

WP2: training

Training course

Food Safety Hazards
Cleaning and Disinfection

Final report

FOODQA partner: University of Teramo (UniTE, Italy)

Local Scientific coordinators: prof. ssa Paola Pittia, prof. Antonello Paparella

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1. SYLLABUS and CONTENTS

1.1 Food Safety Hazards

Teaching/contact time: 16 hours

a. **Target group:**

- Practitioners of the food chain sector
- Experienced professionals
- Undergraduates
- Master degree students, PhD

b. **Learning outcomes:**

Trainees will:

- develop knowledge and understanding of the significant biological, physical and chemical hazards associated with foods and food processing and the available tools for their control.
- implement knowledge on new food safety hazards in food formulation and processing (nutritional and novel foods).
- enhance a critical mindset to analyse food processing and to apply preventive methods minimise risk with specific focus on microbiological hazards

c. **Minimum knowledge pre-requisites** (if any)

- Basic concepts of food processing and preservation, including factors (product, environmental) that affect food degradation (microbial, enzymatic, chemical)
- Basics in food microbiology

d. **General contents**

(take as reference the contents already defined for the teaching materials)

	Sub-topic	Teaching material	reference person
1	Food safety: definition and aspects	Ebook/ppt-elearning FOODQA ebook	Antonello Paparella, Annalisa Serio, Clemencia Chaves
2	Definition of food safety hazards		
3	Microbiological and biological hazards		
4	Chemical hazards and analytical tools for evaluation		Dario Compagnone

5	<i>Innovation and safety health hazards</i>		Paola Pittia
6	<i>Food Safety Regulations</i>		Pierina Visciano

Complementary/practicals

- A lab experience in the microbiology and a visit in analytical chemistry labs of the University of Teramo
- A visit at the Istituto Zooprofilattico Sperimentale dell'Abruzzo e Molise
<http://www.izs.it/IZS/Engine/RAServePG.php/P/250010010603/L/1>, will be planned

e. Evaluation: self-evaluation

- 4 Questions for each sub-topic (multiple-choice, descriptive).

1.2. Cleaning and disinfection

a. Teaching/contact time: 16 h

b. Target group

- Practitioners of the food chain sector
- Experienced professionals
- Undergraduates
- Master degree students, PhD

c. Learning outcomes:

Trainees will:

- understand the need for cleaning and disinfecting systems.
- achieve knowledge about the main cleaning and disinfection tools and their application in the food production chain.

b. Minimum knowledge pre-requisites (if any)

- Basic knowledge and concepts of food processing and preservation

a. Contents

(take as reference the contents already defined for the teaching materials)

	Sub-topic	Teaching material to be prepared *	reference person (availability)
1	Sanitisation: introduction	Presentations (ppt) of the teacher FOODQA ebook	Antonello Paparella, Annalisa Serio
2	Cleaning and cleaning agents		
3	Disinfection: Introduction; agents and methods		
4	Cleaning and disinfection equipment		
5	Sanitation methodology and documentation		

e. valuation: self-evaluation

4 questions for each subtopic should be collected.

2. PLANNING, ORGANIZATION

Organisational information

**Venue: Faculty of Bioscience and Technology for Food Agriculture and Environment,
University of Teramo, Via R. Balzarini 1 , Coste Sant'Agostino, Teramo**

Room 9

Schedule at glance:

28 January: arrival

29 Jan, 9:00 a.m.: registration and start of the training course

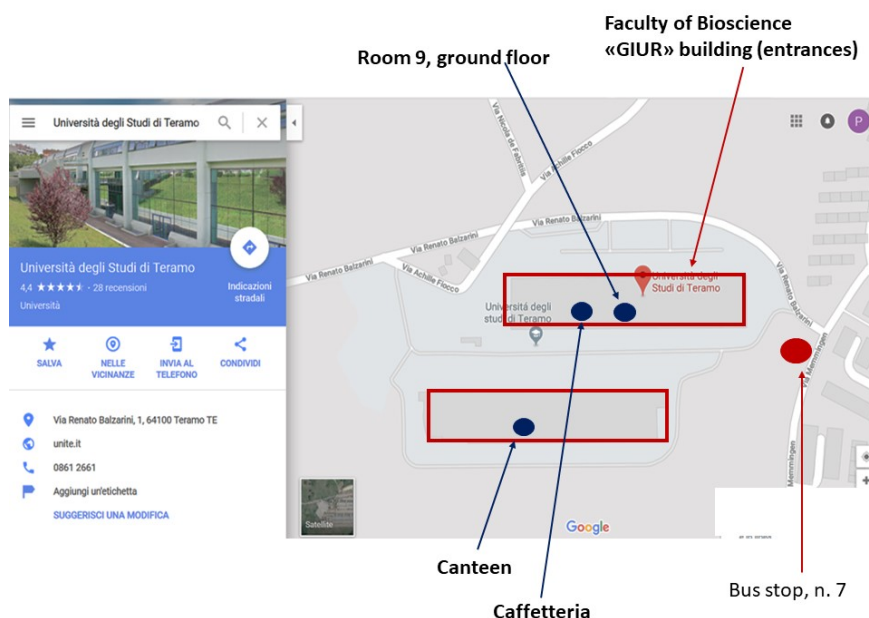
29 Jan -2nd Feb: training (classes, visits, meetings)

2nd February, afternoon: training evaluation

2nd -3rd Feb: departure

Accommodation: Hotel Abruzzi (Viale Giuseppe Mazzini, 18, 64100 Teramo)

University and location map



3. TRAINING COURSE TIMING

Day	9:00-13:00	14:00-17:30
29/01	Registration Food Safety Hazards Prof. A. Paparella	Food Chemical Hazards Prof. Dario Compagnone
30/01	Food Safety Hazards Prof. A. Paparella	Cleaning and disinfection practicals/lab Dr. Annalisa Serio
31/01	Cleaning and disinfection Prof. A. Paparella	Food Safety legislation Dr Pierina Visciano
1/02	Food safety+ Cleaning and Disinfection: application aspects Visit @ Food company Baccalà Monti (https://www.baccalamonti.com/?lang=en) (Corropoli – Teramo)	Food safety in the food chain Seminar and visit @ Public Health Institute “Istituto Zooprofilattico dell’Abruzzo e Marche” Teramo http://www.izs.it/IZS/Engine/RAServePG.php/P/250010010603/L/1
2/02	Food processing and innovation hazards Prof. Paola Pittia	Summary Discussion Evaluation Prof. Paola Pittia

Teachers

Prof. Antonello Paparella

Food microbiologist, <http://www.unite.it/UniTE/Docente/Doc/apaparella>

Prof. Dario Compagnone

Food Analytics, <http://www.unite.it/UniTE/Docente/Doc/dcompagnone>

Prof.ssa Paola Pittia

Food technologist, <http://www.unite.it/UniTE/Docente/Doc/ppittia>

Dott. Annalisa Serio

Food microbiologist, <http://www.unite.it/UniTE/Docente/Doc/aserio>

Dott. Pierina Visciano

Food hygiene, <http://www.unite.it/UniTE/Docente/Doc/pvisciano>

TUTOR AND ORGANISATIONAL SUPPORT

Dr Marco Faieta

3.1. Visit at the Istituto Zooprofilattico dell'Abruzzo e Molise – timing



International cooperation activities

Food safety in the food chain

Study Visit

IZSAM Headquarters, Zaffiro Classroom
Teramo, 31 January 2018

Istituto Zooprofilattico Sperimentale
dell'Abruzzo e del Molise "G. Caporale"
Ente sanitario di diritto pubblico



Sistema Gestione Qualità Certificato
IAF 37, 35

Subject

- ☒ Study visit
- ☐ Study tour
- ☐ Other (please, specify):

Framework

- ☒ OIE related activities
- ☐ OIE Twinning
- ☐ EU project (please, specify):

Introduction

In the framework of a training course on "Food Safety Hazards Cleaning and Disinfection" (Teramo, 29 January – 2 February 2018) organised by the University of Teramo within the Erasmus+ project "Fostering Academia-Industry Collaboration in Food Safety and Quality (FoodQA)", a Jordan delegation will visit the Institute on 31 January 2018.

The FoodQA project aims at reinforcing and implementing a Jordanian network for promoting entrepreneurship and innovation in the food area, while improving the knowledge flow and cooperation between Higher Education Institutions (HEIs) and industry. This ambitious goal will be achieved through a set of activities to be assigned to FoodQA centers. These activities will lead to key changes in teaching and learning approaches and will build strong & durable bridges between academia and industry.

In this framework, the visit at IZSAM will be an opportunity for the delegation to have an overview of the official controls on food in Europe and in Italy. Furthermore, IZSAM and Jordan experts will share knowledge and experiences, with particular reference to food safety and quality management systems.

IZSAM

People involved	Department/Unit	Position	Phone	Email
Mauro Mattioli	IZSAM	Director General	+ 39 0861 332204	m.mattioli@izs.it
Nicola D'Alterio	IZSAM	Health Director	+ 39 0861 332204	n.dalterio@izs.it
Barbara Alessandrini	Training	Head	+ 39 0861 332676	b.alessandrini@izs.it
Roberta Ceci	NRL for Dioxins (PCDDs/PCDFs) and Polychlorobiphenyls (PCBs)	Biologist	+ 39 0861 332453	r.cecchi@izs.it
Giuliano Garofolo	NRL for <i>Campylobacter</i>	Veterinarian	+ 39 0861 332411/461	g.garofolo@izs.it
Gianfranco Diletti	NRL for Dioxins (PCDDs/PCDFs) and Polychlorobiphenyls (PCBs)	Head	+ 39 0861 332453	g.diletti@izs.it
Luigi Iannetti	Food Hygiene	Veterinarian	+ 39 0861 332465	l.iannetti@izs.it
Francesco Pomilio	Food Hygiene	Head	+ 39 0861 332462	f.pomilio@izs.it
Massimo Scacchia	Animal Health	Head	+ 39 0861 332405	m.scacchia@izs.it

Training visit coordinator	Unit	Position	Phone	Email
Francesca Pompei	Training	Trainer	+39 0861 332673	f.pompei@izs.it

Draft agenda

Time	Activity	Person in charge
14.30	<ul style="list-style-type: none"> ✓ Welcome address and opening remarks ✓ Role and activities of IZSAM 	M. Mattioli/ F. Pomilio
14.45	<ul style="list-style-type: none"> ✓ Introduction to the official controls on food in Europe and Italy ✓ The OIE Collaborating Centre for Veterinary Training, Epidemiology, Food Safety and Animal Welfare 	F. Pomilio
15.15	The role of the National Reference Laboratories (NRLs) in the framework of the Italian National Health Service and the European context: <ul style="list-style-type: none"> ✓ General Framework ✓ NRL for <i>Listeria monocytogenes</i> ✓ NRL for <i>Campylobacter</i> ✓ NRL for Dioxins (PCDDs/PCDFs) and Polychlorobiphenyls (PCBs) 	F. Pomilio L. Iannetti G. Diletti/R. Ceci
16.00	Coffee break	--
16.15	Research on food safety: strategic guidelines, projects and partnership at IZSAM	F. Pomilio L. Iannetti G. Garofalo
16.45	Advanced training on food safety: approaches, methods and tools of IZSAM	B. Alessandrini
17.00	Visit to the IZSAM laboratories for Food Safety <i>The delegation will be divided into two groups</i>	All tutors involved
18.00	End of the day	--

Activities might be re-scheduled for specific needs that might occur.

Contacts

Headquarters: Campo Boario, 64100 Teramo, Italy; +39 0861 3321; www.izs.it

International Centre for Veterinary Training and Information "Francesco Gramenzi" (CIFIV):

Francesca Pompei

Via G. Caporale, 64100 Teramo, Italy; +39 0861 332670; formazione@izs.it

4. LIST OF PARTICIPANTS

20 trainees (out of 22 registered)

University	No.	Full Name
1- Balqa Applied University -BAU	1	Sana'a Ali Ahmad Ghnamat
	2	Elham Mohammad Ahmed Al Hiary
	3	Rawan Hamdi Radwan Abu Taleb
	4	Tahani Ahmed Abidrabbu Al Bdour
2-Jordan University of Science and technology - JUST	5	Ranya Butrous Esoh
	6	Najah Mohammed Obeidat
	7	Sharifeh Sheyab
	8	Majdi A. Abu Ishmais
3-Mutah University - (MU)	9	Samer Yousef Sulieman Alqaraleh
	10	Firas Abderahim Hamed Nawaiseh
4- MONOJO	11	PENLOPA AHMAD SAIDAN
	12	Laury Abu Qatouseh
Jordan food and drug administration - J-FDA	13	Rania Ali Mohammad Ghanem
	14	Fatima Suleiman Mustafa Alshuaibi
	15	Enas Radwan Abdallah Alnsour
	16	Ma'mon Mohammad Mousa Gharaibeh
	17	Mo'ath Abdelmajid Hamad Mansour
	18	Samir Salah Abed Alhafiz Abu Ali
The University of Jordan- JO	19	Isra'a Mohammad Hussein Haj Hussein
	20	Rana Nemer Hussein Alakhras
	21	Khaled Rasmi Sharif Al-Saeed
	22	Mohammed Hasan Abdallah Shahein

5. SIGNATURES



FOODQA training
29 January-2nd February 2018
University of Teramo



Food Safety Hazards Cleaning and Disinfection

LIST participants

University	No.	Full Name	29 Jan (in)	29 Jan (out)	30 Jan (in)	30 Jan (out)
1- Balqa Applied University - BAU	1	Sana'a Ali Ahmad Ghinamat				
	2	Elham Mohammad Ahmed Al Hilary				
	3	Rawan Hamdi Radwan Abu Taleb				
	4	Tahani Ahmed Abdurabbu Al Bdour				
2-Jordan University of Science and technology - JUST	5	Ranya Butrous Esah				
	6	Najah Mohammed Obeidat				
	7	Sharifeh Sheyab				
	8	Majdi A. Abu Ismailis				
3-Mutah University - (MU)	9	Samir Yousef Suliman Alqaraleh				
	10	Firas Abderahim Hamed Nawaiseh				



University	No.	Full Name	29 Jan (in)	29 Jan (out)	30 Jan (in)	30 Jan (out)
Jordan food and drug administration - J-FDA	11	PENLOPA AHMAD SAIDAN	X			
	12	Laay Abu Qatouseh				
	13	RANIA ALI MOHAMMAD GHANEM				
	14	FATIMA SULEIMAN MUSTAFA ALSHUAIBI				
	15	ENAS RADWAN ABDALLAH ALNSOUR				
	16	MAMON MOHAMMAD MOUSA GHARAIBEH				
	17	MO'ATH ABDELMAJID HAMAD MANSOUR				
	18	SAMIR SALAH ABED ALHAFAZ ABU ALI				
	19	Isra'a Mohammad Hussein HAJ				
	20	Rana Nemer Hussein Alakhras				
The University of Jordan- JO	21	Khaled Rasmi Sharif Al-Saeed				
	22	Mohammed Hasan Abdallah Shahein				

Food Safety Hazards Cleaning and Disinfection

LIST participants

University	No.	Full Name	31 Jan (in)	31 Jan (out)	1 Feb (in)	1 Feb (out)
1- Balqa Applied University - BAU	1	Sana'a Ali Ahmad Ghnamat	<i>Sana'a</i>	<i>Sana'a</i>	<i>Sana'a</i>	<i>Sana'a</i>
	2	Elham Mohammad Ahmed Al Hary	<i>Elham</i>	<i>Elham</i>	<i>Elham</i>	<i>Elham</i>
	3	Rawan Hamdi Radwan Abu Taleb	<i>Rawan</i>	<i>Rawan</i>	<i>Rawan</i>	<i>Rawan</i>
	4	Tahani Ahmed Abidrabhu Al Bdour	<i>Tahani</i>	<i>Tahani</i>	<i>Tahani</i>	<i>Tahani</i>
2-Jordan University of Science and technology - JUST	5	Ranya Butrous Esch	<i>Ranya</i>	<i>Ranya</i>	<i>Ranya</i>	<i>Ranya</i>
	6	Najah Mohammed Obeidat	<i>Najah</i>	<i>Najah</i>	<i>Najah</i>	<i>Najah</i>
	7	Sharifeh Sheyab	<i>Sharifeh</i>	<i>Sharifeh</i>	<i>Sharifeh</i>	<i>Sharifeh</i>
	8	Majdi A. Abu Ishmaels	<i>Majdi</i>	<i>Majdi</i>	<i>Majdi</i>	<i>Majdi</i>
3-Murrah University - (MU)	9	Samir Yousef Sulleman Alqaraleh	<i>Samir</i>	<i>Samir</i>	<i>Samir</i>	<i>Samir</i>
	10	Firas Abderahim Hamed Nawaiseh	<i>Firas</i>	<i>Firas</i>	<i>Firas</i>	<i>Firas</i>

University	No.	Full Name	31 Jan (in)	31 Jan (out)	1 Feb (in)	1 Feb (out)
Jordan food and drug administration - J-FDA	11	PENTOPAHMAD SAIDAN				
	12	Lauy Abu Qatouseh				
	13	RANIA ALI MOHAMMAD GHANEM				
	14	FATIMA SULEIMAN MUSTAFA ALSHUAIBI				
	15	ENAS RADWAN ABDALLAH ALNSOUR				
	16	MA'WON MOHAMMAD MOUSA GHARAIBEH				
	17	MO'ATH ABDELMAJID HAMAD MANSOUR				
	18	SAMIR SALAH ABED ALHAFFZ ABU ALI				
	19	Isra'a Mohammad Hussein Hajj Hussein				
	20	Rana Nemer Hussein Alakhras				
The University of Jordan- JO	21	Khaled Rasmi Sharif Al-Saeed				
	22	Mohammed Hasan Abdallah Shahein				

Food Safety Hazards Cleaning and Disinfection

LIST participants

University	No.	Full Name	2 Feb (in)	2 Feb (out)		
1- Baqa Applied University - BAU	1	Sana'a Ali Ahmad Ghinamat	<i>Sana'a</i>	<i>Sana'a</i>		
	2	Elham Mohammad Ahmed Al Hiary	<i>Elham</i>	<i>Elham</i>		
	3	Rawan Hamdi Radwan Abu Taleb	<i>Rawan</i>	<i>Rawan</i>		
	4	Tahani Ahmed Abdirabbu Al Bdour	<i>Tahani</i>	<i>Tahani</i>		
2-Jordan University of Science and technology - JUST	5	Ranya Butrous Esah	<i>Ranya</i>	<i>Ranya</i>		
	6	Najah Mohammed Obeidat	<i>Najah</i>	<i>Najah</i>		
	7	Sharifeh Sheyab	<i>Sharifeh</i>	<i>Sharifeh</i>		
	8	Majdi A. Abu Ishmaels	<i>Majdi</i>	<i>Majdi</i>		
3-Mutah University - (MU)	9	Samer Yousef Suleiman Alqaraleh	<i>Samer</i>	<i>Samer</i>		
	10	Firas Abderahim Hamed Nawaiseh	<i>Firas</i>	<i>Firas</i>		

University	No.	Full Name	2 Feb (in)	2 Feb (out)		
Jordan food and drug administration - J-FDA	11	PENLOPA AHMAD SAIDAN				
	12	Lauy Abu Qatouseh				
	13	RANIA ALI MOHAMMAD GHANEM				
	14	FATIMA SULEIMAN MUSTAFA ALSHUAIBI				
	15	ENAS RADWAN ABDALLAH ALSOUR				
	16	MA'AMON MOHAMMAD MOUSA GHARAIBEH				
	17	MO'ATH ABDELMAID HAMAD MANSOUR				
	18	SAMIR SALAH ABED ALHAFIZ ABU ALI				
	19	Isra'a Mohammad Hussein Hajj Hussein				
	20	Rana Nemer Hussein Alakhras				
The University of Jordan- IO	21	Khaled Rasmi Sharif Al-Saeed				
	22	Mohammed Hasan Abdallah Shahein				

6. LIST of ADDITIONAL TRAINING MATERIALS

DAY 1	Prof. Paparella	Food Safety
	Prof. Compagnone	Food Chemical Hazard
Day 2	Prof. Paparella	Predictive Microbiology + exercises
	Prof. Serio & Prof. Chaves-Lopez	Laboratory practical experience – Biofilm forming capacity; Essential oils antibacterial activity; Sodium hypochlorite sensitivity.
Day 3	Prof. Paparella	Disinfection and Biopreservation + exercises
	Dr. Garofolo (IZSAM)	Bacteriology: Research, strategic guidelines and projects
	Dr. Pomilio (IZSAM)	IZSAM
	Dr. Iannetti (IZSAM)	Focus on NRL for <i>Listeria monocytogenes</i> and research activities
	Dr. Ceci, Dr. Diletti & Dr. Migliorati (IZSAM)	The role of the National Reference Laboratory for dioxins and PCBs in food and feed
	Dr. Pompei (IZSAM)	Advanced training on food safety: approaches, methods and tools of IZSAM
Day 4	Prof. Visciano	Basic EU food safety regulations
Day 5	Prof. Pittia	Innovation and food safety aspects

7. ASSESSMENT

The final assessment of the acquired knowledge was carried out by a questionnaire made of 19 questions.



FINAL ASSESSMENT

TRAINING "FOOD SAFETY HAZARDS" + "CLEANING AND DISINFECTION"

TERAMO (IT) 29 JANUARY-2 FEBRUARY 2018

NAME:.....

SURNAME:.....

EMAIL:

1. In HACCP, Hazards can be defined as:

- A. "A biological, chemical or physical agent with the potential to cause an adverse health effect"
- B. "A biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect"
- C. "A biological, chemical or physical agent with the potential to cause food spoilage"

2. Codex Principle 4 is:

- A. Monitoring
- B. Corrective actions
- C. Documentation

3. The units of measurement for a hazard are:

- A. Importance and Risk
- B. ALOP and TLR
- C. Severity and Risk

4. Describe the main difference between a document and a record:

.....

.....

.....

.....



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5. In a Central Composite Design (CCD) at 3 variables and 5 levels, the so-called “star points” that are less explored correspond to the numbers:

- A. +1 and -1
- B. +3 and -3
- C. +2 and -2

6. In a Microbial Challenge Test:

- A. The whole process is investigated in fixed conditions
- B. The whole process is investigated in changing conditions
- C. Only one relevant Unit Operation is investigated

7. COMBASE is an example of:

- A. Primary model
- B. Secondary model
- C. Tertiary model

8. Describe the main difference between kinetic models and probabilistic models:

9. Which of the following sentences IS TRUE?

- A. “Gram-Positives are usually more resistant to disinfectants than Gram Negatives”
- B. “Protozoan vegetative forms are usually more resistant to disinfectants than protozoan cysts”
- C. “Gram-Negatives are usually more resistant to disinfectants than Gram Positives”

10. 2% Glutaraldehyde is:

- A. A high activity disinfectant
- B. A medium activity disinfectant
- C. A low activity disinfectant



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11. In Food Biopreservation, scaling up from lab scale to real food systems normally involves:

- A. 100 to 1000-fold increase in % biopreservative
- B. 10 to 100-fold decrease in % biopreservative
- C. 10 to 100-fold increase in % biopreservative

12. Describe the main difference between an Antiseptic and a Disinfectant:

13. How chemical contaminants are classified according to EU?

- a) GROUP A — Substances having anabolic effect and unauthorized substances and Group B- Veterinary Drugs and Contaminants
- b) GROUP A — Veterinary Drugs and Contaminants and Group B- Substances having anabolic effect and unauthorized substances
- c) GROUP A — Substances having anabolic effect and Group B- Heavy metals
- d) GROUP A — Substances having anabolic effect and unauthorized substances and Group B — pesticides

14. What is the robustness of an analytical method?

- a. The ability of the method to be transferred from lab to lab
- b. The capacity of the method to resist to changes during times
- c. The susceptibility of an analytical method to changes in experimental conditions
- d. The susceptibility of an analytical method to changes of the regulations

15. What is a confirmatory method?

- a. An independent method giving the same information of the selected method
- b. A method used by another lab to confirm the correctness of the analysis
- c. A method giving structural information on the analyte
- d. A method with an error below 5%



16. Which Institutions of the European Union are engaged in preparing and/or amending the food law?

- a. the European Parliament
- b. the Court of Justice
- c. the Commission

17. In which Regulation are reported the seven principles of HACCP?

- a. Regulation EC 178/2002
- b. Regulation 852/2004/EC
- c. Regulation 853/2004/EC

18. At which stage of the food production chain the food safety criteria of Regulation 2073/2005/EC apply?

- a. when the production is beginning
- b. when the product is placed on the market during its shelf-life
- c. at the end of the manufacturing process

19. Summarize the evolution of food safety legislation from Directive 93/43/EEC to Hygiene Package



Assessment results

All trainees have taken the exam, with correct responses to questions > 65%.



8. PICTURES



FOODQA training @ UNITE



FOODQA Group in visit at IZS



FOODQA Group in visit at Monti, food factory

9. TRAINING EVALUATION

Work Package: WP2

Training Course Title: *Food Safety Hazards + Cleaning and disinfection*

Location of training: *Teramo - IT*

Date: 29.01.2018 – 02.02.2018

Grades between 1-5, where 1 is Fully disagree and 5 is Fully agree

	Average	St.dev
1. Please rate the overall training experience.		
a. The training was well planned and organised.	4,6	0,6
b. The training facilities were adequate and comfortable.	4,2	0,7
c. The technical resources used were satisfactory.	4,6	0,6
d. Materials provided were helpful.	4,6	0,6
e. The objectives of the training were clearly defined and met.	4,4	0,8
f. The training content was well organised.	4,2	0,9
g. The topics of the training were clear and easy to follow.	4,0	1,0
h. Length of training was sufficient.	3,7	1,2
i. The training enhanced my understanding on the subject.	4,4	0,7
j. Training was relevant to my needs.	4,5	0,7
k. The training will be useful to my work and my professional growth.	4,5	0,7
l. Training met my expectations.	4,5	0,7
2. What is your opinion of the Trainers, regarding:		
a. The trainer was knowledgeable about the training topic.	4,6	0,7

	Average	St.dev
b. The trainer had the ability to explain and illustrate concepts.	4,4	0,9
c. The topics were presented in a clear and understandable manner.	4,4	0,9
d. The trainer encouraged participation, interaction and answered questions clearly.	4,5	0,7
e. The trainer's communication style kept me focused and interested.	4,5	0,9

(1) Was this training appropriate for your level of experience?	Yes 100%	No 0 %
(2) Which topics were not covered or insufficiently covered, in your opinion? <ul style="list-style-type: none"> • Chemical hazards • The validation method of analytical • Method validation; legislation • Method development • Method development • Legislation • ISO22000/Food labelling; food additives • Validation and analytical methods • Visit in the food company • Food chemical hazards & EU regulations • Chemical hazards 		
(3) Which topics were not relevant in your opinion? <ul style="list-style-type: none"> • food safety hazards & microbiological test • Food Safety • Legislation (n. 3) • Maybe the validation of analytical methods • method validation • More practice or factory/plant visit; material could be given in advance to read and think about questions and challenges; • Very good trainer (Paparella) while trainer (Visciano) was not (evaluation point 2a and 2nb) (2 trainees) • All are relevant 		
(4) What did you like best about the training? <ul style="list-style-type: none"> • More laboratory visit • All the program • Trainer (A. Paparella); cooperation with the tutor (M. Faieta) • Trainer (A. Paparella) • Trainers (A. Paparella); cooperation with the tutor (M. Faieta); infrastructure & facility of training premises 		

- HACCP system discussion; disinfection and biopreservatives
- Trainers; visit
- It is very well organised, visits were good
- I am interested in Eos extracts and techniques; antioxidants

(5) What suggestions or comments do you have for making the program more effective?

- Enjoyable training
- Practical part; more details about subjects; no sufficient info about food safety hazards
- More time & frequency of the training
- Practical part; induce group working
- None
- More time for covering more topics
- I wish to continue training with you to know about new methods of preserving food practicals, more test and procedures
- Working lab by each one