



Australian Government

Department of Education, Employment and Workplace Relations

FDFRB3011A Diagnose and respond to product and process faults (bread)

Revision Number: 1

FDFRB3011A Diagnose and respond to product and process faults (bread)

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skill and knowledge required to determine cause and address faults in bread 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 bread 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		
	FDFRB3002A	Produce bread dough
	FDFRB3005A	Bake bread
	FDFRB3010A	Process dough

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	<p>1.1. Unacceptable products are analysed to determine cause</p> <p>1.2. Process parameters and reactions which occur during processing are monitored</p>
2. Take corrective action according to workplace procedures	<p>2.1. Corrective action is taken to remove unacceptable product and prevent recurrence of the problem according to workplace procedures</p> <p>2.2. Corrective action is recorded according to workplace procedures and food safety program</p>

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
- bread styles, types and textures, including labelling requirements for types of bread consistent with the Food Standards Code
- impact of ingredient cost and yields on profit margin
- principles of processing techniques used to achieve finished products, including:
 - wet and dry proving methods
 - types of mixers used
 - hand moulding
 - oven types, including method of steam generation
 - methods of delivering product to the oven
- effect of typical reactions during mixing, development and baking, such as:
 - yeast activity

REQUIRED SKILLS AND KNOWLEDGE

- gluten development
- browning and caramelisation
- gelatinisation as it occurs in different dough types
- formula balance and ingredient addition sequence
- impact of ingredient cost and yields on profit margin
- process parameters and their effect, 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:
 - ingredients used
 - bread types
 - 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:

- FDFRB3002A Produce bread dough
- FDFRB3005A Bake bread
- FDFRB3010 Process dough.

EVIDENCE GUIDE**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	
<p>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.</p>	
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	<p>Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes:</p> <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	<p>Raw materials include:</p> <ul style="list-style-type: none"> • those used to manufacture bread products
Causes of unacceptable quality	<p>Causes of unacceptable quality may relate to:</p> <ul style="list-style-type: none"> • raw materials, processing and/or storage
Ingredients	<p>Ingredients relate to:</p> <ul style="list-style-type: none"> • those ingredients used in product <p>Materials may include:</p> <ul style="list-style-type: none"> • packaging consumables
Bread styles and types	<p>Bread styles and types include but are not limited to:</p> <ul style="list-style-type: none"> • sours • flat breads • ryes, • continental breads
Typical process parameters	<p>Typical process parameters include:</p> <ul style="list-style-type: none"> • temperature

RANGE STATEMENT

	<ul style="list-style-type: none">• time• humidity• development/proving time
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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	