

3242 Principles of fats and oils in bakery

SQA Unit Code

H3HX 04

Level 3

SCQF Level 6

SCQF Credit value 6

Unit Summary

This unit is about understanding the sources and extraction methods of fats and oils, and the use of these in the bakery. Fats and oils typically include, lard and beef fats, dairy fats, cake and pastry margarines, frying fats and oils, shortenings, vegetable oils and emulsions.

You need to understand the structure of fats and oils, their purpose and properties. You need to know the functions of fats and oils in the bakery in recipes and other functions like releasing agents. You also need to know the role of emulsifiers and stabilisers.

This unit is for you if you work in food and drink manufacture and/or supply operations and need a broad understanding of fats and oils 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 main sources of animal and vegetable fats used in bakery
2. the methods of extracting fats and oils from sources by; rendering, expression and solvent extraction
3. removal of impurities from fats and oils by; refining, bleaching and deodorizing
4. how and why oils are hydrogenated
5. the purpose of fats and oils in bakery products
6. the physical properties of fats and oils
7. how fats and oils are chemically structured around complex glyceride mixtures
8. the triglyceride compound and how their make up affects properties
9. why fats and oils deteriorate, and the development of rancidity by oxidation and decomposition
10. the functional properties of fats and oils in baking; shortening, creaming, layering and emulsifying
11. the composition, properties and uses of lard
12. the composition, properties and uses of compound shortenings and pumpable

shortening

13. the composition, properties and uses of beef fat
14. the composition, properties and uses of cake and pastry margarines
15. the composition, properties and uses of vegetable oils Sector Performance Standard for Food & Drink Production
16. the composition, properties and uses of emulsions
17. the role of emulsifiers and stabilisers in the use of fat and oils

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