

## BAKERY RAW MATERIALS

**UNIT CODE:** FOP/CU/BT/CC/01/4/B

### Relationship to Occupational Standards

This unit addresses the Unit of Competency: Demonstrate knowledge of bakery raw material

**Duration of Unit:** 30 hours

### Unit Description

This unit covers the competencies required to demonstrate knowledge of wheat flour and other flours used in baking. It also entails demonstrating knowledge of leavening agents, fats and oils, moistening agents, sweeteners, flavouring and colouring agents, additives, fruits and nuts as raw materials in baking and packaging materials used in baking.

### Summary of Learning Outcomes

Demonstrate knowledge of:

1. Wheat flour
2. Other flours used in baking
3. Leavening agents
4. Fats and oils
5. Moistening agents
6. Sweeteners
7. Flavouring and colouring agents
8. Additives
9. Fruits and nuts
10. Packaging materials used in baking

### Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Demonstrate knowledge of wheat flour as a bakery raw material	Wheat flour: <ul style="list-style-type: none"><li>• Composition of wheat</li><li>• Types of wheat flour</li><li>• Flour characteristics</li><li>• Flour physical properties</li><li>• Flour storage</li></ul>	<ul style="list-style-type: none"><li>• Written tests</li><li>• Observation</li><li>• Interviewing</li></ul>
2. Demonstrate knowledge of other	Other flours used in baking: <ul style="list-style-type: none"><li>• Identification</li></ul>	<ul style="list-style-type: none"><li>• Written tests</li><li>• Observation</li></ul>

flours used in baking	<ul style="list-style-type: none"> <li>• Characteristics</li> <li>• Uses and functions</li> <li>• Physical properties</li> </ul>	<ul style="list-style-type: none"> <li>• Interviewing</li> </ul>
3. Demonstrate knowledge of leavening agents as raw materials in baking	<p>Leavening agents:</p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Types</li> <li>• Physical properties</li> <li>• Uses and functions</li> <li>• Storage</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Interviewing</li> </ul>
4. Demonstrate knowledge of fats and oils as raw materials in baking	<p>Fats and oils</p> <ul style="list-style-type: none"> <li>• Definition</li> <li>• Sources</li> <li>• Types of fats and oils</li> <li>• Spoilage and preservation</li> <li>• Uses and functions</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Interviewing</li> </ul>
5. Demonstrate knowledge of moistening agents as raw materials in baking	<p>Moistening agents:</p> <ul style="list-style-type: none"> <li>• Definition of terms</li> <li>• Types</li> <li>• Characteristics</li> <li>• Uses in bakery</li> <li>• Storage</li> <li>• Processing of moistening agents</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Interviewing</li> </ul>
6. Demonstrate knowledge of sweeteners as raw materials in baking	<p>Sweeteners:</p> <ul style="list-style-type: none"> <li>• Definition of terms</li> <li>• Sources</li> <li>• Types</li> <li>• Processing</li> <li>• physical properties</li> <li>• Functions in bakery</li> <li>• Storage</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Interviewing</li> </ul>

7. Demonstrate knowledge of flavouring and colouring agents as raw materials in baking	Flavouring and colouring agents <ul style="list-style-type: none"> <li>• Definition</li> <li>• Sources</li> <li>• Types</li> <li>• Uses/roles in baking</li> <li>• physical components</li> <li>• Storage</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Interviewing</li> </ul>
8. Demonstrate knowledge of additives as raw materials in baking	Additives: <ul style="list-style-type: none"> <li>• Definition</li> <li>• Sources</li> <li>• Types</li> <li>• Characteristics</li> <li>• Uses/roles</li> <li>• Storage</li> <li>• Biological properties</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Interviewing</li> </ul>
9. Demonstrate knowledge of fruits and nuts as raw materials in baking	Fruits and nuts: <ul style="list-style-type: none"> <li>• Types</li> <li>• Characteristics</li> <li>• Uses /roles</li> <li>• Physical properties</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Interviewing</li> </ul>
10. Demonstrate knowledge of packaging materials used in baking	Packaging materials: <ul style="list-style-type: none"> <li>• Types and sizes</li> <li>• Quality</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Interviewing</li> </ul>

#### **Suggested Methods of Instruction:**

- Direct instruction
- Assignments
- Field trips
- Discussions

- Demonstration

**List of Recommended Resources:**

- Computers
- Stationery
- Internet
- Projectors
- Charts
- Assorted samples of baking raw materials
- Laboratory resources:
  - Reagents
  - Apparatus
  - Assorted samples