

## 660 Principles of multi variance charts in a food environment

**SQA Unit Code**

**H16J 04**

**Level 3**

**SCQF Level 6**

**SCQF Credit value 3**

### Unit Summary

This unit is about the understanding the principles of multi-variance charts as part of your organisation's drive to achieve 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.

You will need to understand the principles behind multi-variance charts and the business benefits of using them during an achieving excellence programme. You will need to understand how to construct multi-variance charts and the amount of data required to draw statistically valid conclusions. You will need to know how to comply with your company policy for improvement, understand how to take responsibility for your actions, and refer any issues outside of the limit of your authority to others.

This unit is for you if your role requires you to understand the principles of a multi-variance charts in food and drink manufacture or supply. You may be a line manager or supervisor and/or have responsibilities for all or part of the production/supply process and for promoting improvements.

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 multi-variance charting
2. Why we need to carry out multi-variance charting, and the benefits to be gained from this activity
3. How to construct a data demographics form
4. Multi-variance chart construction
5. How the chart is used to assess within-piece variation, piece-to-piece variation and time-to-time variation
6. The amount of data required to draw statistically valid conclusions from the chart
7. The use of tools in the development of further conclusions
8. The benefits of multi-variance analysis with respect to design of experiments (DOE)
9. 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