



UNIVERSITÀ
CATTOLICA
del Sacro Cuore

Technology for Food Safety – Principles of food hygiene

Prof. PIER SANDRO COCCONCELLI

COURSE AIMS

The learning objectives are: (i) to illustrate the European approach to food risk analysis and (ii) to provide the basic and technical knowledge on food processing and hygiene.

COURSE CONTENTS

The Food Safety concept. The European risk analysis approach: risk assessment and risk management. The steps of risk assessment. The risk management in the food chains: the concept of ALARA, ALOP and FSOs. The RASFF (Rapid Alert System for Food and Feed) system in EU. The food risks. Biological and chemical hazards.	1
Food born infections and intoxication. The EFSA Report on Trends and Sources of Zoonoses. Food-borne pathogens and control measures. Microbiological Quantitative Risk Assessment. Risk Management in the food chain: the regulation on Microbiological Criteria. The microbial food spoilage: bacteria and fungi	1
Basic terms and concepts of food technology. Thermal preservation of food. Non-thermal processes for food processing: the cold chains, acidification and fermentation.	1
Basic of food processing hygiene criteria: the Good Manufacturing and Hygiene Practices (GMP-GHP). The HACCP: concept and application. Prerequisites, the decisional tree for CCP identification, the corrective measures. Examples of HACCP plans.	1
Tutorials	1

SCHEDULE

Spring semester

TEACHING METHOD

The course will consist of lectures presenting the theoretical and conceptual aspects of the subject, coupled with case studies and practical work.



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COURSE REQUIREMENTS

It is strongly recommended to attend classes.

CREDITS

5 ECTS

ASSESSMENT METHOD

The assessment is based on cases study discussion and on an oral examination. The active participation at the case studies and the quality of the final report is assessed. Oral examination evaluates the knowledge of food microbiology and critical reasoning. The final result also takes into account the report of the practical activities, documenting the work done.

COURSE READINGS AND MATERIALS

The bibliographic material, web sites, E-books and pdf documents on food hygiene will be provided during the course.

INSTRUCTOR BIO

Prof. Pier Sandro Cocconcelli

Pier Sandro Cocconcelli, is Full Professor of Food Microbiology at the Università Cattolica del Sacro Cuore and he is Rector's delegate for internationalization of the same university. Since 2003, he is scientific expert of the European Authority of Food Safety (EFSA) His research activities are focused on food and agricultural microbiology, bacterial molecular biology, bacterial genomics, risk analysis of food pathogenic bacteria, and on the gene exchange of antibiotic resistance and virulence determinants in the food chain.

Professor Pier Sandro Cocconcelli is available to meet with students after class at C.R.B.

http://docenti.unicatt.it/ita/pier_sandro_cocconcelli/

E-MAIL ADDRESS

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