



Food Manufacture

Control and Monitoring of Operations

Lesson 2

Improve your knowledge of controlling and monitoring operations in food manufacture with this course.





Processes are monitored and controlled, this is done by monitoring temperature, time, pressure and chemical properties in order to ensure the product falls within the required process specification





Some of the most common monitoring devices are:

- Scales
- Temperature probe or gun
- pH meters
- Rheometers and viscometers measuring viscosity
- Computerised systems
- Laboratory testing
- Polarimeters, Refractometers, Saccharimeters – monitor sugars
- Pressure gauges
- Timers



**All monitoring
checks are
carried out at
suitable
frequencies and
recorded**



If the checks are outside of the limits of the specification then corrective actions is taken and recorded on documentation





If process parameters or product quality is controlled by in-line monitoring devices then they will have a suitable failure alert system





Where processing conditions may vary, then a worst-case scenario will be identified to ensure products are safe e.g. warm spots in a chiller should still allow product to achieve the required temperatures within a specified time frame



If there is a case of equipment failure then certain steps will be completed to ensure the product is safe these include:

- Identification of all of the products at risk
- How the products will be assessed to ensure their safety and suitability e.g. microbiological sampling or sensory testing
- Identification of authorised personnel who will make the final decision



**Operations are
controlled by
production
staff, team
leaders and
supervisors**



A quality control or quality assurance operative monitors and audits the quality of products and ingredients in all operations.





The quality control or quality assurance operative can monitor and audit operations by:

- Performing control checks on the products and ingredients
- Monitoring documentation of checks
- End product taste panel checks



Revision Activity 2

What does a quality control and quality assurance operative do to monitor and audit the quality of products and ingredients?