



# Advanced Master's Degree Clinical Nutrition for Nursing

» Modality: online

» Duration: 2 years

» Certificate: TECH Global University

» Credits: 120 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/nursing/advanced-master-degree/advanced-master-degree-clinical-nutrition-nursing

# Index

01		02			
Introduction		Objectives			
	p. 4		p. 8		
03		04		05	
Skills		Course Management		Structure and Content	
	p. 16		p. 24		p. 35
		06		07	
		Methodology		Certificate	
			p. 44		p. 52





# tech 06 | Introduction

Keeping a balanced diet helps to maintain health. However, there are pathologies that demand certain dietary protocols that are more beneficial to control and help overcome disease. In this field, the work of the healthcare practitioner is essential, since having a broad knowledge of clinical nutrition will allow them to offer more personalized care to their patients.

Therefore, specialization in nutrition is the healthcare practitioner's essential response to healthcare and preventive needs of the population in terms of nutrition and health, and is especially important in the field of nursing.

In pediatric pathology, nutrition intervenes as an etiological factor and as a complication of other diseases. In the same way in geriatrics, sick patients or even athletes, the exhaustive and complete control of food becomes an essential tool in any therapeutic approach. In this scenario, the study of the human microbiota opens a door to the knowledge of multiple diseases, especially the so-called functional diseases, with the microbiome being the main workhorse of researchers.

In addition, there is ample evidence on the importance of proper nutrition for the prevention and treatment of chronic diseases, such as cardiovascular diseases, type 2 diabetes mellitus, cancer, among others, and this, together with the fact that there are more and more nutritional supplements available to users, makes it vitally important to have the necessary expertise to provide good nutritional advice.

This Advanced Master's Degree offers the possibility to learn in depth and update knowledge in this subject, with the use of the most up-to-date educational technology. It provides an overview of clinical nutrition, while focusing on the most important and innovative aspects of feeding in the pediatric age, as well as the diseases in which feeding plays a highly relevant role. All this in a 100% online specialization, which will allow you to expand your knowledge and, therefore, your professional skills and competencies in a simple way, adapting your study time to the rest of your daily obligations.

This **Advanced Master's Degree in Clinical Nutrition for Nursing** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Clinical cases presented by experts in the different specialties
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Diagnostic and therapeutic novelties on the management of pathologies in the field of nutrition
- Presentation of practical workshops on procedures, diagnosis, and treatment techniques
- Contains real images in high resolution and practical exercises where the self-evaluation process can be carried out to improve learning
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- Special emphasis on test-based medicine and research methodologies
- All of this will be complemented by 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



Keeping up to date with the latest developments in clinical nutrition will help you provide better care for your patients. Do not hesitate and increase your education in this field"

# Introduction | 07 tech



This program is the best investment you can make in selecting a refresher program for two reasons: in addition to updating your knowledge of Clinical Nutrition for Nursing, you will earn a degree from TECH Global University"

Its teaching staff includes healthcare practitioners from the field of nutrition, who contribute their work experience to this program, as well as renowned specialists belonging to leading scientific societies.

Thanks to its multimedia content developed with the latest educational technology, it will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to prepare in real situations.

This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise throughout the program. To do so, the physician will be assisted by an innovative interactive video system created by renowned experts in the field of Clinical Nutrition for Nursing with extensive teaching experience.

Increase your confidence in decision making by updating your knowledge through this Advanced Master's Degree, a program created to prepare the best.

> We offer you the best teaching methodology, with a multitude of practical contents that will allow you to study in a more complete and effective way.







# tech 10 | Objectives



# **General objectives**

- Develop within the profession in terms of working with other health professionals, acquiring skills to work as a team
- Recognize the need to maintain your professional skills and keep them up to date, with special emphasis on autonomous and continuous learning of new information
- Develop the capacity for critical analysis and research in your professional field
- Understand the basics of nutritional analysis in people of any age, regardless of whether they are healthy or not and in any personal circumstance
- Know the products and possibilities that can be recommended for use at home







# **Specific objectives**

# Module 1. New Developments in Food

- Review the basics of a balanced diet in the different stages of the life cycle, as well as in exercise
- Assess and calculate nutritional requirements in health and disease at any stage
  of the life cycle

#### Module 2. Current Trends in Nutrition

- Review the new dietary guidelines, nutritional objectives, and recommended dietary allowances (RDA)
- Manage food databases and composition tables
- Explain the proper reading of new food labeling

#### Module 3. Probiotics, Prebiotics, Microbiota, and Health

- Deepen knowledge of how drugs designed for humans can have a negative impact on the gut microbiota, in addition to the known impact of antibiotics
- Know in depth the safety profile for probiotics, since, although their use has spread in recent years thanks to their proven efficacy, in both the treatment and prevention of certain diseases, this does not exempt them from generating adverse effects and potential risks

# Module 4. Sports Nutrition

- Identify the repercussion that a pregnant and lactating mother's nutrition has on the intrauterine growth and evolution of new-borns and infants
- Describe the nutritional requirements in the different periods of childhood
- Perform nutritional assessment in pediatrics
- Evaluate and prescribe physical activity as a factor involved in nutritional status
- Calculate child and adolescent athlete dietary needs and risks

# tech 12 | Objectives

- Review current trends in premature infant nutrition
- Explain current trends in the nutrition of infants with delayed intrauterine growth and the implication of nutrition on metabolic diseases
- Reflect on the role of human milk as a functional food
- Analyze the operation of milk banks
- Describe new formulae used in infant feeding
- Reflect on new trends and models in infant feeding

## Module 5. Clinical Nutrition for Nursing and Hospital Dietetics

- Reflect and identify risk factors in school and adolescent nutrition
- Incorporate the different techniques and products of basic and advanced nutritional support related to pediatric nutrition into clinical practice
- · Identify children at nutritional risk who are eligible for specific support
- Evaluate and monitor the supervision of children on nutritional support
- Explain the new developments and available evidence on probiotics and prebiotics in infant feeding

# Module 6. Nutrition in Digestive System Pathologies

- Identify children suffering from malnutrition
- Describe the correct nutritional support for a malnourished child
- Classify the different types of malnutrition and their impact on the developing organism
- Reflect on the etiology, repercussions, and treatment of childhood obesity
- Explain the nutritional treatment of the most common deficiency diseases in our environment
- Define the role that fats play in children's diets

#### Module 7. Nutrition in Endocrine-Metabolic Diseases

- Assess the psychological and physiological aspects involved in eating disorders in young children
- Identify eating behavior disorders
- Review the pathogenesis and update the treatment of inborn errors of metabolism
- Explain the treatment of dyslipidemias and the role that nutrition plays in their genesis and treatment

#### Module 8. Nutrition in Special Situations

- · Manage diabetic children's diet
- Assess the nutritional support of children with cancer in different situations
- Reflect on the role of nutrition in autistic children
- Review the rationale for dietary support of acute diarrhea
- Describe the management of nutritional support in inflammatory diseases
- Reflect on the relationship between constipation and infant nutrition
- Identify exclusion foods in the diets of children with celiac disease
- Define the dietary management of children with nephropathy
- Explain the latest evidence on food allergies and intolerances
- Identify dietary factors related to bone metabolism
- Review the dietary management of oral cavity pathologies in children
- Explain managing children with gastroesophageal reflux
- Explain the implications that nutrition can have in the treatment of liver diseases
- Describe the main malabsorption syndromes and how they are treated
- Identify the appropriate nutritional therapy for pediatric patients with chronic pulmonary pathology

## Module 9. Nutrition in Deficiency Diseases

- Identify the main deficiency diseases that generate malnutrition in the patient
- Analyze the fasting and refeeding cycle
- Identify the foods with the highest percentage of nutrients and vitamins
- Explain the main reasons for anemia and hemochromatosis in patients with poor nutrition
- Analyze the foods that are useful in combating osteoporosis
- · Identify oral diseases and their relationship to nutrition

#### Module 10. Artificial Nutrition in Adults

- Identify the enteral nutrition technique and delve into its mechanism of appropriation on adult patients
- Identify the parenteral nutrition technique and delve into its mechanism of appropriation on adult patients
- Analyze the process of home artificial nutrition
- · Describe the process of adapted oral nutrition and its efficacy in adult patients

# Module 11. Assessment of Nutritional Status and Diet. Practical Application

- Identify the role of bioenergetics in the assessment of nutritional status
- Describe the process to perform nutritional status assessment
- Learn to assess intake
- Analyze body composition
- Identify the main biochemical, hematological and immunological methods of nutritional status
- Identify new updates in nutritional requirements
- Identify the different types of diets that exist, and which one is more suitable for the different stages of life
- Identify the different types of foods and their nutritional value in order to make a proper assessment

#### Module 12. Nutritional Consultation

- Describe the procedure for implementing a consultation
- Identify the role of the consultation and its medical value for the patient's health
- Analyze the different forms of nutrition and define which one is more appropriate for each type of patient

# Module 13. Physiology of Infant Nutrition

- Identify the nutritional status of the child patient and its rapid medical diagnosis
- Explore the main techniques that help good nutrition and implement them in the different situations of child malnutrition
- Identifying the undernourished infant
- Identify the overweight infant
- Analyze the different diseases that attack the nutritional development of the infant patient
- Develop new techniques to help improve the situation of children with nutritional problems

#### Module 14. Artificial Nutrition in Pediatrics

- Identify the enteral nutrition technique and delve into its mechanism of appropriation on pediatric patients
- Identify the parenteral nutrition technique and delve into its mechanism of appropriation on pediatric patients
- Analyze the process of home artificial nutrition in the pediatric patient
- Describe the process of adapted oral nutrition and its efficacy in the pediatric patient

# tech 14 | Objectives

#### Module 15. Infant Malnutrition

- Identify through a brief diagnosis the clinical classification of the infant patient
- Explain the problems that infant malnutrition can generate and its implication in the infant's development
- Identify vitamin and trace element deficiencies
- Analyze the process of fats in infant feeding
- Analyze the repercussions of diseases in the pediatric patient

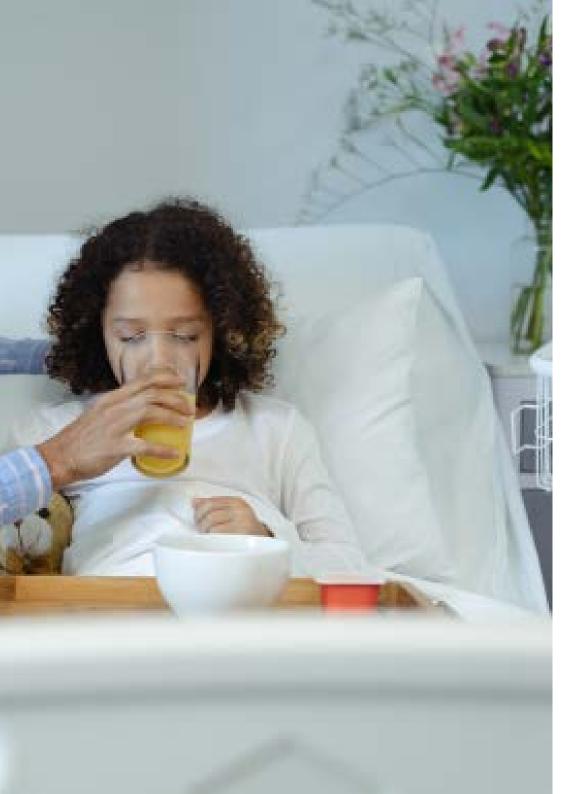
## Module 16. Childhood Nutrition and Pathologies

- Identify the child with oral pathology
- Analyze the repercussions of nutritional alterations in infants
- Identify mechanisms to prevent malnutrition in infants
- Analyze the nutrition of the child with celiac disease
- Identify the mechanisms to avoid malnutrition
- Identify the different digestive pathologies affecting infants

## Module 17. Childhood Nutrition and Pathologies

- Assess the nutritional support of children with cancer in different situations
- Reflect on the role of nutrition in autistic children
- Describe the management of nutritional support in inflammatory diseases
- Define the dietary management of children with nephropathy
- Identify dietary factors related to bone metabolism
- Explain the implications that nutrition can have in the treatment of liver diseases
- Identify the appropriate nutritional therapy for pediatric patients with chronic pulmonary pathology







Get the most comprehensive update on Clinical Nutrition for Nursing through the best educational material"







#### **General skills**

- Apply acquired knowledge and problem-solving skills in unfamiliar settings and in broader (or multidisciplinary) contexts related to nutritional counseling and the public health implication that this entails
- Integrate knowledge and face the complexity of making judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments
- Communicate their conclusions and the ultimate knowledge and rationale behind them to patients and healthcare professionals
- Be aware of the limits of the profession and its competencies, identifying when interdisciplinary treatment or referral to another professional is necessary
- Be familiar with, critically evaluate and know how to use and apply sources of information related to nutrition, food, lifestyles and health aspects
- Design, develop and evaluate educational methods of application related to human nutrition and dietetics on an individual and personalized basis for each patient
- Integrate and evaluate the relationship between food and nutrition in health and in pathological situations
- Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context
- Apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study

- Integrate knowledge and face the complexity of making judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments
- Communicate their conclusions and the ultimate knowledge and rationale behind them in a clear and unambiguous way to reach both specialized and non-specialized audiences
- Acquire the learning skills that will enable further studying in a largely self-directed or autonomous manner in order to continue updating knowledge over time



Take advantage of the opportunity and take the step to get up to date on the latest developments in nutritional counseling"





# Specific skills

- Analyze the different methods for assessing nutritional status
- Interpret and integrate anthropometric, clinical, biochemical, hematological, immunological, and pharmacological data in the patient's nutritional assessment and dietary-nutritional treatment
- Predict patients' nutritional risk
- Manage the different types of nutritional surveys to assess food intake
- Early detection and evaluation of quantitative and qualitative deviations from the nutritional balance due to excess or deficiency
- Identify and classify foods, food products, and food ingredients
- Review the chemical composition of foods, their physicochemical properties, their nutritional value, their bioavailability, their organoleptic properties, and the changes they undergo as a result of technological and culinary processes
- Get up to date on the composition and utilities of new foods
- Review basic aspects of food microbiology, parasitology, and toxicology related to food safety
- Acquire teamwork skills as a unit in which professionals and other personnel related to the diagnostic evaluation and treatment of dietetics and nutrition are structured in a uni or multidisciplinary and interdisciplinary way
- Apply Food Science and Nutrition to the practice of pediatric dietetics
- Update the different educational methods of application in health sciences, as well as communication techniques applicable to food and human nutrition with a special focus on children and adolescents

# tech 20 | Skills

- Reflect on the usefulness of the school cafeteria as an educational vehicle
- Review the relation between physiology and nutrition in the different stages of infant development
- Analyze the implications of nutrition in the growth process and in the prevention and treatment of different childhood pathologies
- Identify the repercussion that a pregnant and lactating mother's nutrition has on the intrauterine growth and evolution of new-borns and infants
- Describe the nutritional requirements in the different periods of childhood
- Apply the knowledge acquired on nutritional assessment in Pediatrics
- Evaluate and prescribe physical activity as a factor involved in nutritional status
- Calculate child and adolescent athlete dietary needs and risks
- Review current trends in premature infant nutrition
- Update current trends in the nutrition of infants with delayed intrauterine growth and the implication of nutrition on metabolic diseases
- Reflect on the role of human milk as a functional food
- Review the physiology of breastfeeding
- Analyze the operation of milk banks
- Update knowledge on new formulae used in infant feeding
- Reflect on new trends and models in infant feeding
- Reflect and identify risk factors in school and adolescent nutrition
- Review the pathophysiological aspects of pediatric diseases
- Incorporate the different techniques and products of basic and advanced nutritional support related to pediatric nutrition into clinical practice
- Identify children at nutritional risk who are eligible for specific support

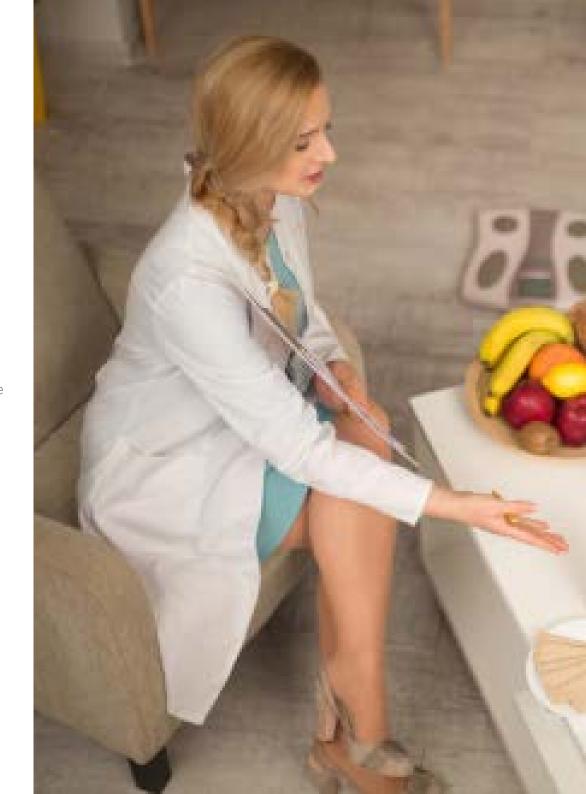
- Evaluate and monitor the supervision of children on nutritional support
- Update knowledge on probiotics and prebiotics in infant feeding
- Acquire technical knowledge on the handling of systems and devices necessary for nutritional support in critically ill patients
- Identify children suffering from malnutrition
- Describe the correct nutritional support for a malnourished child
- Classify the different types of malnutrition and their impact on the developing organism
- Reflect on the etiology, repercussions, and treatment of childhood obesity
- Learn and understand the nutritional treatment of the most common deficiency diseases in our environment
- Update knowledge on the role that fats play in childrens diets
- Assess the psychological and physiological aspects involved in eating disorders in young children
- Identify eating behavior disorders
- Review the pathogenesis and update the treatment of inborn errors of metabolism
- Update knowledge on the treatment of dyslipidemias and the role that nutrition plays in their development and treatment
- Manage diabetic children's diet
- Assess the nutritional support of children with cancer in different situations
- Reflect on the role of nutrition in autistic children
- Review the rationale for dietary support of acute diarrhea
- Update the management of nutritional support in inflammatory diseases
- Reflect on the relationship between constipation and infant nutrition

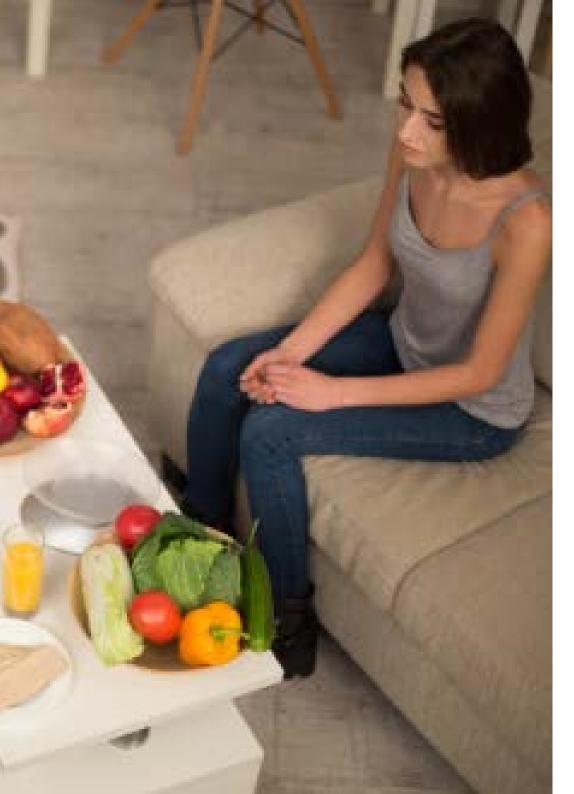
- Identify exclusion foods in the diets of children with celiac disease
- Update the dietary management of children with nephropathy
- Update knowledge on food allergies and intolerances
- · Identify dietary factors related to bone metabolism
- Review the dietary management of oral cavity pathologies in children
- Review the most up-to-date dietary criteria for the management of gastroesophageal reflux in children and the treatment of different liver diseases
- Describe the main malabsorption syndromes and how they are treated
- Identify the appropriate nutritional therapy for pediatric patients with chronic pulmonary pathology
- Gain up-to-date knowledge on the dietetic treatment of oral cavity pathologies in adults paying special attention to sensory disorders and mucositis
- Study the interrelationship between diet and oral disease
- Identify nutritional factors involved in gastroesophageal reflux and ulcers
- Get up to date on the management of patients with swallowing problems
- Understand the implications that nutrition can have in the treatment of liver diseases
- Describe the different uses of nutritional support for inflammatory diseases
- Reflect on the etiology of constipation and its relationship to diet in adults
- Get up to date on dietary management procedures for adults with chronic renal failure and on dialysis
- Gain up-to-date knowledge on the most common food allergies and intolerances
- Reflect on new techniques in digestive and intestinal surgery and their impact on patient nutrition

- Get up to date on small intestine management procedures
- Know the dietary treatment for biliary and pancreatic pathologies
- Know the main malabsorption syndromes and how they are treated
- Identify the signs and symptoms of the most prevalent colonic pathology and its nutritional treatment
- Explain the role of the intestinal microbiota and their implication in pathologies
- Know the different techniques and products of basic and advanced nutritional support related to patient nutrition
- Identify patients with nutritional risk or established malnutrition susceptible to specific support
- Evaluate and monitor the supervision of nutritional support
- Update knowledge of specific formulae for artificial nutrition in adults
- Incorporate the nutritional treatment of the most prevalent deficiency diseases in adults
- Identify and assess obesity and know its dietary or surgical treatment
- Manage the type II diabetic diet and other lifestyle factors
- Get up to date on the dietary management of dyslipidemias
- Study the DASH diet as a treatment for cardiovascular disease
- Identify dietary factors involved in hyperuricemia
- Get up to date on the procedures for dietary management of patients with disabling neuromuscular pathology and strokes
- Identify the nutritional support needs of patients with Parkinson's disease and Alzheimer's disease at each evolutionary stage
- Manage the diet of critically ill patients
- Provide nutritional support to different oncology patients

# tech 22 | Skills

- Update knowledge in the light of the current evolution of HIV patients on the nutritional support of the disease
- Identify dietary and lifestyle factors involved in the genesis and treatment of osteoporosis
- Describe balanced nutrition in the different stages of the life cycle as well as in exercise to prevent deficits and lacking
- Contrast nutritional requirements in health and disease situations at any stage of the life cycle to adapt to the patient accordingly
- Determine nutritional objectives and recommended nutrient intakes (RDA) to establish healthy recommendations for our patients
- Develop skills in reading and understanding food labeling to identify the most appropriate foods to advise our patients
- Design an adjuvant treatment based on phytotherapy as an additional resource in the nutritional support of patients
- Question the different methods of assessment of nutritional status in order to select the most appropriate one for the subject under study
- Interpret all data in the nutritional assessment of the patient in order to make a proper nutritional diagnosis
- Analyze the importance of nutrition in the growth process in childhood in order to detect problems or pathologies related to deficiencies or deficits
- Questioning nutritional requirements at different stages of childhood in order to adapt them to the needs of children
- Determine the calculation of the nutritional needs and risks of children and adolescent athletes in order to guarantee adequate growth and development
- Describe current trends in new-born nutrition in order to advise parents





- Describe the operation of milk banks in order to advise parents of children with specific needs
- Screen children at nutritional risk in order to apply targeted support to those at risk
- Analyze the differences between probiotic and prebiotic foods in order to determine their application in the infant stage
- Develop a correct nutritional support for the malnourished child in order to reverse this situation and avoid later complications
- Describe the etiology, repercussions and treatment of childhood obesity in order to detect, prevent and treat when necessary
- Address the psychological and physiological aspects involved in feeding disorders in young children in order to prevent and identify complications in their development and growth
- Determine the correct dietary management of the diabetic child to ensure proper development and growth and to avoid complications
- Analyze and determine the nutritional support of the oncological child in different phases
  of the disease in order to avoid complications and comorbidities
- Update and broaden the knowledge of students with special background and interest in Probiotic Therapy, Prebiotic Therapy and the latest advances in this field such as fecal transplantation, current situation and future developments, as the main tools we have to optimize the functions of the Microbiota and its future projection



The program includes in its teaching staff leading specialists in nutrition, who bring to this program their expertise. Additionally, other recognized specialists participate in its design and preparation, which means that the program is developed in an interdisciplinary manner. A teaching staff of specialists chosen for their professional trajectory and teaching capacity that will allow you to learn from the direct experience of the best in the sector.

## **International Guest Director**

Dr. Caroline Stokes is a specialist in Psychology and Nutrition, with a doctorate and a habilitation in Medical Nutrition. After a distinguished career in this field, she leads the Food and Health Research group at the Humboldt University of Berlin. This team collaborates with the Department of Molecular Toxicology at the German Institute of Human Nutrition Potsdam-Rehbrücke. Previously, he has worked at the Medical School of Saarland University in Germany, the Cambridge Medical Research Council and the UK National Health Service.

One of her goals is to discover more about the fundamental role that Nutrition plays in improving the overall health of the population. To this end, he has focused on elucidating the effects of fat-soluble vitamins such as A, D, E and K, the amino acid methionine, lipids such as omega-3 fatty acids and probiotics for both the prevention and treatment of diseases, particularly those related to hepatology, neuropsychiatry and aging.

Her other lines of research have focused on plant-based diets for the prevention and treatment of diseases, including liver and psychiatric diseases. He has also studied the spectrum of vitamin D metabolites in health and disease. She has also participated in projects to analyze new sources of vitamin D in plants and to compare the luminal and mucosal microbiome.

In addition, Dr. Caroline Stokes has published a long list of scientific papers. Some of her areas of expertise are Weight Loss, Microbiota and Probiotics, among others. The outstanding results of her research and her constant commitment to her work have led her to win the National Health Service Journal Award for the Nutrition and Mental Health Program in the UK.



# **Dr. Caroline Stokes**

- Head of the Food and Health Research Group at the Humboldt University of Berlin, Germany
- Researcher at the German Institute of Human Nutrition Potsdam-Rehbruecke
- Professor of Food and Health at the Humboldt University of Berlin
- Scientist in Clinical Nutrition at the University of Saarland
- Nutrition Consultant at Pfizers
- PhD in Nutrition at the University of Saarland
- Postgraduate Diploma in Dietetics at King's College London, University of London
- Master's Degree in Human Nutrition from the University of Sheffield



Thanks to TECH you will be able to learn with the best professionals in the world".

## **Guest Directors**



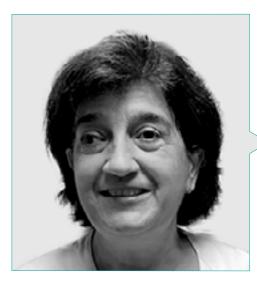
# Dr. Sánchez Romero, María Isabel

- Area Specialist in the Microbiology Department of the Puerta de Hierro Majadahonda University Hospital, Madrid
- PhD in Medicine and Surgery from the University of Salamanca
- Medical Specialist in Clinical Microbiology and Parasitology
- Member of the Spanish Society of Infectious Diseases and Clinical Microbiology
- Technical Secretary of the Madrid Society of Clinical Microbiology



# Dr. Portero, María Francisca

- Acting Head of the Microbiology Department of the Puerta de Hierro University Hospital, Madrid
- Specialist in Clinical Microbiology and Parasitology, Puerta de Hierro University Hospital, Madrid
- Doctorate in Medicine from the Autonomous University Madrid
- Postgraduate in Clinical Management by Gaspar Casal Foundation
- Research stay at the Presbyterian Hospital of Pittsburgh through a FISS scholarship



# Dr. Alarcón Cavero, Teresa

- Biologist Specialist in Microbiology, La Princesa University Hospita
- Head of Group 52 of the Research Institute of the La Princesa Hospital
- Degree in Biological Sciences with a major in Fundamental Biology from the Complutense University of Madrid
- Master's Degree in Medical Microbiology from the Complutense University of Madrid



# Dr. Muñoz Algarra, María

- Head of Patient Safety at the Microbiology Department of the Puerta de Hierro Majadahonda University Hospital
- Area Specialist in the Microbiology Department of the Puerta de Hierro Majadahonda University Hospital, Madrid
- · Collaborator Department of Preventive Medicine and Public Health and Microbiology Autonomous University of Madrid
- Doctorate in Pharmacy from the Complutense University of Madric



# Dr. López Dosil, Marcos

- Area Specialist in Microbiology and Parasitology at San Carlos Clinical University Hospital
- Specialist Physician of the Microbiology and Parasitology Department of the Hospital de Móstoles
- Master's Degree in Infectious Diseases and Antimicrobial Treatment from CEU Cardenal Herrera University
- Master's Degree in Tropical and Health Medicine from the Autonomous University of Madrid
- Expert in Tropical Medicine from the Autonomous University Madrid



# Dr. Anel Pedroche, Jorge

- Facultative Area Specialist. Microbiology Department. Puerta de Hierro University Hospital
- Degree in Pharmacy from the Complutense University of Madrid
- Course in Interactive Sessions on Hospital Antibiotherapy by MSD
- Updating course on infection in hematologic patients by Puerta del Hierro Hospital
- Attendance at the XXII Congress of the Spanish Society of Infectious Diseases and Clinical Microbiology

# Management



# Ms. Fernández Montalvo, María Ángeles

- Director of the Master's Degree in Human Microbiota at CEU University
- Parapharmacy Manager, Nutrition and Natural Medicine professional at Natural Life Parapharmacy
- Degree in Biochemistry from the University of Valencia
- Diploma in Natural and Orthomolecular Medicine
- Postgraduate in Food, Nutrition and Cancer: prevention and treatment
- Master's Degree in Integrative Medicine from CEU University
- Specialist Degree in Nutrition, Dietetics and Diet Therapy
- Expert in Vegetarian, Clinical, and Sports Nutrition
- Expert in the current use of Nutricosmetics and Nutraceuticals in general



# Ms. Aunión Lavarías, María Eugenia

- Pharmacist and Clinical Nutrition Expert
- Author of the reference book in the field of Clinical Nutrition "Dietary Management of Overweight in the Pharmacy Office". (Panamericana Medical Publishing House)
- Pharmacist with extensive experience in the public and private sector
- Pharmacist in Valencia Pharmacy
- Pharmacy Assistant in the British pharmacy and health and beauty retail chain Boots, UK
- Degree in Pharmacy and Food Science and Technology. University of Valencia
- Head of Postgraduate Certificate "Dermocosmetics in the Pharmacy Office"

# tech 32 | Course Management

#### **Professors**

## Dr. Uberos, José

- Specialist in Pediatrics and Child Care
- Associate Professor of Pediatrics, University of Granada
- Vocal Bioethics Research Committee of the Province of Granada (Spain)
- Coeditor of the Signs and Symptoms Journal
- Professor Antonio Galdo Award. Society of Pediatrics of Eastern Andalucía
- Editor of the Journal of the Pediatric Society of Eastern Andalusia (Bol. SPAO)
- Doctor of Medicine and Surgery
- Degree in Medicine from the University of Santiago de Compostela
- Member of the Board of the Pediatric Society of Eastern Andalusia

#### Dr. López Martínez, Rocío

- Immunology Physician at the Vall d'Hebron Hospital
- Internal Biologist in Immunology at Central University Hospital of Asturias
- Member of the Immunotherapy Unit at the Clinic Hospital of Barcelona
- PhD in Biomedicine and Molecular Oncology at the University of Oviedo
- Master in Biostatistics and Bioinformatics, Universidad Oberta of Catalunya

## Dr. Bueno García, Eva

- Predoctoral researcher in Immunosenescence at the Immunology Service of the Central University Hospital of Asturias (HUCA)
- Degree in Biology from the University of Oviedo
- Master's Degree in Biomedicine and Molecular Oncology from the University of Oviedo
- Molecular biology and immunology courses

# Dr. Verdú López, Patricia

- Physician specializing in Allergology at Inmunomet Health and Integral Wellness Center
- Research physician in Allergology at San Carlos Hospital
- Specialist in Allergology at the University Hospital Dr. Negrín in Las Palmas of Gran Canaria
- Degree in Medicine from the University of Oviedo
- Master's Degree in Aesthetics and Antiaging Medicine at Complutense La University of Madrid

# Dr. Álvarez García, Verónica

- Specialist in Digestive System at the Central Hospital of Asturias
- Speaker at the XLVII Congress SCLECARTO
- Degree in Medicine and Surgery
- Digestive System Specialist

# Dr. Lombó Burgos, Felipe

- Head of the BIONUC Research Group, University of Oviedo
- Former Director of the Research Support Area of the AEI Project
- Member of the Microbiology Area of the University of Oviedo
- Co-author of the research 'Biocidal nanoporous membranes with inhibitory activity of biofilm formation at critical points in the production process of the dairy industry'
- Head of the study '100% natural acorn-fed ham against inflammatory intestinal diseases'
- Speaker III Congress of Industrial Microbiology and Microbial Biotechnology

## Dr. Gonzalez Rodríguez, Silvia Pilar

- Specialist in Gynecology and Obstetrics at HM Gabinete Velázquez
- Medical Expert at Bypass Comunicación en Salud, SL
- Key Opinion Leader of several international pharmaceutical laboratories
- Doctor in Medicine and Surgery from the University of Alcalá de Henares, specializing in Gynecology
- Specialist in Mastology by the Autonomous University of Madrid
- Master's Degree in Sexual Orientation and Therapy from the Sexological Society of Madrid
- Master's Degree in Climacteric and Menopause from the International Menopause Society
- Postgraduate Diploma in Epidemiology and New Applied Technologies from the UNED (Spanish Distance Learning University)
- University Diploma in Research Methodology from the Foundation for the Training of the Medical Association and the National School of Health of the Carlos III Health Institute

## Dr. López López, Aranzazu

- Researcher at Fisabio Foundation
- Assistant Researcher at the University of the Balearic Islands
- PhD in Biological Sciences from the University of the Balearic Islands

## Dr. Gabaldon Estevani, Toni

- Co-founder and Scientific Advisor (CSO) of Microomics SL
- ICREA Research Professor and Group Leader of the Comparative Genomics Laboratory
- Doctor of Medical Sciences, Radbout University Nijmegen
- Corresponding Member of the Royal National Academy of Pharmacy of Spain
- Member of the Spanish Young Academy

## Dr. Alonso Arias, Rebeca

- Director of the Immunosenescence research group of the HUCA Immunology Service
- Specialist Immunology Physician at the Central University Hospital of Asturias
- Numerous publications in international scientific journals
- Research work on the association between the microbiota and the immune system
- 1st National Award for Research in Sports Medicine, 2 occasions

#### Dr. Rioseras de Bustos, Beatriz

- Member of the Biotechnology of Nutraceuticals and Bioactive Compounds Research Group (Bionuc) of the University of Oviedo
- Member of the Microbiology Area of the Department of Functional Biology
- Collaborator of the Southern Denmark University
- Doctorate in Microbiology from the University of Oviedo
- Master's Degree in Neuroscience Research from the University of Oviedo

## Dr. Suárez Rodríguez, Marta

- Researcher and University Professor
- PhD in Medicine and Surgery from the Complutense University of Madrid
- Degree in Medicine and Surgery from the Complutense University of Madrid
- Master's Degree in Senology and Breast Pathology from the Autonomous University of Barcelona

# Dr. Méndez García, Celia

- Biomedical Researcher at Novartis Laboratories in Boston, USA
- Doctorate in Microbiology from the University of Oviedo
- Member of the North American Society for Microbiology

# tech 34 | Course Management

# Dr. Fernández Madera, Juan

- Allergologist at HUCA
- Former Head of the Allergology Unit, Monte Naranco Hospital, Oviedo
- Allergology Service, Central University Hospital of Asturias
- Member of: Alergonorte Board of Directors, SEAIC Rhinoconjunctivitis Scientific Committee and Medicinatv.com Advisory Committee

# Dr. Narbona López, Eduardo

- Speciality Neonatal Unit, San Cecilio University Hospital
- Advisor to the Department of Pediatrics, University of Granada
- Member of: Pediatric Society of Western Andalusia and Extremadura and Andalusian Association of Primary Care Pediatrics

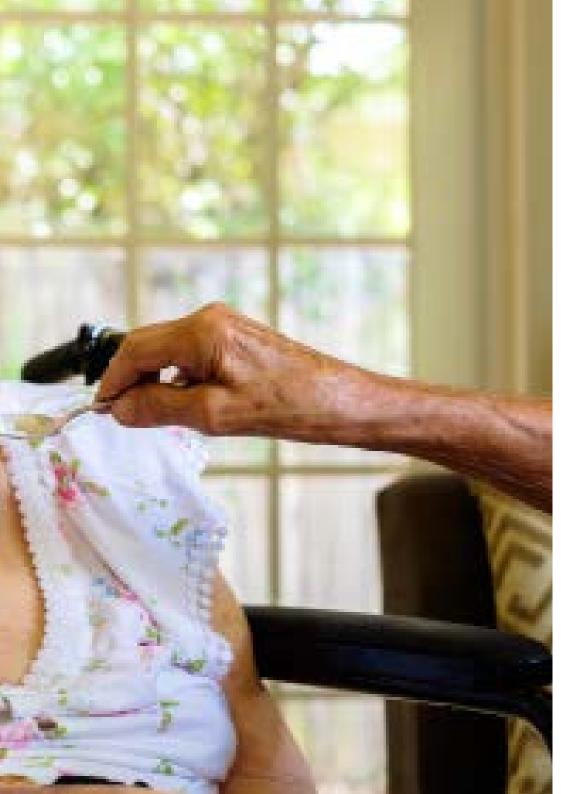
# Dr. Rodríguez Fernández, Carolina

- Researcher at Adknoma Health Research
- Master's Degree in Clinical Trials Monitoring by ESAME Pharmaceutical Business School
- Master's Degree in Food Biotechnology from the University of Oviedo
- University Expert in Digital Teaching in Medicine and Health by CEU Cardenal Herrera University

## Dr. Solís Sánchez, Gonzalo

- Chief of the Neonatology Service at the Hospital Universitario Central de Asturias (HUCA)
- Doctor of Medicine, University of Oviedo
- Degree in Medicine from the University of Oviedo
- Researcher and Associate Professor at the University of Oviedo





# Course Management | 35 tech

# Dr. Losa Domínguez, Fernando

- Gynecologist at the Sagrada Familia Clinic of HM Hospitals
- Doctor in private practice in Obstetrics and Gynecology in Barcelona
- Expert in Gynecoesthetics by the Autonomous University of Barcelona
- Member of: Spanish Association for the Study of Menopause, Spanish Society of Phytotherapeutic Gynecology, Spanish Society of Obstetrics and Gynecology and Board of the Menopause Section of the Catalan Society of Obstetrics and Gynecology

# Dr. López Vázquez, Antonio

- Area Specialist in Immunology, Central University Hospital of Asturias, Spain
- Collaborator of the Carlos III Health Institute
- Advisor of Aspen Medical
- Doctor of Medicine, University of Oviedo



A unique, key, and decisive educational experience to boost your professional development"





# tech 38 | Structure and Content

### Module 1. New Developments in Food

- 1.1. Molecular Foundations of Nutrition
- 1.2. Update on Food Composition
- 1.3. Food Composition Tables and Nutritional Databases
- 1.4. Phytochemicals and Non-Nutritive Compounds
- 1.5. New Food
  - 1.5.1. Functional Nutrients and Bioactive Compounds
  - 1.5.2. Probiotics, Prebiotics and Symbiotics
  - 1.5.3. Quality and Design
- 1.6. Organic Food
- 1.7. Transgenic Foods
- 1.8. Water as a Nutrient
- 1.9. Food Safety
  - 1.9.1. Physical Hazards
  - 1.9.2. Chemical Hazards
  - 1.9.3. Microbiological Hazards
- 1.10. Phytotherapy Applied to Nutritional Pathologies

### Module 2. Current Trends in Nutrition

- 2.1. Nutrigenetics
- 2.2. Nutrigenomics
  - 2.2.1. Fundamentals
  - 2.2.2. Methods
- 2.3. Immunonutrition
  - 2.3.1. Nutrition-Immunity Interactions
  - 2.3.2. Antioxidants and Immune Function
- 2.4. Physiological Regulation of Feeding. Appetite and Satiety
- 2.5. Psychology and Nutrition
- 2.6. Nutrition and Sleep
- 2.7. Update on Nutritional Objectives and Recommended Intakes
- 2.8. New Evidence on the Mediterranean Diet

### Module 3. Probiotics, Prebiotics, Microbiota, and Health

- 3.1. Probiotics: Definition, History, Mechanisms of Action
- Prebiotics: Definition, Types of Prebiotics (Starch, Inulin, FOS Oligosaccharides), Mechanisms of Action
- 3.3. Clinical Applications of Probiotics and Prebiotics in Gastroenterology
- 3.4. Clinical Applications of Endocrinology and Cardiovascular Disorders
- 3.5. Clinical Applications of Probiotics and Prebiotics in Urology
- 3.6. Clinical Applications of Probiotics and Prebiotics in Gynecology
- Clinical Applications of Probiotics and Prebiotics in Immunology. Autoimmunity, Pulmonology, Vaccines
- 3.8. Clinical Applications of Probiotics and Prebiotics in Nutritional Diseases. Obesity and Eating Disorders. Metabolism, Malnutrition, and Malabsorption of Nutrients
- 3.9. Clinical Applications of Probiotics and Prebiotics in Neurological Diseases. Mental Health. Old Age
- 3.10. Clinical Applications of Probiotics and Prebiotics in Critically III Patients. Cancer
- 3.11. Dairy Products as a Natural Source of Probiotics and Prebiotics. Fermented Milk

### Module 4. Sports Nutrition

- 4.1. Physiology of Exercise
- 4.2. Physiological Adaptation to Different Types of Exercise
- 4.3. Metabolic Adaptation to Exercise. Regulation and Control
- 4.4. Assessing Athletes' Energy Needs and Nutritional Status
- 4.5. Assessing Athletes' Physical Ability
- 4.6. Nutrition in the Different Phases of Sports Practice
  - 4.6.1. Pre-Competition
  - 4.6.2. During
  - 4.6.3. Post-Competition
- 4.7. Hydration
  - 4.7.1. Regulation and Needs
  - 4.7.2. Types of Beverages
- 4.8. Dietary Planning Adapted to Different Sports
- 4.9. Nutrition in Sports Injury Recovery



# Structure and Content | 39 tech

- 4.10. Psychological Disorders Related to Practising Sport
  - 4.10.1. Eating Disorders: Bigorexia, Orthorexia, Anorexia
  - 4.10.2. Fatigue Caused by Overtraining
  - 4.10.3. The Female Athlete Triad
- 4.11. The Role of the Coach in Sports Performance

### Module 5. Clinical Nutrition for Nursing and Hospital Dietetics

- 5.1. Management of Hospital Nutrition Units
  - 5.1.1. Nutrition in the Hospital Setting
  - 5.1.2. Food Safety in Hospitals
  - 5.1.3. Hospital Kitchen Organization
  - 5.1.4. Planning and Managing Hospital Diets. Dietary Code
- 5.2. Hospital Basal Diets
  - 5.2.1. Basal Diet in Adults
  - 5.2.2. Pediatric Basal Diet
  - 5.2.3. Ovo-Lacto-Vegetarian and Vegan Diet
  - 5.2.4. Diet Adapted to Cultural
- 5.3. Therapeutic Hospital Diets
  - 5.3.1. Unification of Diets and Personalized Menus
- 5.4. Bidirectional Drug-Nutrient Interaction

### **Module 6.** Nutrition in Digestive System Pathologies

- 6.1. Nutrition in Oral Disorders
  - 6.1.1. Taste
  - 6.1.2. Salivation
  - 6.1.3. Mucositis
- 6.2. Nutrition in Esophageal and Gastric Disorders
  - 6.2.1. Gastroesophageal Reflux
  - 6.2.2. Gastric Ulcers
  - 6.2.3. Dysphagia
- 6.3. Nutrition in Post-Surgical Syndromes
  - 6.3.1. Gastric Surgery
  - 6.3.2. Small Intestine

# tech 40 | Structure and Content

- 6.4. Nutrition in Bowel Function Disorders
  - 6.4.1. Constipation
  - 6.4.2. Diarrhea
- 6.5. Nutrition in Malabsorption Syndromes
- 6.6. Nutrition in Colonic Pathology
  - 6.6.1. Irritable Bowel
  - 6.6.2. Diverticulosis
- 6.7. Nutrition in Inflammatory Bowel Disease (IBD)
- 6.8. Most Frequent Food Allergies and Intolerances with Gastrointestinal Effects
- 6.9. Nutrition in Liver Diseases
  - 6.9.1. Portal Hypertension
  - 6.9.2. Hepatic Encephalopathy
  - 6.9.3. Liver Transplant
- 6.10. Nutrition in Biliary Diseases. Biliary Lithiasis
- 6.11. Nutrition in Pancreatic Diseases
  - 6.11.1. Acute Pancreatitis
  - 6.11.2. Chronic Pancreatitis

### Module 7. Nutrition in Endocrine-Metabolic Diseases

- 7.1. Dyslipidemia and Arteriosclerosis
- 7.2. Diabetes Mellitus
- 7.3. Hypertension and Cardiovascular Disease
- 7.4. Obesity
  - 7.4.1. Etiology. Nutrigenetics and Nutrigenomics
  - 7.4.2. Pathophysiology of Obesity
  - 7.4.3. Diagnosis of the Disease and its Comorbidities
  - 7.4.4. Multidisciplinary Team in Obesity Treatment
  - 7.4.5. Dietary Treatment. Therapeutic Possibilities
  - 7.4.6. Pharmacological Treatment. New Drugs
  - 7.4.7. Psychological Treatment
    - 7.4.7.1. Intervention Models
    - 7.4.7.2. Treatment of Associated Eating Disorders



- 7.4.8. Surgical Treatments
  - 7.4.8.1. Indications
  - 7.4.8.2. Techniques
  - 7.4.8.3. Complications
  - 7.4.8.4. Dietary Management
  - 7.4.8.5. Metabolic Surgery
- 7.4.9. Endoscopic Treatments
  - 7.4.9.1. Indications
  - 7.4.9.2. Techniques
  - 7.4.9.3. Complications
  - 7.4.9.4. Patient Dietary Management
- 7.4.10. Physical Activity in Obesity
  - 7.4.10.1. Assessment of the Patient's Functional Capacity and Activity
  - 7.4.10.2. Activity-based Prevention Strategies
  - 7.4.10.3. Intervention in the Treatment of the Disease and Associated Pathologies
- 7.4.11. Update on Diet and Obesity Studies
- 7.4.12. International Intervention Strategies for Obesity Control and Prevention

### Module 8. Nutrition in Special Situations

- 8.1. Nutrition in Metabolic Stress Situations
  - 8.1.1. Sepsis
  - 8.1.2. Polytrauma
  - 8.1.3. Burns
  - 8.1.4. Transplant Recipient
- 8.2. Oncology Patient Nutrition
  - 8.2.1. Surgical Management
  - 8.2.2. Chemotherapy Treatment
  - 8.2.3. Radiotherapy Treatment
  - 8.2.4. Bone Marrow Transplant
- 8.3. Immune Diseases
  - 8.3.1. Acquired Immunodeficiency Syndrome

### Module 9. Nutrition in Deficiency Diseases

- 9.1. Malnutrition
  - 9.1.1. Hospital Malnutrition
  - 9.1.2. The Fasting and Refeeding Cycle
- 9.2. Anaemia. Hemochromatosis
- 9.3. Vitamin Deficiencies.
- 9.4. Osteoporosis
- 9.5. Oral Disease and its Relation to Diet

### Module 10. Artificial Nutrition in Adults

- 10.1. Enteral Nutrition
- 10.2. Parenteral Nutrition
- 10.3. Artificial Nutrition at Home
- 10.4. Adapted Oral Nutrition

### Module 11. Assessment of Nutritional Status and Diet. Practical Application

- 11.1. Bioenergy and Nutrition
  - 11.1.1. Energy Needs
  - 11.1.2. Methods of Assessing Energy Expenditure
- 11.2. Assessment of Nutritional Status
  - 11.2.1. Body Composition Analysis
  - 11.2.2. Clinical Diagnosis. Symptoms and Signs
  - 11.2.3. Biochemical, Hematological and Immunological Methods
- 11.3. Intake Assessment
  - 11.3.1. Methods for Analyzing Food and Nutrient Intake
  - 11.3.2. Direct and Indirect Methods
- 11.4. Update on Nutritional Requirements and Recommended Intakes
- 11.5. Nutrition in a Healthy Adult. Objectives and Guidelines. Mediterranean Diet
- 11.6. Nutrition in Menopause
- 11.7. Nutrition in the Elderly

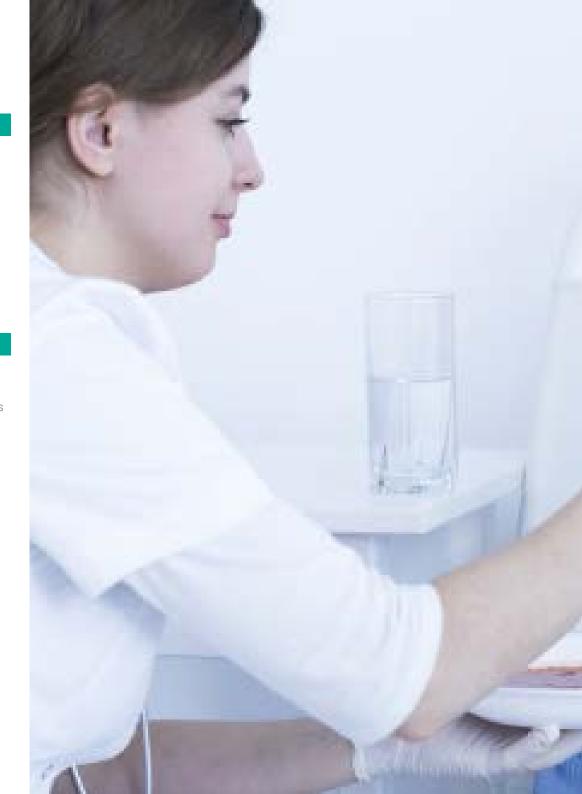
# tech 42 | Structure and Content

### Module 12. Nutritional Consultation

- 12.1. How to Carry Out a Nutritional Consultation?
  - 12.1.1. Analysis of the Market and Competition
  - 12.1.2. Clientele
  - 12.1.3. Marketing. Social Media
- 12.2. Psychology and Nutrition
  - 12.2.1. Psychosocial Factors Affecting Eating Behavior
  - 12.2.2. Interview Techniques
  - 12.2.3. Dietary Advice
  - 12.2.4. Stress Control
  - 12.2.5. Child and Adult Nutrition Education

### **Module 13.** Physiology of Infant Nutrition

- 13.1. Nutrition During Pregnancy and its Impact on the New-born
- 13.2. Current Trends in the Premature New-born Nutrition
- 13.3. Nutrition of Newborns with Intrauterine Growth Delay. Implications on Metabolic Diseases
- 13.4. Nutrition in Lactating Women and its Impact on the Infant
- 13.5. Breastfeeding
  - 13.5.1. Human Milk as a Functional Food
  - 13.5.2. Process of Milk Synthesis and Secretion
  - 13.5.3. Reasons for it to be Encouraged
- 13.6. Human Milk Banks
  - 13.6.1. Milk Bank Operation and Indications
- 13.7. Characteristics of the Formulae Used in Infant Feeding
- 13.8. Influence of Nutrition on Growth and Development
- 13.9. Nutritional Requirements in the Different Periods of Childhood
- 13.10. Nutritional Assessment in Children
- 13.11. Physical Activity Evaluation and Recommendations
- 13.12. The Move to a Diversified Diet. Complementary Feeding During the First Year of Life
- 13.13. Feeding 1-3-Year-Old Children
- 13.14. Feeding During the Stable Growth Phase. Schoolchild Nutrition





# Structure and Content | 43 tech

- 13.15. Adolescent Nutrition, Nutritional Risk Factors
- 13.16. Child and Adolescent Athlete Nutrition
- 13.17. Other Dietary Patterns for Children and Adolescents. Cultural, Social, and Religious Influences on Infant Nutrition
- 13.18. Prevention of Childhood Nutritional Diseases. Objectives and Guidelines

### Module 14. Artificial Nutrition in Pediatrics

- 14.1. Nutritional Therapy in Pediatrics
  - 14.1.1. Evaluation of Patients in Need of Nutritional Support
  - 14.1.2. Indications
- 14.2. Enteral Paediatric Nutrition
- 14.3. Parenteral Paediatric Nutrition
- 14.4. Dietary Products Used for Sick Children or Children with Special Needs
- 14.5. Implementing and Monitoring Patients with Nutritional Support
  - 14.5.1. Critical Patients
  - 14.5.2. Patients with Neurological Pathologies
- 14.6. Artificial Nutrition at Home
- 14.7. Nutritional Supplements to Support the Conventional Diet
- 14.8. Probiotics and Prebiotics in Infant Feeding

### Module 15. Infant Malnutrition

- 15.1. Infant Malnutrition
  - 15.1.1. Psychosocial Aspects
  - 15.1.2. Pediatric Assessment
  - 15.1.3. Treatment and Monitoring
- 15.2. Undernourishment
  - 15.2.1. Clinical Classification
  - 15.2.2. Repercussions on a Developing Organism
- 15.3. Iron Deficiency
  - 15.3.1. Other Nutritional Anemias in Childhood
- 15.4. Vitamin and Trace Element Deficiencies
  - 15.4.1. Vitamins
  - 15.4.2. Trace Elements
  - 15.4.3. Detection and Treatment

# tech 44 | Structure and Content

- 15.5. Fats in Infant Diets
  - 15.5.1. Essential Fatty Acids
- 15.6. Childhood Obesity
  - 15.6.1. Prevention
  - 15.6.2. Impact of Childhood Obesity
  - 15.6.3. Nutritional Treatment

### Module 16. Childhood Nutrition and Pathologies

- 16.1. Nutrition of Children with Oral Pathologies
  - 16.1.1. Major Childhood Oral Pathologies
  - 16.1.2. Repercussions of These Alterations on the Child's Nutrition
  - 16.1.3. Mechanisms to Avoid Related Malnutrition.
- 16.2. Nutrition of Infants and Children with Gastroesophageal Reflux
  - 16.2.1. Repercussions of These Alterations on the Child's Nutrition
  - 16.2.2. Mechanisms to Avoid Related Malnutrition
- 16.3. Nutrition in Acute Diarrhea Situation
  - 16.3.1. Repercussions of These Alterations on the Child's Nutrition
  - 16.3.2. Mechanisms to Avoid Related Malnutrition
- 16.4. Nutrition in Children with Celiac Disease
  - 16.4.1. Repercussions of These Alterations on the Child's Nutrition
  - 16.4.2. Mechanisms to Avoid Related Malnutrition
- 16.5. Nutrition in Children with Inflammatory Bowel Disease
  - 16.5.1. Repercussions of These Alterations on the Child's Nutrition
  - 16.5.2. Mechanisms to Avoid Related Malnutrition
- 16.6. Nutrition in Children with Digestive Malabsorption Syndrome
  - 16.6.1. Repercussions of These Alterations on the Child's Nutrition
  - 16.6.2. Mechanisms to Avoid Related Malnutrition
- 16.7. Nutrition in Children with Constipation
  - 16.7.1. Nutritional Mechanisms to Prevent Constipation
  - 16.7.2. Nutritional Approaches for Treating Constipation
- 16.8. Nutrition in Children with Liver Disease
  - 16.8.1. Repercussions of These Alterations on the Child's Nutrition
  - 16.8.2. Mechanisms to Avoid Related Malnutrition
  - 16.8.3. Special Diets

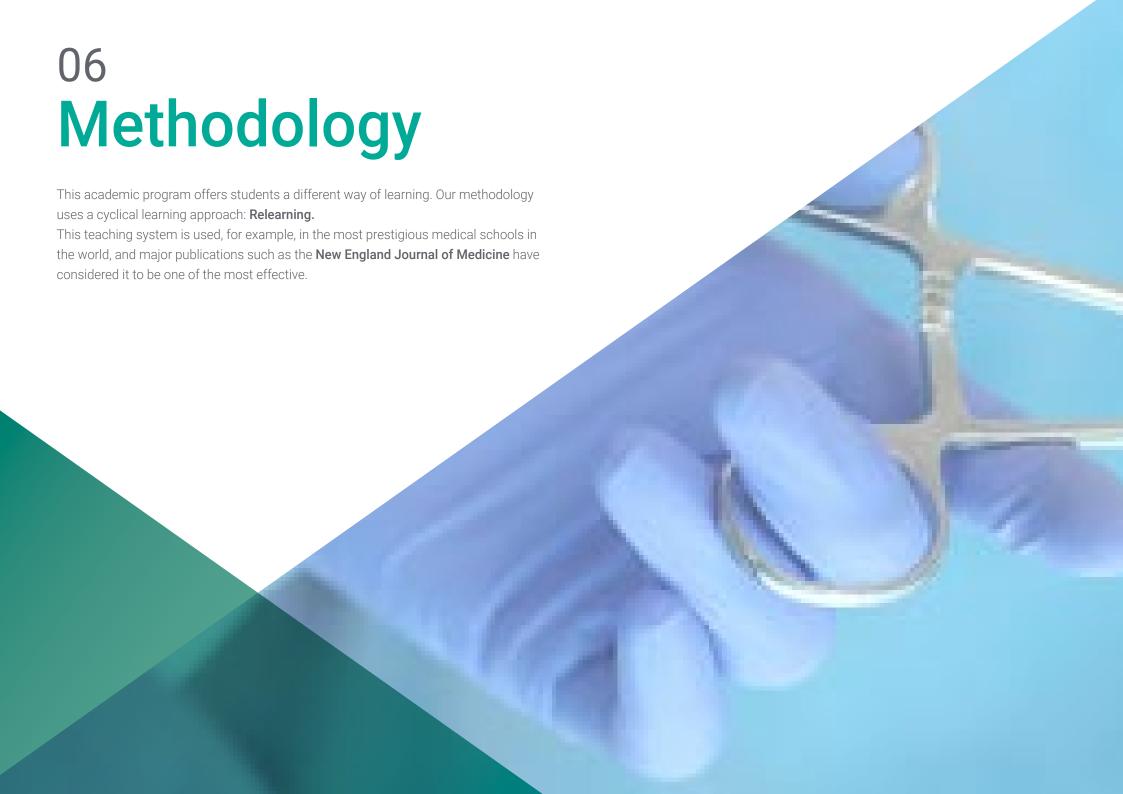




# Structure and Content | 45 tech

### Module 17. Childhood Nutrition and Pathologies

- 17.1. Feeding Difficulties and Disorders in Children Small
  - 17.1.1. Physiological Aspects
  - 17.1.2. Psychological Aspects
- 17.2. Eating Disorders
  - 17.2.1. Anorexia
  - 17.2.2. Bulimia
  - 17.2.3. Others
- 17.3. Inborn Errors of Metabolism
  - 17.3.1. Principles for Dietary Treatment
- 17.4. Nutrition in Dyslipidemias
  - 17.4.1. Nutritional Mechanisms to Prevent Dyslipidemias
  - 17.4.2. Nutritional Approaches for Treating Dyslipidemias
- 17.5. Nutrition in Diabetic Children
  - 17.5.1. Repercussions of Diabetes on the Child's Nutrition
  - 17.5.2. Mechanisms to Avoid Related Malnutrition
- 17.6. Nutrition in Autistic Children
  - 17.6.1. Repercussions of These Alterations on the Child's Nutrition
  - 17.6.2. Mechanisms to Avoid Related Malnutrition
- 17.7. Nutrition in Children with Cancer
  - 17.7.1. Repercussions of Disease and Treatments in the Child's Nutrition
  - 17.7.2. Mechanisms to Avoid Related Malnutrition
- 17.8. Nutrition in Children with Chronic Pulmonary Pathology
  - 17.8.1. Repercussions of These Alterations on the Child's Nutrition
  - 17.8.2. Mechanisms to Avoid Related Malnutrition
- 17.9. Nutrition in Children with Nephropathy
  - 17.9.1. Repercussions of These Alterations on the Child's Nutrition
  - 17.9.2. Mechanisms to Avoid Related Malnutrition
  - 17.9.3. Special Diets
- 17.10. Nutrition in Children with Food Allergies and/or Intolerances
  - 17.10.1. Special Diets
- 17.11. Childhood and Bone Pathology Nutrition
  - 17.11.1. Mechanisms for Good Bone Health in Childhood



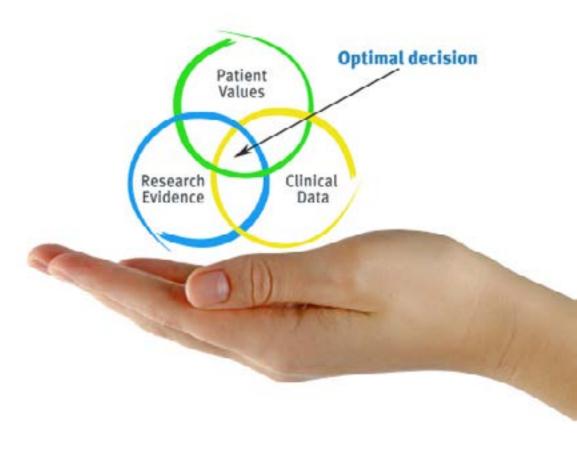


# tech 48 | Methodology

### At TECH Nursing School 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. Nurses learn better, faster, and more sustainably over time.

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



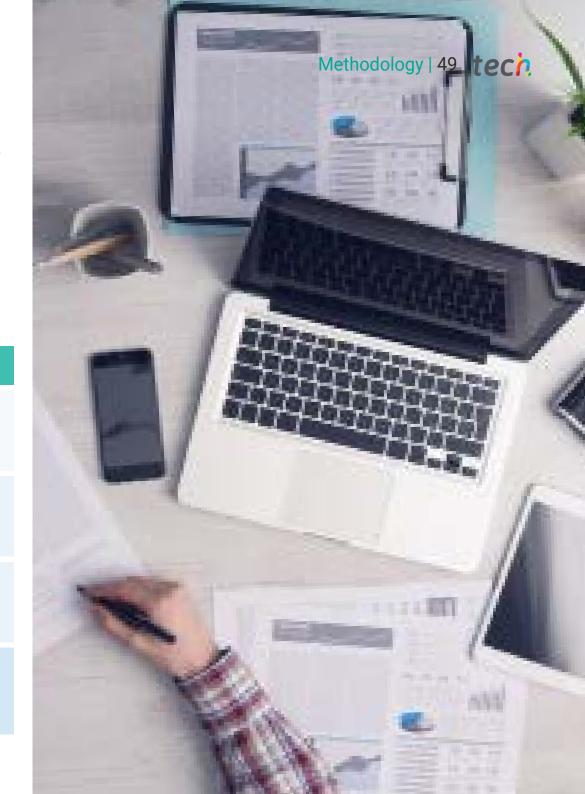
According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that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

- Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
- 2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
- 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

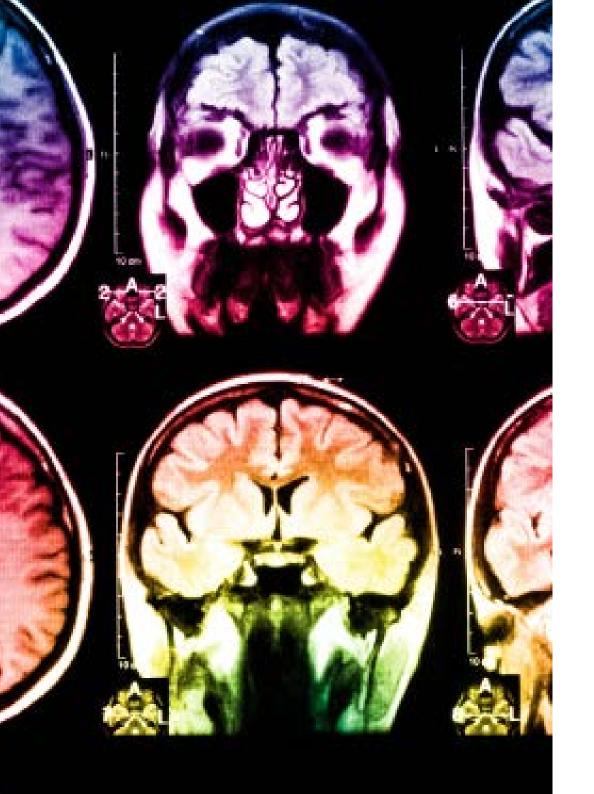
At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

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

The nurse 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.





# Methodology | 51 tech

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 we have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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



### **Nursing Techniques and Procedures on Video**

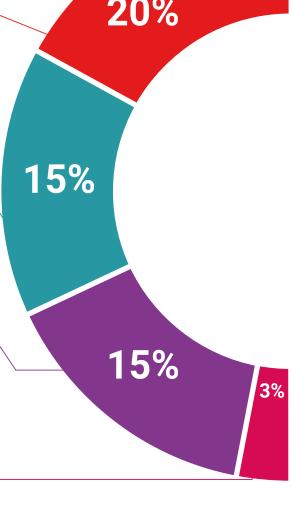
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch them as many times as you want.



### **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.



## **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.

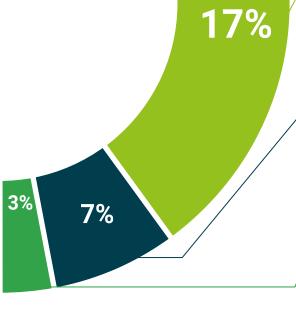
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



### **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.





20%





# tech 56 | Certificate

This program will allow you to obtain your **Advanced Master's Degree diploma in Clinical Nutrition for Nursing** 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: Advanced Master's Degree in Clinical Nutrition for Nursing

Modality: online

Duration: 2 years

Accreditation: 120 ECTS







<sup>\*</sup>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.

health confidence people
leducation information tutors
guarantee accreditation teaching
institutions technology learning



# Advanced Master's Degree Clinical Nutrition for Nursing

- » Modality: online
- » Duration: 2 years
- » Certificate: TECH Global University
- » Credits: 120 ECTS
- » Schedule: at your own pace
- » Exams: online

