

## 3248 Principles of dairy products in bakery

**SQA Unit Code**

**H3J4 04**

**Level 3**

**SCQF Level 6**

**SCQF Credit value 6**

### Unit Summary

This unit is about understanding milk and its pasteurisation and processing to produce milk based products. Milk based products typically include, cream, evaporated milk, condensed milk, milk powders, butter, cheese and yoghurt.

You need to understand the chemical composition of milk and its products. You need to know the functions of milk and milk based products in baking. You also need to know how dairy based emulsifiers work.

This unit is for you if you work in food and drink manufacture and/or supply operations and need a broad understanding of dairy products to support your role.

In order to be assessed as competent you must demonstrate to your assessor that you can consistently perform to the requirements set out below. Your performance evidence must include at least one observation by your assessor.

Evidence of knowledge and understanding should be collected during observation of performance in the workplace. Where it cannot be collected by observing performance, other assessment methods should be used.

You need to know and understand:

1. the composition of milk and its properties relating to protein, fat and sugar content
2. the constitution of milk as a solution, a colloidal dispersion and an emulsion
3. how and why pasteurisation of milk is carried out, and its affect on pathogenic bacteria counts
4. the importance of the phosphatase test for pasteurisation adequacy
5. how sterilised milk is produced
6. the functional properties of milk in baking
7. how cream is separated from milk, and the %fat values of single, whipping and double cream
8. the functional properties of cream in baking
9. how evaporated milk is produced and its composition
10. how condensed milk is produced and its composition
11. how milk solids are produced and its composition
12. the functional properties of milk powders in baking
13. the churning process producing butter and its composition
14. the functional properties of butter in baking, the rancidity process in butter and how

this can be delayed

15. how cheese is produced and its average composition
16. the functional properties of cheese in baking
17. how yoghurt is produced and its average composition
18. the functional properties of yoghurt in baking
19. natural dairy based emulsifiers, their chemical composition and function

Evidence of performance may employ examples of the following assessment:

- observation
- written and oral questioning;
- evidence from company systems (e.g. Food Safety Management System)
- reviewing the outcomes of work
- checking any records of documents completed
- checking accounts of work that the candidate or others have written