The Royal Environmental Health Institute of Scotland

Intermediate Food Hygiene Course

Syllabus

Minimum teaching time – 20 hours
INTERMEDIATE FOOD HYGIENE COURSE SYLLABUS

All Objectives to be prefixed by the words: The expected outcome is that the course participant is able to:

1.0 GENERAL INTRODUCTION

Aim To provide an understanding of the relationship between food hygiene, food poisoning and food spoilage, the socio-economic costs of poor food hygiene, and the role of HACCP and hazard analysis in ensuring food safety.

Objectives

1.1 Define the term: food hygiene.

1.2 Explain the moral, legal and financial benefits of high standards of food hygiene, including the role of HACCP and hazard analysis in maintaining high standards.

1.3 Describe employer’s and employees’ Responsibilities.

1.4 Explain the cost of poor food hygiene in economic terms to the Country, employer, and in terms of inconvenience to employees and general public.

1.5 State the trends in food poisoning over the most recent 10 year period in Scotland.

1.6 Describe the foods most commonly involved in outbreaks of food poisoning.

2.0 SUPERVISORY MANAGEMENT

Aim To provide an understanding of the role and responsibilities of the supervisor and middle manager in maintaining high standards of hygiene and preventing food poisoning.

Objectives

2.1 Describe the role of supervisors and middle managers in food safety.

2.2 Describe the responsibilities of supervisors and middle managers with regard to standards, food safety policies and quality assurance and control.

2.3 Describe the responsibilities of supervisors and middle managers with regard to auditing systems, inspecting premises and reporting findings.

2.4 Describe the responsibilities of supervisors and middle managers with regard to staff training and food safety management systems based on HACCP principles.
3.0  HACCP AND HAZARD ANALYSIS

Aim To provide an understanding of the rational behind food safety management systems based on HACCP principles and the importance of the implementation of such a system to food businesses.

Objectives

3.1 Define the terms: HACCP and hazard analysis.

3.2 Describe the background to food hazard analysis systems.

3.3 Explain the rationale behind HACCP and hazard analysis in food business.

3.4 Describe, in general terms, hazards, controls, critical control points, monitoring, validation, recording and verification.

3.5 Explain the importance of implementation and maintenance of food hazard systems.

3.6 Outline the legislative requirements with respect to food safety management systems based on HACCP principles.

4.0  BACTERIOLOGY

Aim To provide an understanding of the characteristics of bacteria and their potential to cause illness and spoil food.

Objectives

4.1 Define the terms: microorganism, pathogen.

4.2 Explain that food may be contaminated by pathogenic microorganisms and spoilage microorganisms (including moulds and yeasts).

4.3 Describe the structure, shape and size of a bacterium.

4.4 Explain that bacteria multiply by binary fission and state the average generation time in optimum conditions.

4.5 Describe the factors influencing bacterial multiplication.

4.6 Explain that bacteria can be killed by the application of adequate heat, irradiation and/or chemicals.

4.7 Describe the function of spores and their role in the survival of bacteria.

4.8 Describe bacterial toxin formation distinguishing between the common types of toxins, and explain how they can cause food poisoning.
5.0 BACTERIAL FOOD POISONING AND FOOD BORNE INFECTIONS

Aim To provide and understanding of the causes of, likely sources and food involved and control measures for bacterial food poisoning and food borne infections.

Objectives

5.1 Define the terms: food poisoning, gastroenteritis, healthy carrier, convalescent carrier, case, incubation/onset period.

5.2 Explain that food contaminated by food poisoning bacteria and the bacteria responsible for food borne infections tastes, smells and looks normal.

5.3 Describe the differences between bacterial food poisoning and food borne infection in terms of their effects and characteristics of their actions.

5.4 Describe the most common sources of bacterial food poisoning and pathogenic food borne organisms indicating how they enter the human food chain.

5.5 Explain the routes of transmission of these organisms from the source to the food.

5.6 Describe the mechanisms of control, which can be introduced throughout the food chain from farm to consumer, to ensure the minimum risk of bacterial food poisoning and food borne infection occurring.

5.7 Indicate the foods most likely to be associated with the following food poisoning and food borne infection bacteria, and describe briefly their characteristics:

**Food Poisoning**

- Salmonella species
- Clostridium perfringens
- Staphylococcus aureus
- Clostridium botulinum
- Bacillus cereus

**Food Borne Infection**

- Campylobacter species
- Listeria species
- Escherichia coli
- Vero cytotoxin organisms

6.0 NON- BACTERIAL FOOD POISONING

Aim To provide an understanding of the causes and effects of non-bacterial food poisoning.
Objectives

6.1 Explain that food poisoning can be caused by viruses, chemicals (including metals) and by the consumption of poisonous plants and fish.

6.2 Provide an example of each of the above types of non-bacterial food poisoning.

7.0 FOOD CONTAMINATION AND ITS PREVENTION

Aim To provide an understanding of the potential for bacterial and physical contamination of food, and how such contamination may be prevented.

Objectives

7.1 Define the terms: contamination, cross contamination, high risk food.

7.2 Describe the main sources, vehicles and routes of bacterial contamination of food.

7.3 Describe the most common physical contaminants of food and the most likely sources of the contaminants.

7.4 Describe methods whereby contamination of food can be prevented.

7.5 Explain how food may be contaminated by non-food personnel.

7.6 Describe procedures available for the prevention and detection of extraneous material in food (including malicious contamination).

7.7 Define the terms food allergen, allergy and intolerance.

7.8 Describe the foods involved in food allergies and intolerances.

7.9 Describe the steps a food business should take to control allergens and prevent affecting consumers.

8.0 PERSONAL HYGIENE

Aim To provide an understanding of the need for high standards of personal hygiene for food handlers.

Objectives

8.1 Explain the problems caused by: boils, cuts, spots, skin infections, sneezing, coughing, smoking, eating, wearing jewellery and wearing nail varnish.

8.2 Explain the need for detectable waterproof dressings and suitable first aid equipment.

8.3 Explain when food handlers should wash and disinfect their hands and describe acceptable methods.
8.4 Explain the need for, and describe the properties of, satisfactory protective overclothing.

8.5 Explain why persons working in a food handling area who is, or may be suffering from certain medical conditions, should be excluded from food handling duties.

9.0 FOOD STORAGE AND TEMPERATURE CONTROL

Aim

To provide an understanding of the importance of providing and maintaining suitable conditions for the storage of food.

Objectives

9.1 Explain the importance of satisfactory storage to minimise the risk of contamination and decomposition.

9.2 State the temperatures necessary to control bacterial activity in food.

9.3 Explain why high-risk foods should be stored at appropriate temperatures.

9.4 Explain why the hygienic and efficient use of refrigerated storage units is dependent on attention to the following:

(a) siting  
(b) maintenance and cleaning (including defrosting)  
(c) appropriate loading  
(d) regular temperature checks

9.5 Explain the necessary controls for the use of frozen food (including thawing), which avoids contamination, and minimises bacterial growth.

9.6 Explain the necessity for cooling hot or cooked food rapidly if it is not to be stored above 63°C or it is not required for immediate consumption.

9.7 Explain the importance of stock rotation.

9.8 Explain the terms "use by" and "best before" particularly as used on food labels.

10.0 FOOD PRESERVATION

Aim

To provide an understanding of the causes of food spoilage and the principles involved in its prevention.

Objectives

10.1 Explain that spoilage of food is mainly caused by bacteria and moulds.

10.2 Explain that spoilage microorganisms affect the appearance, smell, texture and taste of food.
10.3 Explain why suspect food should not be tasted.

10.4 Describe the basic principles involved in minimising the deterioration of food by the use of:
(a) temperature (including cooking, canning, pasteurisation)
(b) dehydration, control of water availability
(c) chemicals (particularly salt and sugar)
(d) controlled atmosphere packaging and vacuum packing
(e) smoking

11.0 THE WORKING ENVIRONMENT

Aim To provide an understanding of the importance of satisfactory design, the use of suitable constructional materials, and proper maintenance of food premises, equipment and utensils.

Objectives

11.1 Explain the principles involved in the satisfactory design of food premises, equipment and utensils.

11.2 Explain the importance of the use of suitable materials for the construction of food premises, equipment and utensils.

11.3 Explain the importance of, and the necessity for, the satisfactory provision of lighting, ventilation and services, including water supply and drainage

11.4 Describe the main types of waste disposal system available for food premises.

11.5 Explain the importance of proper maintenance of food premises and equipment.

12.0 CLEANING AND DISINFECTION

Aim To provide an understanding of the principles of, and the procedures for, satisfactory cleaning and disinfection of food premises, equipment and utensils.

Objectives

12.1 Define the terms: bactericide, cleaning, detergent, disinfectant, disinfection, bactericidal detergent/sanitizer, and sterilisation.

12.2 Explain the need for, and benefits of, cleaning and disinfection.

12.3 Explain that cleaning involves the systematic application of energy to remove dirt.

12.4 Describe the procedures and methods employed in cleaning and, when necessary, disinfecting premises, work surfaces, equipment and utensils.
13.0 COMMON FOOD PESTS AND THEIR CONTROL

Aim
To provide an understanding of the habitats and characteristics of food pests and acceptable methods for their control.

Objectives
13.1 Define the term: food pest, and describe the hazards associated with food pests.
13.2 Describe the habitat, characteristics, food requirements, signs of infestation and reasons for control of the following:
   (a) rodents
   (b) birds
   (c) insects
13.3 Provide examples of the following methods of control for rodents, birds, and insects in and around food premises:
   (a) environmental control
   (b) physical control
   (c) chemical control

14.0 LEGISLATION

Aim
To provide an understanding of the main requirements of the Food Safety Act 1990, and principal associated Regulations.

Objectives
14.1 Describe the main requirements of the Food Safety Act 1990 and the General Food Regulations 2004 with regard to the prevention of the sale of food injurious to health, unfit or substandard food.
14.2 Describe in general terms the main requirements of The Food Hygiene (Scotland) Regulations and Regulation (EC) No852/2004 on the hygiene of foodstuffs.
14.3 Describe in general terms, the main requirements of the regulations with regard to “approved premises”.
14.4 Explain the links between the Local Authority, Scottish Executive, Health Boards and The Food Standards Agency.
14.5 Describe briefly the role and powers of Environmental Health Officers and other Food Enforcement Officers, set out in the Food Safety Act 1990, and the Food Hygiene (Scotland) Regulations 2006.