











Basic Microbiology for the Food Industry

FS003

Basic Microbiology for the Food Industry

Under European Food Safety Regulation 178/2002, Article 14 "Food shall not be placed on the market if it is unsafe or unfit for human consumption." As bacteria are the major cause of food being unsafe, it is essential that those persons responsible for producing safe food have some knowledge of bacteria. Historically the majority of personnel who held these responsibilities studied a Food Science or Microbiology related discipline in a third level College or University. This however is no longer the case as many graduates with engineering, supply chain and financial backgrounds or non-graduates who have progressed to managerial positions are now in charge of food manufacturing processes and factories where the biggest threat to the business or the consumer is E. coli, Salmonella, Clostridia just to name a few.

If one is in charge of producing food that is governed by law where microbiological criteria are specified it is vital to know ones legal obligations. This course will give delegates an understanding of how bacteria grow, unique characteristics of some bacteria and most importantly how they can be controlled. A simple method of microbiological risk assessment will be explained so that risk based decisions can be made which will be in the interest of the business and consumer alike.

Case study exercises will be undertaken with particular focus on the WPC 80 Fonterra incident. This incident resulted from the lack of understanding of bacteria by production and technical staff alike and is one of the most significant food safety incidents and product recalls in recent years.

Duration & Price

Duration: 1 day

Delivery mode: This programme is available In-Company

Dates & Locations

In-Company training programmes are customised for your organisations specific needs. Most In-Company training is now delivered virtually.

In-Company Training

Please contact us for more information on our In-Company training options

What's covered?

- Delegate/Tutor Introduction
- Course Introduction
- History of Microbiology
- Bacteria Classification / Shapes
- Bacteria Cell Structure
- Bacteria Spore Formation
- Bacteria Growth Requirements
- Disease Causing Bacteria:
 - Food Poisoning Causes
 - Food Hygiene
 - Major Pathogens
 - Food Spoilage Bacteria
- Microbiological Risk Assessment Methodology
- Microbiological Criteria of Foodstuffs (2073/2005) Chapter 1 & 2
- FSAI Guidance Note 3 Guidelines for the Interpretation of Micro Test results
- WPC 80 Case Study Review
- Course Review / Evaluation

Who should participate?

- General management who need a basic knowledge of bacteria
- HACCP / Food Safety team member who may not have a Food Science background
- Maintenance / Engineering personnel who manage process intervention in a high risk environment
- Food manufacturing supervisory personnel who make decisions relating to food safety
- Technical personnel who need to know the Microbiological Criteria of Foodstuffs (2073/2005)
- Product recall personnel who need to understand the significance of microbiological contamination

What will I learn?

Participants achieve the following learning outcomes from the programme;

- Be familiar with basic bacteria classification and structure
- Understand spore formation and the difficulties it poses for the food sector
- Understand the requirements for bacteria growth and survival
- Understand the major disease causing bacteria (Pathogens) and how they can be controlled
- Understand food spoilage bacteria and the importance of milk hygiene
- Understand how to carry out a microbiological risk assessment
- Be familiar with EU regulation on the microbiological criteria of foodstuffs (2073/2005)
- Be able to use FSAI Guidance Note 3 to interpret microbiology test result

How do we train and support you?

In-House Courses

For In-House courses, the tutor will contact you in advance to discuss the course programme in more detail in order to tailor it specifically for your organisation.

Course Manual

Delegates will receive a very comprehensive course manual.

Tutors



Brian Robinson View Profile



Ciaron White View Profile



Denis Kiely View Profile



Edel Jones View Profile



Joan Brien View Profile



Tom Keane View Profile

What Our Learners Say

We believe in excellence through transparency and continuous improvement. That's why we invite all our delegates to share their experiences on CourseCheck.com, an independent platform dedicated to genuine, unfiltered feedback. Learner insights help us not only to enhance our training programmes but also empower potential learners to make informed decisions. Click on the link below to read firsthand experiences and testimonials from past learners.



Click Here



SQT provide a unique combination of high quality, accredited, practical training delivered by leading industry experts and supported by the most up to date learning technology and tools

LEAN SIX SIGMA, PROCESS & PROJECT MANAGEMENT

- Lean Six Sigma
- Join our Lean Six Sigma Network
- Continual Process
 Improvement
- Project & Programme
 Management

COMPLIANCE, STANDARDS & AUDITING

- Quality
- Environment & Energy
 Management
- Health & Safety
- Food Safety
- Life Sciences
- Laboratory
- <u>Integrated Management</u> Systems

LEADERSHIP & PERSONAL DEVELOPMENT

- Leadership & Personal
 Development
- Train the Trainer













SQT Training Ltd. | T: +353 61 339040 | E: info@sqt-training.com W: sqt-training.com





Please follow us on social media for relevant news, events and updates