



# SAFE2FOOD

Increasing the Qualifications of the Employees of the Food Manufacturing Sector in the Areas of Occupational Health and Safety and Food Safety

## MODULE 2: SAFE FOOD

SAFE2FOOD TRAINING PROGRAM

Duration: 6 hours

Target groups: food sector employees

Methods: self-education, e-learning

### INTRODUCTION

Food safety means ensuring the health and hygiene of the food and encompasses all stages after production, that is preparation, processing, processing, finishing, packaging, storage, transport, distribution and sale of finished products. Food safety ensures that food is not harmful to the health of the consumer.

The Module 2 enables you to recognize food safety hazards at the personal workplace and provides some professional recommendations to ensure safer food. Module consists of Tables with general information and instructions on how to process important information. It also includes Resources for easier self-education. The Module is used together with SAFE2FOOD digital platform, where you can find educational videos.

LESSON	DURATION	TOPICS
Lesson 1	3 hours	Food safety hazards and cross-contamination
Lesson 2	3 hours	Sanitation, Personal hygiene and HACCP



# LESSON 1: FOOD SAFETY HAZARDS (3 HOURS)

TOPICS	GOALS	MATERIALS	PROCESS	RESULTS	EVALUATION
<ul style="list-style-type: none"> <li>• Safe food</li> <li>• Biological hazards</li> <li>• Chemical hazards</li> <li>• Physical hazards</li> <li>• Cross-contamination</li> </ul>	<ul style="list-style-type: none"> <li>• To get familiarized with general food safety rules</li> <li>• To identify main hazards at personal workplace</li> <li>• To identify areas of cross-contamination at personal workplace</li> <li>• To suggest improvements for better food safety at personal workplace</li> </ul>	<ul style="list-style-type: none"> <li>• Resource 1</li> <li>• Resource 2</li> <li>• Resource 3</li> <li>• Resource 4</li> <li>• Resource 5</li> <li>• Resource 6</li> <li>• SAFE2FOOD digital platform</li> <li>• SAFE2FOOD synthesis report</li> </ul>	<ol style="list-style-type: none"> <li>1. Study Resource 1 and Resource 2</li> <li>2. Fill in Resource 3 and Resource 4</li> <li>3. Study Resource 5 and fill in Resource 6</li> </ol>	<ul style="list-style-type: none"> <li>• Filled in Resource 3, Resource 4 and Resource 6</li> </ul>	<ul style="list-style-type: none"> <li>• Present conclusions to family, friend or coworker</li> <li>• Answer their questions and get their feedback</li> <li>• Compare answers with coworkers</li> </ul>



# 10 RULES OF SAFE FOOD

1. No physical contamination with impurities or unknown matter
2. No toxic metals and non-metals and other chemical contaminants
3. No microorganisms, parasites or their developmental forms or secretions
4. No exceeding concentrations pesticide and drug residues
5. No exceeding concentrations processing aids
6. No exceeding concentrations radionuclides and radiation
7. No unpermitted additives
8. Food composition is in accordance with the prescribed conditions
9. Food shelf life is readable and is not expired
10. Food of animal origin is marked with a health mark



## RESOURCE 2

### **BIOLOGICAL HAZARDS**

Microorganisms such as pathogenic bacteria, parasites, viruses, fungi or prions can spread with saliva, stool, urine, open wounds, dirty hands, used equipment and can cause infections, food poisoning

### **CHEMICAL HAZARDS**

Natural such as mycotoxins, toxic mushrooms, fish; non-natural such as pesticide residues, heavy metals, medicines, detergents, cleaners' residues, disinfectants, forbidden additives, process oils, veterinary medicines, improper packaging materials and objects such as plastic cups and plates, cutlery, bottles, work knives, wrapping paper, plastic films, boxes of pizza

### **PHYSICAL HAZARDS**

Plastic package pieces, small pebbles, bones, wood, soil, glass, nails, hair, insects, vertebrates, personal objects such as rings, coins, buttons



## RESOURCE 3

Rules I did not know before:

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Rules missing on the list of 10:

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## RESOURCE 4

5 food hazards present at my workplace:

1. 

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3. 

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4. 

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5. 

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## RESOURCE 5

**Cross-contamination:** transfer of microorganisms, chemicals and physical particles to foods via other foods, equipment, utensils, employees and mixing of work processes.

**Prevention:** personal hygiene, washing hands, cleaning work surfaces, equipment and premises, using gloves and work clothes.

### Some ways to trigger cross-contamination



Shaking hands



Using toilet



Dealing with money



Using phone



Using tools



Holding a cigarette



Serving food



Using keys



## RESOURCE 6

3 most common ways and places to trigger cross-contamination at my workplace:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

# LESSON 2: FOOD SAFETY RECOMMENDATIONS (3 HOURS)

TOPICS	GOALS	MATERIALS	PROCESS	RESULTS	EVALUATION
<ul style="list-style-type: none"> <li>• Sanitation</li> <li>• Personal hygiene</li> <li>• HACCP principles</li> </ul>	<ul style="list-style-type: none"> <li>• To recognize sanitation practices for food safety</li> <li>• To revise knowledge about hand washing and other personal hygiene matters</li> <li>• To increase awareness about HACCP principles</li> </ul>	<ul style="list-style-type: none"> <li>• Resource 7</li> <li>• Resource 8</li> <li>• Resource 9</li> <li>• Resource 10</li> <li>• SAFE2FOOD digital platform</li> <li>• SAFE2FOOD synthesis report</li> </ul>	<ol style="list-style-type: none"> <li>1. Study Resource 7, Resource 8, Resource 9, Resource 10</li> <li>2. Fill in Resource 11</li> </ol>	<ul style="list-style-type: none"> <li>• Filled in Resource 10 and Resource 12</li> </ul>	<ul style="list-style-type: none"> <li>• Present conclusions to family, friend or coworker</li> <li>• Answer their questions and get their feedback</li> <li>• Compare answers with coworkers</li> <li>• Think about new knowledge and skills and make a plan to implement them at personal workplace</li> </ul>



# 8 PROFESSIONAL RECOMMENDATIONS FOR SAFE FOOD

1. Comply with personal hygiene rules, especially thorough hands washing
2. Use gloves, headwear and other parts of protective clothing
3. Act as a potential germ carrier and avoiding touching the skin, nose, mouth, face, hair
4. Protect cuts, burns and other wounds
5. No work with purulent wounds, diarrhea, vomiting and similar medical conditions
6. Sneeze and cough into a handkerchief or upper arm, then proper hand washing
7. Treat foods above 65 °C and store foods under 4 °C
8. Thoroughly clean fresh foods



## RESOURCE 8

**Sanitation:** procedures to ensure adequate hygienic conditions of work surfaces, equipment and premises in order to prevent food contamination.

**Examples:** cleaning, disinfection, disinsection, pest control, detoxification

### Most common sanitation procedures

#### Cleaning:

- dry or wet removal of visible and invisible impurities
- Use cleaners and utensils made of safe material, stored separately from food and washed at 95 °C after use
- Clean rooms and surfaces from the cleanest to the dirtiest areas and from the top down

#### Disinfection:

- Inhibit growth of harmful microorganisms on work surfaces or equipment
- Use hot water between 70-80 °C or chemicals and UV rays
- Switch between disinfectants to prevent the resistance of microorganisms



## RESOURCE 9

Employees in food sector have a moral and legal duty to maintain personal hygiene at all stages of food production, preparation and distribution

Especially important is hygiene of hands:

- Hands must be washed anytime after touching anything that is not food you are preparing or utensils you are using at that moment
- Hands must be washed before starting work and after coming from different workspace
- Hands must be washed also after using the toilet, after unclean work and work with delicate foods, after taking garbage out, after sneezing, coughing, wiping the nose, touching skin and hair, before and after using gloves, before and after eating, before and after smoking, after using phone, after cleaning and before leaving the job

Besides hands, it is necessary to firmly fasten hair away from the face and cover it before starting to work. Beard and mustache are also clean.

### The correct procedure for washing hands



Remove watches and jewelry



Apply soap to wet hands for at least 20 seconds



Rub palms, backs of hands, wrists, nails, fingers, thumbs, areas between them



Rinse soap thoroughly with running warm water



Wipe wet hands with disposable towel, use it to close faucet and open door



## RESOURCE 10

Where and when I must wash hands at my personal workplace:

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## RESOURCE 11

HACCP (Hazard Analysis and Critical Control Points): system of preventive measures, which enables identification, assessment, prevention of hazards and the control of potentially harmful agents present in food or conditions that may endanger human health

### 7 PRINCIPLES OF HACCP

1. **Risk factors analysis:** identify potential risks for each product component and all stages of production
2. **Identification of critical control points:** establish control, prevention and corrective measures
3. **Determination of critical limit value:** determine criteria for separating an acceptable parameter from an unacceptable parameter such as temperature, time, pH or aw
4. **Establishment and implementation of monitoring:** implement planned observations and measurements of physical, chemical, sensory and visual parameters at critical control points
5. **Determination of corrective procedures:** prevent or reduce risk through planned actions in excess of critical values
6. **Verification:** evaluate compliance with the HACCP plan at the establishment
7. **Archiving documentation:** store documents and data on ensuring food safety



## RESOURCE 12

5 changes I can make at my personal workplace to ensure better food safety based on what I have learned in Module 2:

