

## 653 Principles of Six Sigma process mapping in a food environment

**SQA Unit Code**

**H167 04**

**Level 3**

**SCQF Level 6**

**SCQF Credit value 3**

### Unit Summary

This unit is about understanding the principles of six sigma process mapping for achieving excellence in food and drink manufacture and/or supply operations. This is important to the manufacture, processing and supply of food and drink within the food supply chain, where for example food safety is a critical factor. Six sigma may be used as the basis of an improvement programme to support achieving excellence.

You will need to know how six sigma mapping is applied, what the map is and how it is constructed. You will need to understand key process input variables and key process output variables, and how these are structured as types. You also need to know the difference between a value-added and non-value-added activity. You need to understand how to comply with your company policy for improvement, understand the level of your responsibility for your actions, and know how to refer any issues outside of the limit of your authority to others.

This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in operations or management practice involving problem solving. This could be either as an autonomous and focused role or as part of another food manufacturing/processing or supply role which includes some problem solving responsibilities.

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. How the health, safety and hygiene requirements of a work area can influence six sigma
2. The application of six sigma process mapping in meeting your organisation's objectives set out in your achieving excellence strategy
3. The benefits of carrying out Six Sigma process mapping
4. What a Six Sigma process map is and how it is constructed
5. How the Six Sigma process map integrates within a Six Sigma project
6. What is meant by key process input variables (KPIVs) and key process output variables (KPOVs)
7. The data collection points for the key process input variables and key process output

variables

8. What the main types of key process input variables and key process output variables are in terms of being controllable, critical, noise, or standard operating procedures
9. Who should create a Six Sigma process map
10. The difference between a value added activity and a non-value added activity
11. The roles and responsibilities of individuals within a process mapping team
12. Levels of authority linked to problem resolution

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