

3336 Principles of fresh produce packaging and preservation

SQA Unit Code

H3KP 04

Level 3

SCQF Level 6

Credit value 7

Unit Summary

This unit is about the principles of fresh produce packaging and preservation in food and drink manufacture and/or supply chain operations. The principles detail the packaging and preservation of fresh produce for human consumption.

The principles detailed apply where fresh produce is packed for human consumption. They can be applied to any type of produce and produce groups including salads, vegetables and fruit. The characteristics and vulnerability to physical damage and spoilage determine that this knowledge is essential to be effective in the packaging and preservation of fresh produce.

You will need to understand the principles of packaging and preservation so that the techniques and methods you apply avoid damaging the product and maintain the quality demanded by customers and consumers. Understanding the principles of the packaging and how it protects and preserves product will help you understand how your own organisation produces its products to service the needs of its customers.

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.

You need to know and understand:

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.

1. the types of packaging available in the fresh produce sector
2. what the properties are of each type of packaging and their benefits
3. how packaging is used at point of harvest and in support of transportation
4. how packaging can damage fresh produce
5. which type of packaging is used for each type of fresh produce
6. how different packaging aids the preservation of fresh produce
7. why it is important to match packaging material correctly to product type
8. the advantages of the different packaging materials used with fresh produce
9. the disadvantages of the different packaging materials used with fresh produce
10. how to assess if packaging is fit for purpose
11. why it is important to use process packaging when handling fresh produce.

12. how fresh produce packaging methods optimise product quality
13. the storage requirements of packaging materials
14. the use of controlled environment as a method of preservation and conditioning of fresh produce
15. the use of Modified Atmosphere Packaging as a method of preservation
16. the use of heat as a method of preservation for fresh produce
17. the effects of the gases used in fresh produce packaging and preservation
18. the effects of chilled environments used in fresh produce packaging and preservation
19. the effects of freezing in fresh produce packaging and preservation
20. what are the possible hazards of preservation systems
21. the packaging requirements used in high risk zones
22. how the stability and shelf life of fresh produce is affected in packaging
23. how the different forms of packaging are formed from packaging materials
24. how to use packaging machinery in the fresh produce sector
25. why automation of packing machinery is important in the packing process
26. how packaging techniques have an impact on the environment
27. what environmental implications are of preservation techniques
28. the legislative requirements on labelling for the fresh produce sector
29. the voluntary requirements on labelling for the fresh produce sector
30. the packaging regulations and legislation including WRAP
31. the key drivers of packaging costs
32. the advantages and disadvantages of consumer packs
33. how the consumer packs have a role in marketing the product

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