - gelatinisation
- effect of typical reactions during mixing and baking for cakes and cookies, such as:
 - emulsification
 - aeration, including the role of eggs in aeration
 - browning and caramelisation
- formula balance and ingredient addition sequence
- impact of ingredient cost and yields on profit margin
- recipe and preparation requirements relevant to product type, such as starting and finishing temperatures of ingredients and dough, the amount of work input/mixing time, and factors, such as time, temperature and humidity during each proving stage, and during baking, depanning and cooling
- storage and handling conditions for raw ingredients and finished product
- procedures for reworking or disposing of unacceptable product
- factors that can affect shelf-life, including:
 - product type
 - ingredients used
 - preparation methods
 - storage conditions
 - packaging
 - environmental factors

Evidence Guide

EVIDENCE GUIDE

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.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- identify product faults and determine cause
- take corrective action in response to typical faults and inconsistencies
- apply safe work practices and identify OHS hazards and controls
- apply food safety procedures.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- production schedule
- recipe instructions
- raw materials specifications
- production equipment
- relevant personal protective clothing and equipment
- troubleshooting advice where available
- documentation and recording requirements and procedures
- sampling schedules and test procedures and equipment as required
- cleaning procedures, materials and equipment as required.

Method of assessment

This unit should be assessed together with core units and other units of competency relevant to the function or work role. Examples could be:

- FDFRB3001A Produce pastry
- FDFRB3003A Produce sponge, cake and cookie batter

EVIDENCE GUIDE	
	<ul style="list-style-type: none">• FDFRB3006A Bake sponges, cakes and cookies• FDFRB3007A Bake pastry products.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

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.

Policies and procedures	Work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
Legislative requirements	Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes: <ul style="list-style-type: none">• the Food Standards Code, including labelling, weights and measures legislation;• legislation covering food safety, environmental management, occupational health and safety (OHS), anti-discrimination and equal opportunity
Raw materials	Raw materials include: <ul style="list-style-type: none">• those used to manufacture pastry, cake and cookies
Causes of unacceptable quality	Causes of unacceptable quality may relate to: <ul style="list-style-type: none">• raw materials, processing and/or storage
Ingredients	Ingredients relate to: <ul style="list-style-type: none">• those ingredients used in product Materials may include: <ul style="list-style-type: none">• packaging consumables
Typical process parameters	Typical process parameters include: <ul style="list-style-type: none">• temperature• time• humidity• development/proving time

Unit Sector(s)

Unit sector	Retail baking
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		