Postgraduate Diploma
Food Microbiological Risk Management

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Food Microbiological Risk Management

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/nutrition/postgraduate-diploma/postgraduate-diploma-food-microbiological-risk-management**

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01
Introduction

The food industry has improved in recent decades in all its phases: creation, development, processing and marketing of products. All this with quality standards that have been demanded by consumers themselves, but also by the authorities who impose strict measures on the sector to prevent the spread of disease or fraud. In this initial process, a proper risk assessment of the food is crucial to achieve an optimal result. That is why the sector is increasingly requesting more and more qualified professionals. In response to this need, this program provides the most advanced knowledge on microbiology, food hygiene and food safety. All this in a 100% online program that can be easily accessed at any time of the day, from an electronic device with Internet connection.

A 100% online Postgraduate Diploma, flexible and with the most innovative content on Food Microbiological Risk Management"

Nowadays, there are many companies in the food industry that have quality certificates for their products, not only for the prestige it gives to the companies, but also for the compliance with the demanding regulations that must be applied throughout the whole process of elaboration and sale of a product.

However, the risk of finding bacteria or microorganisms in food that generate human illnesses continues to exist and is increasingly frequent due to globalization, contamination of natural resources or their scarcity. For this reason, properly managing these risks is key for the sector, which requires highly qualified professionals in this field. In this scenario, TECH has designed this Postgraduate Diploma in Food Microbiological Risk Management, where the Nutrition professionals will be able to make an advanced tour of the main products of the Food Industry and the relevance of hygiene.

A program taught exclusively online, where the specialist can delve into the beneficial effects of microorganisms, control systems and process optimization or proper management of traceability in the food chain. All this by means of video summaries, videos in detail or complementary readings that will favor the progression of the students in a degree, which is at the academic forefront.

The professionals are, therefore, facing an excellent opportunity to update their knowledge thanks to a university education that can be accessed 24 hours a day from a computer, tablet or cell phone with Internet connection. In addition, the Relearning system, based on the reiteration of content, will allow students to reduce the hours of study. An ideal option for those who wish to combine a quality program with the most demanding responsibilities.

This **Postgraduate Diploma in Food Microbiological Risk Management** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of case studies presented by experts in Food Technology
- Graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

Access the most comprehensive and advanced knowledge on foodborne microbial diseases”

You have access to a library of multimedia resources with which you can more easily delve into the development of new processes in the meat sector"

This course will allow you to keep abreast of the latest developments in the most commonly used techniques in food microbiology.

With this university qualification you will be able to know in depth the main requirements demanded by the ISO 22000 standard.

The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will provide the professionals with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professionals must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned experts.

02

Objectives

The university qualification syllabus has been designed with the objective of offering the nutrition professional the most recent information on Microbiological Risk Management of Foodstuffs. This knowledge will allow them to be up to date with the main mechanisms of food preservation, quality and safety criteria in the use of water or the most recent techniques used in microbiological analysis. The specialist team that is part of this program will be in charge of guiding students to successfully achieve these goals.

With this university program you will learn about the latest advances achieved in the optimization of processes and products in the food industry"

General Objectives

- Know the mechanisms of food preservation and know how to prevent microbial spoilage of food
- Know how to identify and differentiate the main elements causing foodborne pathologies: microorganisms, toxins, viruses and parasites
- Controlling and optimizing processes and products in the food industry Manufacturing and preserving foodstuffs
- Develop new processes and products
- Participate in the design, organization and management of different food services
- Collaborate in the implementation of quality systems

Specific Objectives

Module 1. Microbiology and Food Hygiene

- To know the main tranformative, pathogenic and beneficial microorganisms in food
- Establish the beneficial effects of microorganisms in the food field
- Identify and understand the most important elements of a microbiology laboratory
- Apply techniques for the detection of microorganisms in food

Module 2. Food Industry

- Understand the industrial processes of food processing and preservation, as well as packaging and storage technologies
- Discover the transformation and preservation processes particular to the main types of food industries
- Identify the process and product control and optimization systems applied to the main types of food industries
- Apply the knowledge of transformation and preservation processes to the development of new processes and products

Module 3. Quality and Food Safety Management

- Identify and interpret the requirements of the food safety management standard (UNE EN ISO 22000) for its subsequent application and evaluation in food chain operators
- Develop, implement, evaluate and maintain appropriate hygiene practices, food safety and risk control systems
- Evaluate, control and manage aspects of traceability in the food supply chain
- Contribute towards consumer protection within the framework of food safety and quality

Thanks to this Postgraduate Diploma you will learn about the relevance of proper water management in the context of food safety"

03

Structure and Content

The syllabus of this Postgraduatre Diploma has been structured in three large modular blocks, where students can delve into the microbiology and hygiene of food, the main products produced in the food industry and the key organisms in the safety of foodstuffs. The case studies provided by the expert team that integrates this program will bring the professionals closer to a much closer and real knowledge of Food Microbiological Risk Management.

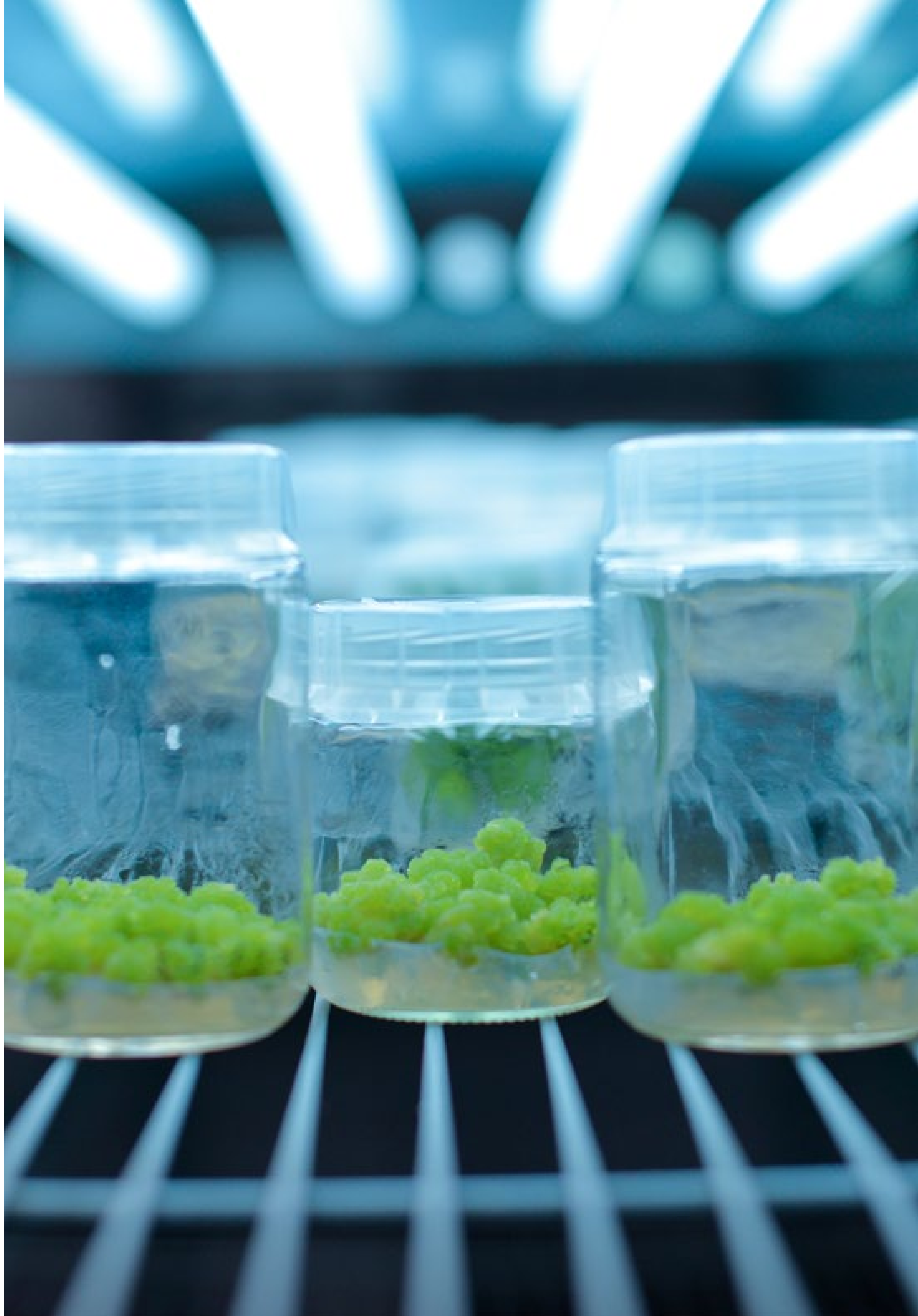
A syllabus with a theoretical-practical approach that will allow you to know the latest scientific evidence on the processes of bactofugation, skimming, standardization, homogenization, deaeration of dairy products"

Module 1. Microbiology and Food Hygiene

1.1. Introduction to Food Microbiology
  - 1.1.1. History of Food Microbiology
  - 1.1.2. Microbial Diversity: Archaea and Bacteria
  - 1.1.3. Phylogenetic Relationships Among Living Organisms
  - 1.1.4. Microbial Classification and Nomenclature
  - 1.1.5. Eukaryotic Microorganisms: Algae, Fungi and Protozoa
  - 1.1.6. Virus

1.2. Introduction to Food Microbiology
  - 1.2.1. Sterilization and Asepsis Methods
  - 1.2.2. Culture Mediums: Liquid and Solid, Synthetic or Defined, Complex, Differential and Selective
  - 1.2.3. Isolation of Pure Cultures
  - 1.2.4. Microbial Growth in Discontinuous and Continuous Cultures
  - 1.2.5. Influence of Environmental Factors on Growth
  - 1.2.6. Optical Microscopy
  - 1.2.7. Sample Preparation and Staining
  - 1.2.8. Fluorescence Microscope
  - 1.2.9. Transmission and Scanning Electron Microscopy

1.3. Microbial Metabolism
  - 1.3.1. Ways of Obtaining Energy
  - 1.3.2. Phototrophic, Chemolithotrophic and Chemorganotrophic microorganisms
  - 1.3.3. Carbohydrate Catabolism
  - 1.3.4. Degradation of Glucose to Pyruvate (Glycolysis, Pentose Phosphate Pathway and Entner-Doudoroff Pathway)
  - 1.3.5. Lipid and Protein Catabolism
  - 1.3.6. Fermentation
  - 1.3.7. Types of Fermentation
  - 1.3.8. Respiratory Metabolism: Aerobic Respiration and Anaerobic Respiration



1.4. Microbial Food Alterations
- 1.4.1. Microbial Ecology of Foods
- 1.4.2. Sources of Contamination of Vegetable Foods
- 1.4.3. Fecal Contamination and Cross Contamination
- 1.4.4. Factors Influencing Microbial Alteration
- 1.4.5. Microbial Metabolism in Food
- 1.4.6. Alteration Control and Preservation Methods

1.5. Foodborne Diseases of Microbial Origin
- 1.5.1. Foodborne Infections: Transmission and Epidemiology
- 1.5.2. Salmonellosis
- 1.5.3. Typhoid and Paratyphoid Fever
- 1.5.4. Campylobacter Enteritis
- 1.5.5. Bacillary Dysentery
- 1.5.6. Diarrhea Caused by Virulent E. coli Strains
- 1.5.7. Yersiniosis
- 1.5.8. Vibrio Infections

1.6. Diseases Caused by Foodborne Protozoa and Helminths
- 1.6.1. General Characteristics of Protozoa
- 1.6.2. Amoebic Dysentery
- 1.6.3. Giardiasis
- 1.6.4. Toxoplasmosis
- 1.6.5. Cryptosporidiosis
- 1.6.6. Microsporidiosis
- 1.6.7. Food-borne Helminths: Flatworms and Roundworms

1.7. Viruses, Prions and Other Foodborne Biohazards
- 1.7.1. General Properties of Viruses
- 1.7.2. Composition and Structure of the Virion: Capsid and Nucleic Acid
- 1.7.3. Virus Growth and Cultivation
- 1.7.4. Virus Life Cycle (Lytic Cycle): Phases of Adsorption, Penetration, Gene Expression and Replication, and Release
- 1.7.5. Alternatives to the Lytic Cycle: Lysogeny in Bacteriophages, Latent Infections, Persistent Infections and Tumor Transformation in Animal Viruses
- 1.7.6. Viroids, Virusoids and Prions
- 1.7.7. Incidence of Foodborne Viruses
- 1.7.8. Characteristics of Foodborne Viruses
- 1.7.9. Hepatitis A
- 1.7.10. Rotavirus
- 1.7.11. Scombroid Poisoning

1.8. Microbiological Analysis of Food
- 1.8.1. Sampling and Sampling Techniques
- 1.8.2. Reference Values
- 1.8.3. Indicator Microorganisms
- 1.8.4. Microbiological Counts
- 1.8.5. Determination of Pathogenic Microorganisms
- 1.8.6. Rapid Detection Techniques in Food Microbiology
- 1.8.7. Molecular Techniques: Conventional PCR and real-time PCR
- 1.8.8. Immunological Techniques

1.9. Beneficial Microorganisms in Food
- 1.9.1. Food Fermentation: The Role of Microorganisms in the Production of Foodstuffs
- 1.9.2. Microorganisms as Food Supplements
- 1.9.3. Natural Preservatives
- 1.9.4. Biological Systems of Food Conservation
- 1.9.5. Probiotic Bacteria

1.10. Microbial Cell biological
- 1.10.1. General Characteristics of Eukaryotic and Prokaryotic Cells
- 1.10.2. The Prokaryotic Cell: Components Outside the Cell Wall: Glycocalyx and S-layer, Cell Wall, Plasma Membrane
- 1.10.3. Flagella, Bacterial Mobility and Taxia
- 1.10.4. Other Surface Structures, Fimbriae and Pilli

Module 2. Food Industry

2.1. Cereals and by-products I
- 2.1.1. Cereals: production and consumption
  - 2.1.1.1. Classification of cereals
  - 2.1.1.2. Current state of research and industrial situation
- 2.1.2. Basic concepts of cereal grains
  - 2.1.2.1. Methods and equipment for the characterization of flours and bread doughs
  - 2.1.2.2. Rheological properties during kneading, fermentation and baking
- 2.1.3. Cereal-derived products: Ingredients, additives and adjuvants. Classification and effects

2.2. Cereals and by-products II
- 2.2.1. Baking process: Stages, changes produced and equipment used
- 2.2.2. Instrumental, sensory and nutritional characterization of cereal-derived products
- 2.2.3. Application of cold in bakery. Frozen pre-baked breads. Process and product quality
- 2.2.4. Gluten-free products derived from cereals. Formulation, process and quality characteristics
- 2.2.5. Pasta products. Ingredients and process. Types of pasta
- 2.2.6. Innovation in bakery products. Trends in Product Design

2.3. Milk and Dairy Products. Eggs and egg products I
- 2.3.1. Hygienic-sanitary quality of milk
  - 2.3.1.1. Origin and levels of contamination. Initial and contaminating microbiota
  - 2.3.1.2. Presence of chemical contaminants: residues and contaminants
  - 2.3.1.3. Influence of hygiene in the milk production and marketing chain
- 2.3.2. Milk production. Milk synthesis
  - 2.3.2.1. Factors influencing the composition of milk: extrinsic and intrinsic factors
  - 2.3.2.2. Milking: good process practices
- 2.3.3. Pre-treatment of milk at the farm: filtration, refrigeration and alternative methods of preservation
- 2.3.4. Treatments in the dairy industry: clarification and bactofugation, skimming, standardization, homogenization, deaeration. Pasteurization. Definition. Procedures, treatment temperatures and limiting factors
  - 2.3.4.1. Types of pasteurizers. Packaging Quality Control Sterilization. Definition
  - 2.3.4.2. Methods: conventional, UHT, other systems. Packaging Quality control Manufacturing defects
  - 2.3.4.3. Types of pasteurized and sterilized milk. Selection of milk. Milkshakes and flavored milks. Mixing process. Enriched milks. Enrichment process
  - 2.3.4.4. Evaporated milk. Condensed milk
- 2.3.5. Preservation and packaging systems
- 2.3.6. Quality control of powdered milk
- 2.3.7. Milk packaging systems and quality control

2.4. Milk and Dairy Products. Eggs and egg products I
- 2.4.1. Dairy Products. Creams and Butter
- 2.4.2. Manufacturing process. Continuous manufacturing methods. Packaging and preservation. Manufacturing defects and alterations
- 2.4.3. Fermented Milks: Yoghurt Preparatory treatments of milk. Processes and systems of elaboration
  - 2.4.3.1. Types of yoghurt. Problems in the elaboration. Quality Control
  - 2.4.3.2. BIO products and other acidophilic milks
- 2.4.4. Cheese-making technology: milk preparatory treatments
  - 2.4.4.1. Obtaining the curd: syneresis. Pressing. Salting
  - 2.4.4.2. Water activity in cheese. Control and conservation of brine
  - 2.4.4.3. Cheese ripening: agents involved. Factors that determine ripening. Effects of contaminating biota
  - 2.4.4.4. Toxicological problems of cheese
- 2.4.5. Additives and antifungal treatments
- 2.4.6. Ice cream. Features. Types of ice cream. Processes of elaboration
- 2.4.7. Eggs and egg products
  - 2.4.7.1. Fresh egg: treatment of fresh egg as raw material for the elaboration of egg derivatives
  - 2.4.7.2. Egg products: liquid, frozen and dehydrated

2.5. Vegetable Products I
- 2.5.1. Post-harvest physiology and technology. Introduction
- 2.5.2. Fruit and vegetable production, the need for postharvest preservation
- 2.5.3. Respiration: respiratory metabolism and its influence on postharvest preservation and deterioration of vegetables
- 2.5.4. Ethylene: synthesis and metabolism. Implication of ethylene in the regulation of fruit ripening
- 2.5.5. Fruit ripening: The ripening process, generalities and its control
  - 2.5.5.1. Climacteric and non-climacteric ripening
  - 2.5.5.2. Compositional changes: physiological and biochemical changes during ripening and preservation of fruits and vegetables

2.6. Vegetable Products II
- 2.6.1. Principle of fruit and vegetable preservation by the control of environmental gases. Mode of action and its applications in the preservation of fruits and vegetables
- 2.6.2. Refrigerated preservation. Temperature control in the preservation of fruits and vegetables
  - 2.6.2.1. Technological methods and applications
  - 2.6.2.2. Cold damage and its control
- 2.6.3. Transpiration: control of water loss in fruit and vegetable preservation
  - 2.6.3.1. Physical Principles. Control systems
- 2.6.4. Postharvest pathology: main deteriorations and rots during fruit and vegetable preservation. Control systems and methods
- 2.6.5. Fresh-cut products
  - 2.6.5.1. Physiology of vegetable products: handling and preservation technologies

2.7. Vegetable Products III
- 2.7.1. Processing of canned vegetables: General description of a characteristic canning line for vegetables
  - 2.7.1.1. Examples of the main types of canned vegetables and legumes
  - 2.7.1.2. New products of vegetable origin: cold soups
  - 2.7.1.3. General description of a typical fruit packaging line
- 2.7.2. Juice and nectar processing: juice extraction and juice processing
  - 2.7.2.1. Aseptic processing, storage and packaging systems
  - 2.7.2.2. Examples of lines for obtaining the main types of juices
  - 2.7.2.3. Obtaining and preservation of semi-finished products: cremogenated products
- 2.7.3. Production of jams, marmalades, jams and jellies: production and packaging process
  - 2.7.3.1. Examples of characteristic processing lines
  - 2.7.3.2. Additives used for the manufacture of jams and marmalades

2.8. Alcoholic beverages and oils
- 2.8.1. Alcoholic beverages: Wine. Manufacturing process
  - 2.8.1.1. Beer: brewing process. Types
  - 2.8.1.2. Spirits and liqueurs: Elaboration processes and types
- 2.8.2. Oils and fats: Introduction
  - 2.8.2.1. Olive oil: Olive oil extraction system
  - 2.8.2.2. Oilseed oils. Extraction
- 2.8.3. Animal fats: Refining of fats and oils

2.9. Meat and meat by-products
- 2.9.1. Meat industry: Production and consumption
- 2.9.2. Classification and functional properties of muscle proteins: Myofibrillar, sarcoplasmic and stromal proteins
  - 2.9.2.1. Conversion of muscle to meat: porcine stress syndrome
- 2.9.3. Maturation of meat. Factors affecting the quality of meat for direct consumption and industrialization
- 2.9.4. Curing chemistry: ingredients, additives and curing coadjuvants
  - 2.9.4.1. Industrial curing processes: dry and wet curing processes
  - 2.9.4.2. Nitrite alternatives
- 2.9.5. Raw and raw marinated meat products: fundamentals and problems of their preservation. Characteristics of raw materials
  - 2.9.5.1. Types of Products. Manufacturing operations
  - 2.9.5.2. Alterations and defects
- 2.9.6. Cooked sausages and hams: basic principles of the preparation of meat emulsions. Characteristics and selection of raw materials
  - 2.9.6.1. Technological manufacturing operations. Industrial systems
  - 2.9.6.2. Alterations and defects

2.10. Seafood
- 2.10.1. Seafood Characteristics of technological interest
- 2.10.2. Main industrial fishing and shellfishing gears
  - 2.10.2.1. Unit operations of fish technology
  - 2.10.2.2. Cold preservation of fish
- 2.10.3. Salting, pickling, drying and smoking: technological aspects of fish manufacturing
  - 2.10.3.1. Characteristics of the final product. Performance
- 2.10.4. Marketing

Module 3. Quality and Food Safety Management

3.1. Food Safety and Consumer Protection
- 3.1.1. Definition and Basic Concepts
- 3.1.2. Quality and Food Safety Evolution
- 3.1.3. Situation in Developing and Developed Countries
- 3.1.4. Key Food Safety Agencies and Authorities: Structures and Functions
- 3.1.5. Food Fraud and Food Hoaxes: The Role of the Media

3.2. Facilities, Premises and Equipment
- 3.2.1. Site Selection: Design and Construction and Materials
- 3.2.2. Premises, Facilities and Equipment Maintenance Plan
- 3.2.3. Applicable Regulations

3.3. Cleaning and Disinfection Plan (L + D)
- 3.3.1. Dirt Components
- 3.3.2. Detergents and Disinfectants: Composition and Functions
- 3.3.3. Cleaning and Disinfection Stages
- 3.3.4. Cleaning and Disinfection Programming
- 3.3.5. Current Regulations

3.4. Pest Control
- 3.4.1. Pest Control and Disinsection (Plan D + D)
- 3.4.2. Pests Associated with the Food Chain
- 3.4.3. Preventive Measures for Pest Control
  - 3.4.3.1. Traps and Snares for Mammals and Ground Insects
  - 3.4.3.2. Traps and Snares for Flying Insects

- 3.5. Traceability Plan and Good Manipulation Practices (GMP)
  - 3.5.1. Structure of a Traceability Plan
  - 3.5.2. Current Regulations Associated with Traceability
  - 3.5.3. GMP Associated with Food Processing
    - 3.5.3.1. Food Handlers
    - 3.5.3.2. Requirements to be Met
    - 3.5.3.3. Hygiene Training Plans
- 3.6. Elements in the Management of Food Safety
  - 3.6.1. Water as an Essential Element in the Food Chain
  - 3.6.2. Biological and Chemical Agents Associated with Water
  - 3.6.3. Quantifiable Elements of Quality, Safety and Use of Water
  - 3.6.4. Approval of Suppliers
    - 3.6.4.1. Supplier Monitoring Plan
    - 3.6.4.2. Current Regulations Associated
  - 3.6.5. Food Labeling
    - 3.6.5.1. Consumer Information and Allergen Labeling
    - 3.6.5.2. Labeling of Genetically Modified Organisms
- 3.7. Food Crisis and Associated Policies
  - 3.7.1. Triggering Factors of a Food Crisis
  - 3.7.2. Scope, Management and Response to the Food Security Crisis
  - 3.7.3. Alert Communication Systems
  - 3.7.4. Policies and Strategies for Improving Food Quality and Safety
- 3.8. HACCP plan design
  - 3.8.1. General Guidelines to be Followed for its Implementation: Underlying Principles and Prerequisite Program
  - 3.8.2. Management Commitment
  - 3.8.3. Configuration of HACCP
  - 3.8.4. Description of the Product and Identification of its Intended Use
  - 3.8.5. Flow Diagrams
- 3.9. Development the HACCP Plan
  - 3.9.1. Defining Critical Control Points (CCPs)
  - 3.9.2. The Seven Basic Principles of the HACCP Plan
    - 3.9.2.1. Requirements Identification and Analysis
    - 3.9.2.2. Establishment of Control Measures for Identified Hazards
    - 3.9.2.3. Determination of Critical Control Points (CCP)
    - 3.9.2.4. Defining Critical Control Points (CCPs)
    - 3.9.2.5. Establishment of Critical Limits
    - 3.9.2.6. Determination of Corrective Actions
    - 3.9.2.7. HACCP System Checks
- 3.10. ISO 22000
  - 3.10.1. ISO 22000 Principles
  - 3.10.2. Purpose and Field of Application
  - 3.10.3. Market Situation and Position in Relation to Other Applicable Standards in the Food Chain
  - 3.10.4. Application Requirements
  - 3.10.5. Food Safety Management Policy

"A university program that will allow you to delve into the best practices for food safety management"

04

Methodology

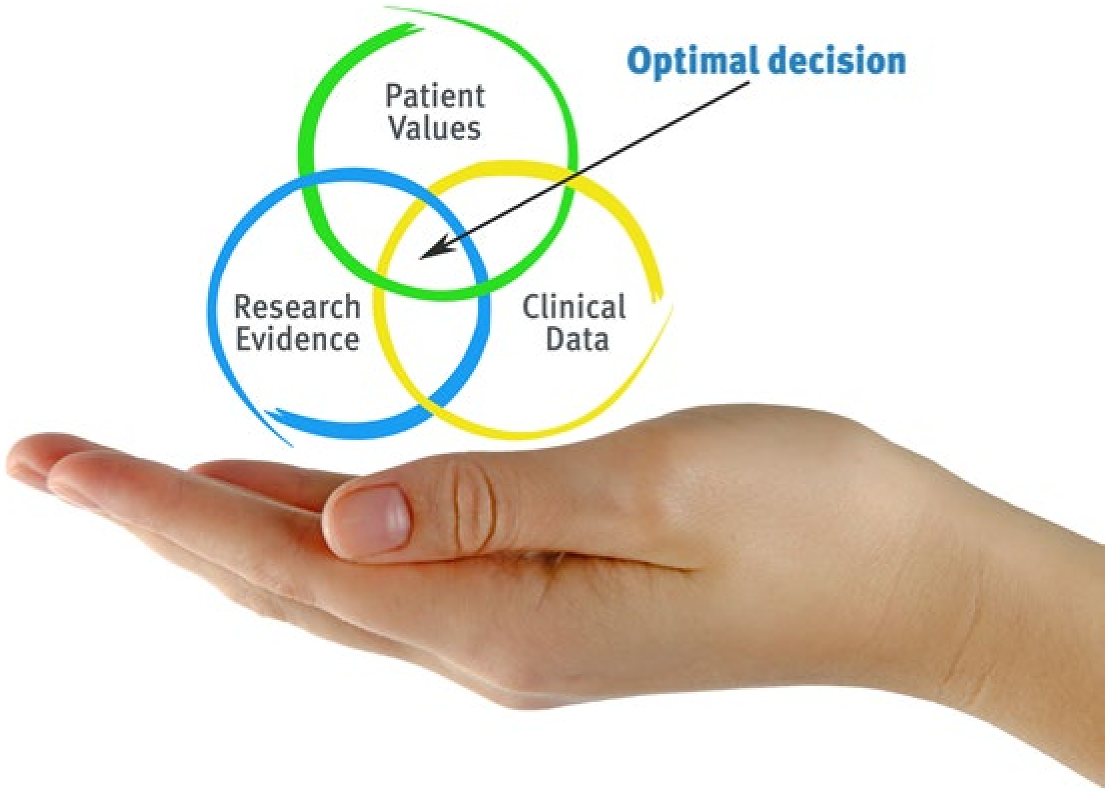
This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.



With TECH, nutritionists can experience a way of learning that is shaking the foundations of traditional universities around the world.

According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions of professional nutritional practice.

"Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

The effectiveness of the method is justified by four fundamental achievements:

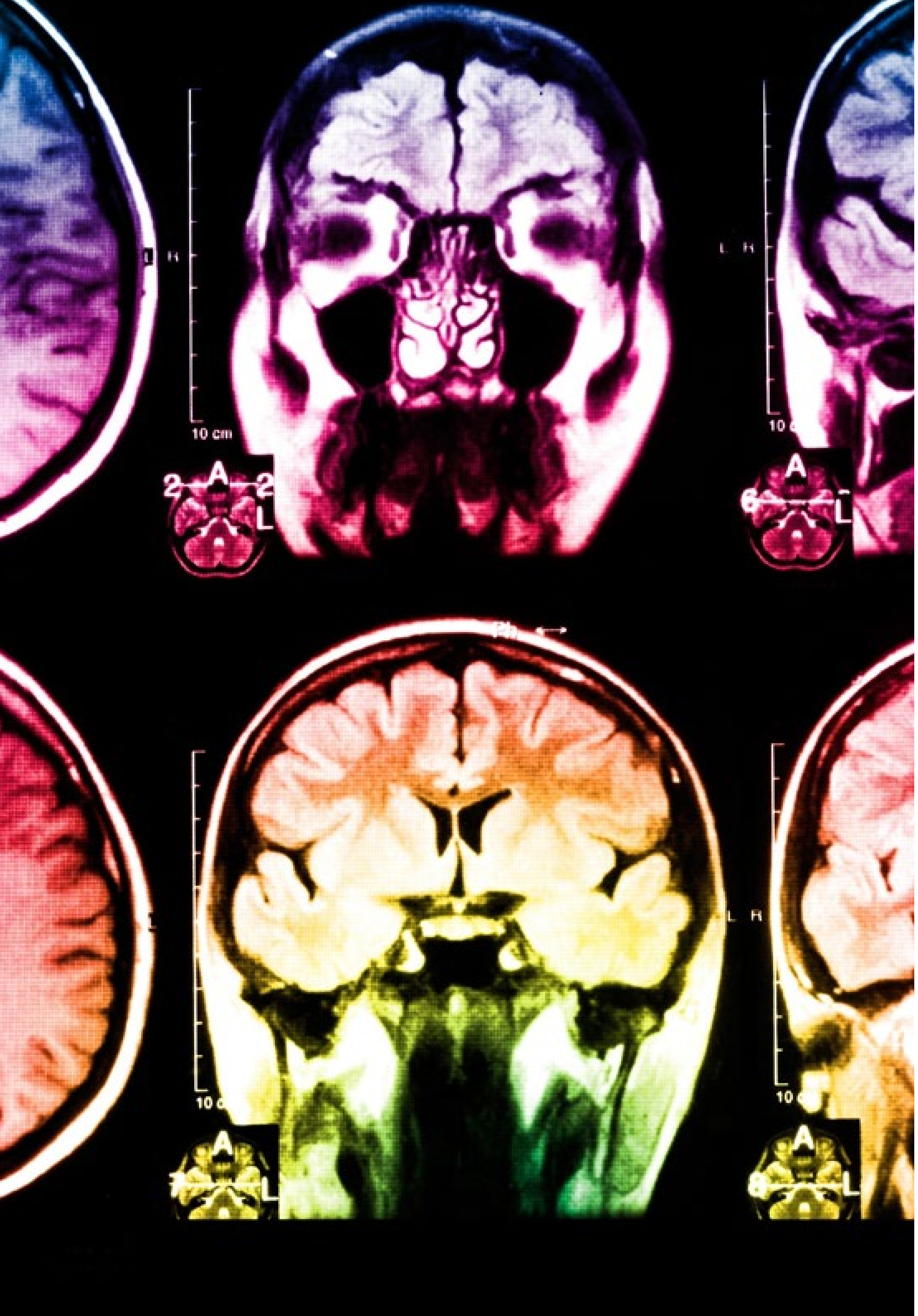
1. Nutritionists who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity through exercises to evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the nutritionist to better integrate knowledge into clinical practice.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

The nutritionist will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

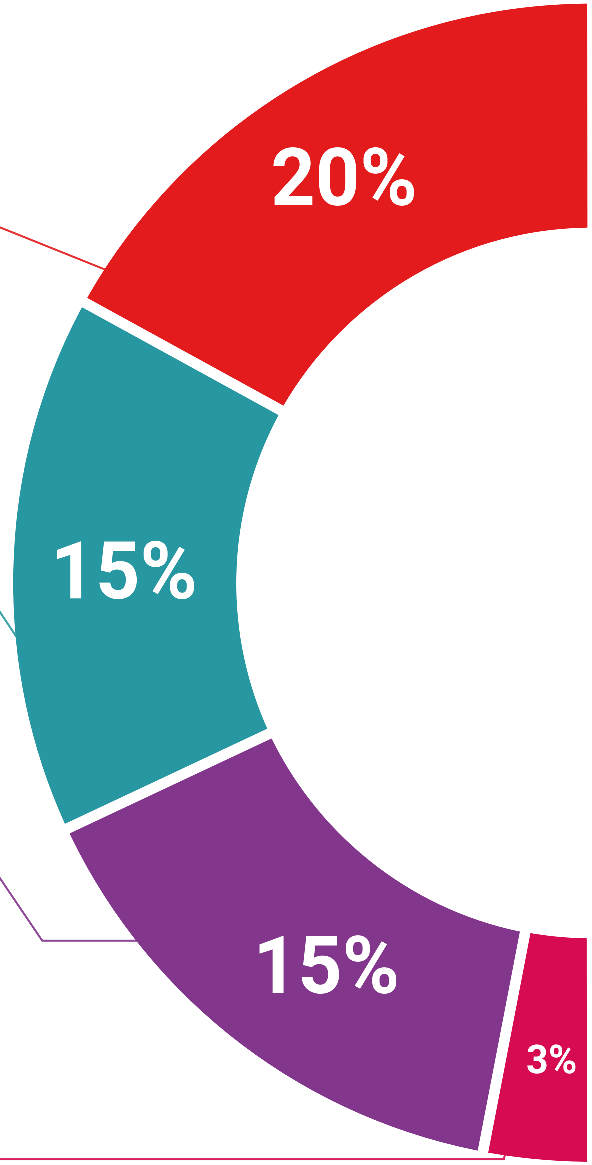
With this methodology, more than 45,000 nutritionists have been trained with unprecedented success in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

This program offers the best educational material, prepared with professionals in mind:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Nutrition Techniques and Procedures on Video

TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current nutritional counselling techniques and procedures. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.

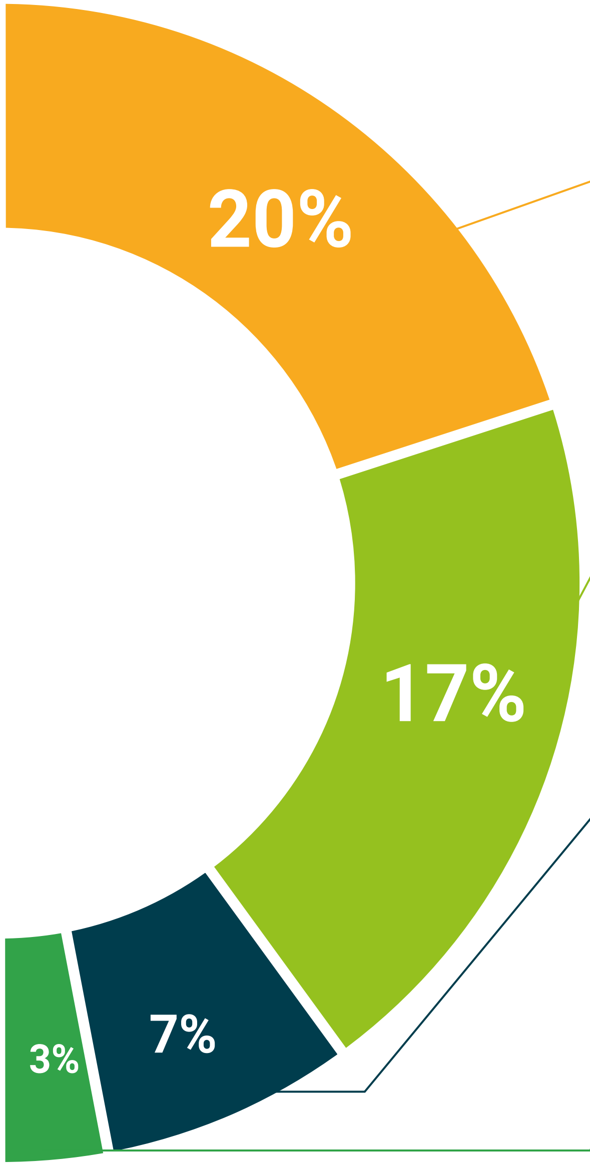
Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.



Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.

05

Certificate

The Postgraduate Diploma in Food Microbiological Risk Management guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This program will allow you to obtain your **Postgraduate Diploma in Food Microbiological Risk Management** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (***official bulletin***). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Food Microbiological Risk Management**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**


tech global university

Mr./Ms. _________________, with identification document ____________
has successfully passed and obtained the title of:

Postgraduate Diploma in Food Microbiological Risk Management

This is a program of 450 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

Postgraduate Diploma
Food Microbiological Risk Management

» Modality: **online**
» Duration: **6 months**
» Certificate: **TECH Global University**
» Credits: **18 ECTS**
» Schedule: **at your own pace**
» Exams: **online**

Postgraduate Diploma

Food Microbiological Risk Management

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