

## Programme

08.45	<i>Registration and Refreshments</i>
09.15	<b>Welcome and Introduction</b>
09.30	<b>The Micro-organisms Found in Foods and Their Significance</b> A basic introduction to: <ul style="list-style-type: none"><li>• The range of micro-organisms that can be found in foods, including bacteria, yeasts and moulds</li><li>• Their typical appearance and microscopic structures</li><li>• The types of problems that they can cause</li></ul>
10.10	<b>What Microbes Need</b> The session: <ul style="list-style-type: none"><li>• Outlines the growth requirements of micro-organisms, including moisture, temperature, pH and nutrients</li><li>• Gives an introduction to the growth dynamics of micro-organisms</li><li>• Covers some microbial jargon</li></ul>
10.30	<i>Refreshments</i>
10.45	<b>Microbial Spoilage of Foods</b> Looks at what food spoilage is, introduces a selection of common food spoilage microbes, from bacteria, yeasts and moulds, and outlines the types of spoilage that they can cause in different food products.
11.30	<b>Microbial Food Poisoning</b> Examines some definitions of food poisoning, lists the most common food poisoning organisms, and gives some details of their symptoms.
12.30	<b>Food Preservation and Control of Microbes – Physical</b> Explains the principles of food preservation and the reasons why food preservation is necessary to achieve product shelf-life. A range of commonly-used physical preservation techniques will be outlined. These include: <ul style="list-style-type: none"><li>• Chilling/freezing</li><li>• Heating, including pasteurisation, UHT and sterilisation</li><li>• Modifying the water activity, including drying, sugar and salt</li><li>• Modified Atmosphere Packaging</li></ul>
12.45	<i>Lunch</i>
13.45	<b>Food Preservation and Control of Microbes – Chemical</b> Examines the use of chemical preservatives including: <ul style="list-style-type: none"><li>• Organic acids</li><li>• Acetic and lactic acids</li><li>• Nitrates and nitrites</li><li>• Smoke</li><li>• Natural preservatives</li><li>• Disinfection</li><li>• Emerging technologies</li></ul>
14.30	<b>Understanding your Microbiology Test Report</b> Microbiological reports are full of jargon. This presentation shows the types of methods and media used to achieve the right result. These include sample dilutions, plating techniques, techniques for low numbers of organisms, incubation temperatures and

	timescales, rapid methods, and information on how to understand what the numbers on your report actually mean.
15.15	<i>Refreshments</i>
15.30	<b>Microbiological Quality Assurance and Environmental Monitoring</b> Explains the importance of: <ul style="list-style-type: none"><li>• Monitoring for micro-organisms in the factory environment</li><li>• Sampling protocols in the factory and how to monitor</li><li>• Rapid methods for environmental monitoring</li><li>• Microbial guidelines for safe food</li></ul>
16.30	<i>Close</i>