Food Manufacture

# Temperature Control

Lesson 4

Understand the importance of temperature control in food manufacturing to ensure food safety is never compromised.

The main reason for keeping a product chilled is to stop bacteria from growing to harmful levels. This is especially important with high risk foods to prevent food poisoning.

FOODSPHERE

# Keeping products chilled does not kill bacteria it just prevents it from growing.

The legal temperature that a refrigerator should be kept at is 8°C or below. An ideal temperature is between 0°C and 5°C.

**In a food factory there are three main types of chillers.**

- A holding chiller (product is kept till it is needed)
- A storage chiller (store ingredients or finished products)
- Chilled vehicle for transport

Areas in a factory can be temperature controlled and air flow systems are used to keep them at a chilled temperature. Humidity must also be kept low to prevent any mould growth and contamination.

No products which are hot in temperature should be placed directly into a refrigerator or it will cause the temperature of the refrigerator to warm up and compromise the safety of everything in it. The hot product must first have its temperature lowered by other means such as a blast chiller.

FOODSPHERE

**Refrigerators must not be overfilled to allow air to circulate so a cool temperature can be maintained.**

The product placed into a refrigerator can be stored in a way that allows the product to receive as much cold air as possible e.g., stacked in spaced out baskets.

Refrigerator doors must be kept closed when possible, to help maintain the correct temperature. Some refrigerators are fitted with alarm systems which prompt the door to be closed.

General housekeeping of a refrigerator requires all product to be stored off the floor on pallets, wheels or raking. The area should be kept clean and tidy. There should also be a stock rotation system in place such as first in first out (FIFO).

# Revision Activity 4

## What is the legal temperature food in a refrigerator should be kept at?