

3244 Principles of egg and egg products in bakery

SQA Unit Code

H3J0 04

Level 3

SCQF Level 6

SCQF Credit value 6

Unit Summary

This unit is about understanding egg production and structure, and the processing of egg to produce egg products. Egg based products typically include, whole egg, frozen whole egg, pasteurised egg, separated egg white and yolk products, dried egg.

You need to understand the structure and chemical composition of egg and its products. You need to know the functions of egg and egg based products in baking. You also need to know how egg 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 egg and egg 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 structure of a hen's egg and the function of its constituent parts
2. the chemical composition of egg white and egg yolk
3. the properties of egg relating to its protein, carbohydrate, fat and mineral content
4. the constitution of egg yolk as an emulsion
5. how eggs are stored and the natural resistance of egg to spoilage
6. how egg quality is maintained before use as a bakery ingredient
7. the functional properties of whole egg in baking; foams, effect of heat on egg proteins, role of egg in sponge and cake mixtures, role of egg in custards
8. the functional properties of egg white in baking; foaming and the factors affecting egg white foams, meringue structures
9. how whole egg and frozen whole egg is produced in bulk for bakery food manufacture
10. why and how egg products are pasteurised for use in baking
11. how separated egg products are produced in bulk for bakery food manufacture
12. how dried egg is produced
13. natural egg based emulsifier and its role in bakery recipes

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