

3333 Principles of fresh produce ripening

SQA Unit Code

H3KL 04

Level 3

SCQF Level 6

Credit value 5

Unit Summary

This unit is about the principles of fresh produce ripening in food and drink manufacture and/or supply operations. The principles explained as part of this unit apply to any situation where fresh produce undertakes controlled ripening as an integral part of the supply chain.

You will need to understand the principles of fresh produce ripening if you are involved in the supply of fruit. It includes understanding the role of ripening in the supply chain for both imported product and product that is grown in the UK. You will also need to know and understand the use of controlled ripening of fresh produce

You will need to understand these principles if you are involved in fresh produce ripening.

This unit is for you if you work in food and drink manufacturing and/or supply chain operations and are involved in production operations.

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 key chemical and physical stages in the natural ripening process of fresh produce
2. the factors affecting the natural ripening process of fresh produce
3. how environmental conditions including temperature, humidity and storage room conditions affect natural ripening
4. how the natural ripening process can be suppressed and controlled
5. which fresh produce undergo a natural ripening process
6. where the ripening of fresh produce occurs in the supply chain
7. the timescales involved in the ripening of different fresh produce
8. the different types of controlled ripening available for fresh produce
9. which types of controlled ripening are used for different types of fresh produce
10. which fresh produce commonly undergo controlled ripening
11. how ripening is used in conjunction with long term storage to maintain continuity of supply
12. the importance of effective ripening planning and forecasting to supply of product

13. how the use of controlled ripening is affected by seasonality of fresh produce
14. the importance of controlled and modified atmosphere storage to controlled ripening
15. how to effectively plan for the controlled ripening of fresh produce to ensure continuity of supply
16. the agents that are used to help ripen fresh produce
17. how product packaging can affect the ripening process
18. how product handling can impact on the ripening process and the quality of ripened product
19. the physical characteristics of ripe and un-ripe produce
20. how the condition of un-ripe produce can impact on the ripening process
21. the storage requirements of both unripe and ripe products
22. methods for assessing fruit ripeness and quality

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