**Summary:**

Water, like food, is a potential vehicle for the direct transmission of disease causing agents. It has been and continues to be a reason of significant outbreaks of disease in developed and developing countries. Water quality and food safety are actually inextricably linked. For example, drinking water was identified as the source of a significant and fatal outbreak of *Escherichia coli* O157:H7 in Canada (Kondro, 2000). In 1970, a cholera epidemic in Jerusalem (Israel) was traced back to the consumption of salad vegetables irrigated with raw wastewater (Shuval *et al.*, 1986) and in 2006; a chocolate company located in the United Kingdom was affected by contamination of chocolate by *Salmonella*, from a leaking wastewater pipe in the production area. Water is, therefore, capable of introducing contamination into food if appropriate care is not taken.

Although water is just one route by which foods can be contaminated with disease-causing agents or toxic chemicals, it is potentially very important. Raw water can be contaminated with pathogens, usually as a consequence of human or animal faecal material or a wide range of natural and anthropogenic chemicals. Contamination can arise in water as a consequence of improper storage, pick-up of contaminants from distribution systems or leakage from a dirty water system into a clean water system. In this way, water may present some risks to food safety as it is an essential part of food production and processing. It is, therefore, vital to minimise

the unnecessary risks associated with the use of contaminated water which in turn necessitates the water testing operations. The process is followed by putting the necessary control measures in place e.g. water safety plans and Hazard Analysis and Critical Control Point (HACCP) plans. The aim of this module is to emphasise the importance of water testing and the different assays recommended for this purpose.