

3060/459 Principles of continuous improvement techniques (Kaizen) in a food environment

SQA Unit Code

H13J 04

Level 3

SCQF Level 7

SCQF Credit value 7

Unit Summary

This unit is about understanding the principles of continuous improvement (Kaizen). It includes understanding the Kaizen principles and how these principles can be used to support improvements in food and drink manufacturing and/or supply operations.

This unit is about knowing how to apply continuous improvement techniques in the overall condition of the working environment. This is important to the productivity and success of manufacture, processing and supply of food and drink within the food supply chain.

This unit is for you if you work in food and drink manufacture and/or supply operations. You may have responsibilities for applying continuous improvement techniques (Kaizen) within your organisation.

In order to be assessed as competent in this understanding you must demonstrate to your assessor that you understand the requirements set out below in the context of performance in the workplace.

Evidence of knowledge and understanding can 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. How the health, safety and hygiene requirements of a work area can influence a Kaizen activity
2. The principles of a Kaizen activity and the establishment of measurable improvements for business
3. The importance of encouraging people to identify potential improvements
4. The evaluation of improvement ideas and selection of those that are to be pursued
5. How to set quantifiable targets and objectives
6. The purpose of standard operating procedures and specifications
7. The criteria used to select an area/processing activity for Kaizen activity
8. The importance of understanding the food process and/or activity under review
9. The qualities of the food being processed and how these influence improvement opportunities
10. The resources required to support production schedules and specifications
11. The principles for the deployment of Kaizen in a food environment and the resources required by the processing activity
12. The importance of waste to Kaizen and how over-production can lead to waste
13. Why inventory control is important to waste reduction in the food industry
14. How and why transport can create waste in the food industry

15. The impact that waiting time has on food waste
16. How operator skills and knowledge can impact on waste
17. How poor quality control and out of specification raw materials and products cause waste
18. Why the effective utilisation of a workforce can support waste reduction in the food industry
19. How root cause analysis can support problem solving
20. How your knowledge of food processing activities can support your problem solving ability
21. The application of the Deming cycle (plan, do, check, act)
22. How to engage the knowledge and experience of the people involved in the process in the development of improvement activities
23. Facts and opinions about the food processing activities and how these affect improvement actions
24. The techniques used to visually communicate the work of the Kaizen activity to participants and others
25. The cycle time of a process
26. The calculations used to identify the required production rate for a process
27. The techniques used to distribute work content to balance cycle times to the rate of customer demand, and how to visually represent it (e.g. line balance and process displays)
28. The levels of authority linked to problem resolution

Evidence of knowledge and understanding may employ examples of the following assessment methods:

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