

# Professional Master's Degree Nutritional Counseling in Community Pharmacy

Endorsed by:



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university



## Professional Master's Degree Nutritional Counseling in Community Pharmacy

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/pharmacy/professional-master-degree/professional-master-degree-nutritional-counseling-community-pharmacy](http://www.techtute.com/us/pharmacy/professional-master-degree/professional-master-degree-nutritional-counseling-community-pharmacy)

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01

# Introduction

In most developed countries around us today, as the pharmacy profession has developed in recent years towards a more patient-centred care profession, community pharmacy is evolving towards the provision of pharmaceutical services. There is no doubt that this transformation is a consequence of Community Pharmacy adapting to a changing society, where public health has reached high levels of control and safety, facing new challenges for which the pharmacist, the health agent and the community pharmacy are resources that are close and accessible to the user.



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*Improve your knowledge in Nutritional Counseling in Community Pharmacy through this program, where you will find the best didactic material with real clinical cases. Find out about the latest advances in the speciality here, in order to be able to carry out quality clinical practice"*

One of these services is related to the field of Nutrition and to developing dietary recommendations. Today there is ample evidence on the importance of proper nutrition for the prevention and/or treatment of chronic diseases, such as cardiovascular diseases, type 2 diabetes mellitus and cancer, among others. With more nutritional supplements becoming available to users, it is of vital importance that community pharmacists have the necessary training to dispense and advise on these products in an appropriate way, to give good nutritional advice and, when necessary, know when to make a referral to the appropriate professional. Although traditionally, several subjects related to bromatology, nutrition, food and food hygiene have been taught in the Bachelor's Degree in Pharmacy, more specific training is required in order to be able to advise users on the food products dispensed in pharmacies, as well as on their interaction with medicines.

For this reason, designing and delivering scientific and professional theoretical and practical training in nutrition at university level is necessary.

This Professional Master's Degree covers various current concepts in nutrition that can be used in a community pharmacist's daily work.

This **Professional Master's Degree in Nutritional Counseling on Community Pharmacy** comprises the most complete and updated scientific program on the market. The most important features include:

- ◆ Development of over 50 clinical cases presented by experts in Nutritional Counseling in Community Pharmacy.
- ◆ Its graphic, schematic and eminently practical contents, which are designed to provide scientific and assistance information on those disciplines that are essential for professional practice.
- ◆ Contains 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.
- ◆ Its special emphasis on evidence-based medicine and research methodologies in Nutritional Counseling in Community Pharmacy.
- ◆ All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments.
- ◆ Availability of content from any fixed or portable device with internet connection



*Update your knowledge through  
the Professional Master's Degree  
in Nutritional Counseling in  
Community Pharmacy"*

“ *This Professional Master’s Degree may be the best investment you can make in selecting a refresher program for two reasons: in addition to updating your knowledge Nutritional Counseling in in Community Pharmacy, you will obtain a Professional Master’s Degree qualification from TECH Global University”*

Its teaching staff includes professionals from the field of Nutritional Counseling in Community Pharmacy who bring the experience of their work to this training, as well as renowned specialists belonging to leading scientific societies.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive training program designed to train in real situations.

This program design focuses on Problem-Based Learning, whereby the health professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced Community Pharmacy experts.

*Increase your confidence in decision-making by updating your knowledge through this Professional Master’s Degree.*

*Take the opportunity to learn about the latest advances in Nutritional Counseling in Community Pharmacy and improve your customer service.*



# 02 Objectives

This program in Nutritional Counseling in Community Pharmacy is aimed at offering a complete, detailed and updated vision of Pharmaceutical Nutritional Counseling as a key element in the care and monitoring of the user.





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*This program is designed for you to update your knowledge on Nutritional Counseling in Community Pharmacy, using the latest educational technology, to contribute with quality and safety to decision-making in the implementation of Professional Pharmaceutical Services"*



## General Objectives

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- ♦ Have the necessary knowledge to provide professional pharmaceutical services in the field of nutrition.
- ♦ Update the community pharmacist's nutrition knowledge.
- ♦ Promote nutritional Counseling strategies in community pharmacy based on patient and user approach.
- ♦ Advise patients and users on foods, supplements and nutritional supplements dispensed at community pharmacies.
- ♦ Encourage the acquisition of skills, through a powerful audiovisual system, and the possibility of development through online simulation workshops and/or specific training.
- ♦ Encourage professional stimulation through continuing education and research





## Specific Objectives

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### Module 1. Basic Principles of Nutrition

- ◆ Be familiar with the basic concepts of nutrition, its contributions and interest for the community pharmacist.
- ◆ Understand the concepts of servings and edible portion, in order to know how to use them.
- ◆ To be familiar with the different types of diet
- ◆ Keep up to date with new nutrition concepts
- ◆ Use the different anthropometric measurements
- ◆ Manage dietary tools: 24-hour recall, food frequency questionnaire, dietary record
- ◆ Apply the knowledge acquired in order to be able to carry out a nutritional assessment.

### Module 2. Nutritional Counseling at Different Stages of Life

- ◆ Assess lifestyle (intake, activity and physical condition, etc.) and be familiar with the guidelines, recommendations and products that can be dispensed at the community pharmacy.
- ◆ Remember nutritional needs at different stages of life
- ◆ Review nutritional requirements and RDIs needed by infants
- ◆ Tell the difference between breast milk and formula milk
- ◆ Analyse the differences between different types of commercially available formula milk.
- ◆ Analyse the amount of water required by infants and their mother
- ◆ Review the nutritional requirements and RDIs needed by children and adolescents
- ◆ Analyse the amount of water required during childhood and adolescence
- ◆ Acquire knowledge about healthy menus at school age
- ◆ Differentiate between various types of dietary products used within this age group
- ◆ Design action strategies for community pharmacies to deal with eating disorders in adolescence
- ◆ Be familiar with the most recommended physical activity for children and adolescents

### Module 3. Nutritional Counseling for Different Pathologies

- ♦ Acquire the knowledge to be able to provide adequate nutritional advice for different pathologies
- ♦ Recall the basic concepts of the anatomy and physiology of the musculoskeletal apparatus.
- ♦ Study the physiopathology and aetiopathogenesis of the different pathologies related to the musculoskeletal system
- ♦ Recognise nutritional deficits in these pathologies
- ♦ Analyse the different nutritional supplements that can be used for these pathologies in community pharmacies.
- ♦ Advise on different hygienic and dietary measures
- ♦ Be familiar with the basic concepts of the anatomy and physiology of the Cardiovascular and Hematopoietic Progenitor Cells apparatus
- ♦ Study the physiopathology and aetiopathogenesis of the different pathologies related to this system
- ♦ Be familiar with the basic concepts of anatomy and physiology of the renal and urinary system
- ♦ Study the physiopathology and aetiopathogenesis of the different pathologies related to the renal and urinary system
- ♦ Be familiar with the basic concepts of the anatomy and physiology of the digestive system
- ♦ Study the physiopathology and aetiopathogenesis of the different pathologies related to the digestive system. Obesity and Overweight
- ♦ Recognising nutritional deficits associated with diarrhoea and constipation
- ♦ Recognising nutritional deficits associated with diabetes
- ♦ Recognise nutritional deficits associated with hypercholesterolaemia

### Module 4. Nutritional Advice from the Community Pharmacy in Special Situations

- ♦ Advise on different hygienic and dietary measures
- ♦ Acquire the knowledge to be able to give appropriate nutritional advice in special situations.
- ♦ Review the different products available as adjuvants for these pathologies
- ♦ Understanding the effects of cancer and cancer therapy on nutrition
- ♦ Assessing nutritional care in cancer patients
- ♦ Incorporating the latest nutritional trends in chemoprevention
- ♦ Distinguishing between common allergens
- ♦ Differentiate between different food intolerances and allergies in order to advise patients suffering from them
- ♦ Recognising allergens in breastfeeding
- ♦ Analyse nutrition-related factors that influence the development and functioning of the immune system
- ♦ Understand how different food compounds modulate immune homeostasis and immune responses involved in the individual's defence against bacteria, viruses, allergens, toxins or malignant cells
- ♦ Analysis of the immunomodulatory characteristics of food components
- ♦ Assess the nutritional and immunological status of at-risk groups and the products that can be dispensed at the community pharmacy

### Module 5. Sports Nutrition

- ♦ Learn the nutritional requirements for different sports
- ♦ Understand the importance of hydration for athletes
- ♦ Distinguish between the different supplements related to sports that can be dispensed at community pharmacies

- ♦ Differentiate between the advantages and disadvantages of ergonomic aids in community pharmacy
- ♦ Recognize those drugs and substances that may cause athletes to test positive in anti-doping tests in order to be able to provide good advice and dispense correctly in community pharmacy

### **Module 6. Drug-nutrient Interactions**

- ♦ Update basic pharmacology knowledge
- ♦ Detect interactions between drugs and foods
- ♦ Restructuring dietary patterns in the event of any interaction of a drug with the type of food usually consumed
- ♦ Classify drugs that affect the metabolism and excretion of nutrients
- ♦ Be familiar with the effects of food in relation to the action mechanism of drugs
- ♦ Analyze drug interactions with alcohol consumption

### **Module 7. Food Legislation in Community Pharmacy**

- ♦ Interpreting the composition of food supplements and their consumption levels
- ♦ Be aware of the scientific evidence of such supplements.
- ♦ Differentiate between food, medicine, dietetic products, food supplements, health products, bio-ecological products and organic products
- ♦ Be familiar with the different interactions between supplements and pharmacological treatments
- ♦ Be aware of the different legislation in force at European, national and Autonomous Community levels
- ♦ Analyze the necessary requirements for the authorization of substances in foodstuffs
- ♦ Learn how to read labels, how they are presented and how they are published

- ♦ Be clear about the safety standards for nutritional supplements
- ♦ Familiarize yourself with the health alert network
- ♦ Understand the reporting standards for dietary supplements

### **Module 8. Implementation of a Nutritional Counseling Service in community pharmacies**

- ♦ Identify and analyze service demand
- ♦ Train the team involved in the service
- ♦ Design a standardized work protocol
- ♦ Assess the need to plan and design community pharmacy nutrition education campaigns
- ♦ Be familiar with the VAT rate applicable to these products, as well as to this service
- ♦ Compare the different autonomic legislations affecting community pharmacy when carrying out nutritional counseling services and dietetic counseling services, in order to avoid conflicts with other professionals.
- ♦ Develop service marketing strategies to promote and implement the service
- ♦ As a complement to the service, participate in nutrition education campaigns already designed by other groups for the population

# 03 Skills

After passing the assessments for the Professional Master's Degree in Nutritional Counseling in Community Pharmacy, the pharmacist will have acquired the necessary professional skills for a quality and updated practice based on the latest scientific evidence.



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*You will be able to assimilate and use the methods and strategies necessary to carry out nutritional counseling at a community pharmacy”*



## General Skills

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- ◆ Possess and understand knowledge that provides a basis for being able to provide good nutritional advice in a pharmacy.
- ◆ Apply acquired knowledge and problem-solving skills in unfamiliar settings and broader (or multidisciplinary) contexts related to nutritional counseling and its public health implications.  
(or multidisciplinary) settings related to nutritional counseling and its public health implications.
- ◆ 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.
- ◆ Acquire the learning skills that will enable them to continue studying in a manner that will be largely self-directed or autonomous.
- ◆ 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.







## Specific Skills

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- ♦ Know and understand the object of study of human nutrition and dietetics, for its application in community pharmacy.
- ♦ Be familiar with the nutrients, their function in the organism, their bioavailability, the needs and recommendations, and the bases of nutritional energy balance.
- ♦ Interpret and manage food composition tables, guides and databases as tools to be used in nutritional counseling in community pharmacy.
- ♦ Identify and classify foods and food products.
- ♦ Analyze and determine the composition of foods, their properties, their nutritional value, the bioavailability of their nutrients and their organoleptic characteristics.
- ♦ Assess the provision of nutrition information to community pharmacy users.
- ♦ Manage dietary tools: 24-hour recall, food consumption frequency questionnaire, dietary record, in order to design menus according to the different recommendations for community pharmacy users.
- ♦ Assess lifelong habits and lifestyles (physical activity, diet).
- ♦ Develop the necessary skills to distinguish dietary guidelines in community pharmacy adapted to any patient in different physiological situations.
- ♦ Study nutritional intervention in pharmacy users for compound, ingredient and supposed functional food (probiotics, fatty acids, amino acids, alcohol...) assessment at the different stages of life.
- ♦ Point out the main characteristics of the different nutritional situations among different pathologies, evaluating the relationship between food and nutrition in a state of health and in pathological situations treated by the community pharmacy.
- ♦ Apply knowledge of anatomy, physiology, pathophysiology, nutrition and feeding to dietary planning and counseling for individuals and communities, throughout the life cycle, both for healthy and sick users of community pharmacy, mainly as an aid to pharmacological therapy.
- ♦ Interpret clinical, biochemical and pharmacological data in the patient's nutritional assessment, and apply them in the community pharmacy.
- ♦ Interpret the effects of cancer and oncotherapy on nutrition from the community pharmacy perspective.
- ♦ Acquire intervention strategies for nutritional care in cancer patients from the community pharmacy.
- ♦ Incorporate the latest nutritional trends in chemoprevention into nutritional intervention strategies in community pharmacy.
- ♦ Acquire knowledge of immunological and inflammatory biomarkers in pathologies related to nutrition and immunity (obesity, metabolic syndrome, allergies, celiac disease).
- ♦ Define the immunomodulatory properties of different nutrients, bioactive compounds and functional ingredients.
- ♦ Be familiar with the energetic and nutritional requirements of different sports specialties in order to have an understanding of what their diet should be and the impact it has on their health.
- ♦ Identify the appropriate hydration guidelines for the athlete pharmacy-user according to the sport practised.
- ♦ Be familiar with the supplements and ergogenic aids available in community pharmacies and know how to assess their risk-benefit ratio.
- ♦ Be aware of the current situation of doping and how it influences the use of drugs in sport.
- ♦ Review and understand clinical pharmacology and drug-nutrient interactions.
- ♦ Review and understand clinical pharmacology and drug-nutrient interactions.
- ♦ Update your knowledge in pharmacology.

04

# Course Management

The program includes renowned specialists in Community Pharmacy among its teaching staff, who bring their work experience to this training. In addition, other specialists of renowned prestige participate in its design and development, completing the program in an interdisciplinary manner.





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*Learn the latest advances in the field of  
Nutritional Counseling in Community Pharmacy  
from leading professionals”*

## Management



### Mrs. Rodríguez Sampedro, Ana

- ◆ Degree in Pharmacy
- ◆ Master's Degree in Nutrition and Dietetics
- ◆ Postgraduate Degree in Nutrition, Dietetics and Diet Therapy
- ◆ University Expert in Health Promotion and Education
- ◆ Coordinator of the SEFAC nutrition and digestive group
- ◆ Currently pursuing a Degree in Dietetics and Nutrition
- ◆ Community Pharmacist
- ◆ Co-author of the SEFAC guide on overweight and obesity
- ◆ Co-author of "Guidelines and consensus documents Probiotics and prebiotics in community pharmacy SEFAC-SEPYP".

## Professors

### Dr. Abellan-García Sánchez, Fernando

- ◆ Attorney and Doctor of Forensic Medicine
- ◆ SEFAC Legal Advisor

### Mrs. Alonso Lovera, Patricia

- ◆ Community Pharmacist

### Mrs. Anca Candoncia, Eva

- ◆ Graduate in Human Nutrition and Dietetics
- ◆ Degree in Pharmacy
- ◆ Expert in Natural Health Nutrition and Dietetics

### Mr. Alba Palomo, José Enrique

- ◆ Degree in Pharmacy
- ◆ Master's Degree in Business Administration
- ◆ Community pharmacist in Malaga

### Mr. Sánchez, José Ángel

- ◆ Community Pharmacist

### Mrs. Baldó, Alicia

- ◆ TECH Master's degree collaborating teacher

### Mrs. Baldonado Mosteiro, Carmen

- ◆ Community Pharmacist

**Dr. Baixauli Fernández, Vicente Javier**

- ♦ Doctor of Pharmacy
- ♦ Community Pharmacist in Mislata Valencia

**Mrs. Busquets Casso, Anna**

- ♦ Degree in Pharmacy. UB

**Dr. Cardelle Cobas, Alejandra**

- ♦ Doctor in Pharmacy, Professor of Nutrition and Bromatology. University of Santiago de Compostela. Pharmacist at the "Cepeda Sáez" pharmacy in O Burgo, A Coruña
- ♦ PhD in Food Science and Technology, Researcher in the field of Nutrition and Bromatology. University of Santiago de Compostela

**Mrs. Dirube, Antonieta de Andres**

- ♦ Degree in Pharmacy
- ♦ Graduate in Nutrition and Dietetics
- ♦ Community Pharmacist in Cantabria

**Mrs. Ecuder Marcos, Carla**

- ♦ Community Pharmacist and Nutritionist

**Mr. Eiras Espiño, Abel**

- ♦ Community Pharmacist

**Dr. Fente Sampayo, Cristina**

- ♦ Doctor of Pharmacy, Professor of Nutrition and Bromatology
- ♦ University of Santiago de Compostela
- ♦ Pharmacist in "La Salud" pharmacy, Lugo.

**Dr. Ferrerio Gómez, Guiomar Luz**

- ♦ Graduate in Medicine
- ♦ Community Pharmacist

**Dr. Fornos Pérez, José Antonio**

- ♦ Doctor of Pharmacy
- ♦ Community Pharmacist

**Dr. Fornos, Pepe**

- ♦ Doctor of Pharmacy
- ♦ Community Pharmacist

**Mrs. Fortunez Garea, Cristina**

- ♦ Pharmacy Graduate

**Mr. García Moreno, Luis**

- ♦ Degree in Pharmacy
- ♦ Diploma in Human Nutrition and Dietetics
- ♦ Community Pharmacist

**Mr. García Vivanco, Pablo**

- ♦ Professor on Leave
- ♦ Community Pharmacist

**Mrs. Gayo Mascaro, Carmen**

- ♦ Community Pharmacist

**Mrs. Gregorio Mazo, Susana**

- ♦ Community Pharmacist

**Dr. Llul Vila, Rosa**

- ♦ Doctor in Human Nutrition
- ♦ Doctor in Human Nutrition and Dietetics
- ♦ Community Pharmacist

**Mrs. Martinez Soto, Portal**

- ♦ Community Pharmacist

**Mrs. Martinez Menéndez, Alicia**

- ♦ TECH Master's Degree Collaborating Teacher

**Mrs. Mera Gallego, Inés**

- ♦ Graduate in Nutrition and Dietetics and Community Pharmacist.

**Mrs. Mera Gallego, Inés**

- ♦ Community Pharmacist

**Mr. Montero González, Marcos Daniel**

- ♦ Degree in Medicine
- ♦ Second Year Internal Medicine Resident. CHUF Ferrol

**Mrs. Montoto Fernández, Adriana**

- ♦ Pharmacy Graduate
- ♦ Specialist in Nutrition

**Mrs. Pellón Olmedo, María**

- ♦ TECH Master's degree collaborating teacher

**Mrs. Pérez Hoyos, Elena**

- ♦ Degree in Food Science and Technology
- ♦ Degree in Human Nutrition and Dietetics
- ♦ Community pharmacist

**Mrs. Pérez Rivas, Miriam**

- ♦ Degree in Pharmacy
- ♦ Postgraduate in Enology
- ♦ Master's Degree in Food Innovation, Technology and Safety
- ♦ Community pharmacist

**Mrs. Pontes Torrado, Yolanda**

- ♦ Degree in Pharmacy and graduate in Human Nutrition and Dietetics
- ♦ Community pharmacist
- ♦ UFV Collaborating Professor
- ♦ Diploma in Nutrition and Dietetics

**Dr. Regal López, Patricia**

- ♦ PhD in Veterinary Medicine, Professor of Nutrition and Bromatology. University of Santiago de Compostela
- ♦ Doctor in Pharmacy, Professor of Nutrition and Bromatology. University of Santiago de Compostela

**Mrs. Sánchez Martínez, Carlota**

- ♦ Physiotherapist and Osteopath



**Mrs. Saez Esteban, María C.**

- ◆ Degree in Pharmacy and graduate in Human Nutrition and Dietetics

**Dr. Servera Barco, María**

- ◆ Doctor in Nutrigenomics
- ◆ Community Pharmacist

**Mr. Torres Neira, Francisco**

- ◆ Community Pharmacist in Pontevedra

**Mr. Queimaño Costas, Ruben**

- ◆ Degree in Pharmacy (USC)
- ◆ Master's Degree in Advanced Biotechnology (UVigo)
- ◆ Community Pharmacist in Camariñas (A Coruña)

**Mrs.. Venrell Garau, Barbara**

- ◆ Degree in Pharmacy
- ◆ Graduate in Human Nutrition and Dietetics
- ◆ Master's Degree in Nutrition and Metabolism
- ◆ Postgraduate Degree in Nutrition and Dietetics Applied to Physical Activity and Sport
- ◆ Dietitian-nutritionist in private practice

05

# Structure and Content

The structure of the contents has been designed by a team of professionals from the best research centers and universities in Spain, aware of the current relevance of training to use drugs safely and with a solid scientific basis based on evidence, and committed to quality teaching through new educational technologies.







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*This Professional Master's Degree in Nutritional Counseling on Community Pharmacy comprises the most complete and updated scientific program on the market”*

## Module 1. Basic Principles of Nutrition

- 1.1. Basic Concepts
  - 1.1.1. Nutrients and Food
  - 1.1.2. Nutritional Objectives
  - 1.1.3. Vitamins, Minerals and Water
  - 1.1.4. The Difference Between Serving and Edible Portion
  - 1.1.5. Usefulness of Exchange Diets and Weight-based Diets
- 1.2. Nutritional Assessment
  - 1.2.1. Anthropometric Parameters
  - 1.2.2. Body Composition, Physical Examination and Bioimpedance
  - 1.2.3. Dietary History
  - 1.2.4. Psychosocial Information and Medical History

## Module 2. Nutritional Counseling at Different Stages of Life

- 2.1. Infant Nutrition
  - 2.1.1. Infant Physiology
  - 2.1.2. Nutritional Requirements of Infants
  - 2.1.3. Breastfeeding
  - 2.1.4. Artificial Breastfeeding
- 2.2. Nutrition in Children and Adolescents
  - 2.2.1. Nutrition in the First Year: Complementary Feeding
  - 2.2.2. Nutritional Requirements for Energy and Macronutrients in Children and Adolescents
  - 2.2.3. Nutritional Requirements for Micronutrients, Water and Electrolytes in Children and Adolescents
  - 2.2.4. School-age Nutrition Healthy Menus
  - 2.2.5. Nutrition in Special Cases: Eating Disorders. Anorexia and Bulimia
  - 2.2.6. Physical Activity



- 2.3. Adult Nutrition
  - 2.3.1. Nutritional Requirements for Macronutrients and Energy
  - 2.3.2. Nutritional Requirements for Micronutrients, Water and Electrolytes
  - 2.3.3. Adult-age Nutrition Healthy Menus
  - 2.3.4. Nutrition, Fertility and Pregnancy
  - 2.3.5. Nutrition in Women During Breastfeeding and the Menopause
  - 2.3.6. Physical Activity
- 2.4. Nutrition in the Elderly
  - 2.4.1. Physical and Metabolic Changes Affecting Nutrition
  - 2.4.2. Nutritional Requirements for Energy and Macronutrients
  - 2.4.3. Nutritional Requirements for Micronutrients, Water and Electrolytes
  - 2.4.4. Nutrition in Old Age Healthy Menus
  - 2.4.5. Nutrition in Special Cases: Dysphagia, Enteral Nutrition
  - 2.4.6. Physical Activity

### Module 3. Nutritional Counseling for Different Pathologies

- 3.1. Nutrition in Pathologies Associated with the Musculoskeletal System: Osteoporosis, Osteoarthritis, Arthritis and Fibromyalgia
  - 3.1.1. Basic Concepts of the Anatomy and Physiology of the Musculoskeletal System
  - 3.1.2. Pathophysiology and Etiopathogenesis of Osteoporosis, Arthritis, Osteoarthritis and Fibromyalgia
  - 3.1.3. Nutritional Objectives
  - 3.1.4. Nutritional Supplementation and/or Supplementation from the Community Pharmacy
  - 3.1.5. Hygienic and Sanitary Measures
- 3.2. Nutrition in Pathologies Associated with the Cardiovascular and Hematopoietic System: Hypertension and Anemia
  - 3.2.1. Basic Concepts of Anatomy and Physiology of the Cardiovascular and Hematopoietic System
  - 3.2.2. Pathophysiology and Etiopathogenesis of Hypertension and Anemia.
  - 3.2.3. Nutritional Objectives
  - 3.2.4. Nutritional Supplementation and/or Supplementation from the Community Pharmacy
  - 3.2.5. Hygienic and Sanitary Measures

- 3.3. Nutrition in Pathologies associated with the Renal and Urinary System: Gout and Renal Lithiasis
  - 3.3.1. Basic Concepts of the Anatomy and Physiology of the Renal and Urinary System
  - 3.3.2. Pathophysiology and Etiopathogenesis of Gout and Renal Lithiasis
  - 3.3.3. Nutritional Objectives
  - 3.3.4. Nutritional Supplementation and/or Supplementation from the Community Pharmacy
  - 3.3.5. Hygienic and Sanitary Measures
- 3.4. Nutrition Associated with Pathologies of the Digestive System I: Obesity and Overweight
  - 3.4.1. Basic Concepts of the Anatomy and Physiology of the Digestive System
  - 3.4.2. Pathophysiology and Etiopathogenesis of Obesity and Overweight
  - 3.4.3. Nutritional Objectives
  - 3.4.4. Nutritional Supplementation and/or Supplementation from the Community Pharmacy
  - 3.4.5. Hygienic and Dietary Measures
- 3.5. Nutrition Associated with Pathologies of the Digestive System II: Diarrhea and Constipation
  - 3.5.1. Pathophysiology and Etiopathogenesis of Diarrhea and Constipation
  - 3.5.2. Nutritional Objectives
  - 3.5.3. Nutritional Supplementation and/or Supplementation from the Community Pharmacy
  - 3.5.4. Hygienic and Sanitary Measures
- 3.6. Nutrition Associated with Pathologies of the Digestive System III: Diabetes
  - 3.6.1. Pathophysiology and Etiopathogenesis of Diabetes
  - 3.6.2. Nutritional Objectives
  - 3.6.3. Nutritional Supplementation and/or Supplementation from the Community Pharmacy
  - 3.6.4. Hygienic and Sanitary Measures
- 3.7. Nutrition Associated with Pathologies of the Digestive System IV: Hypercholesterolemia
  - 3.7.1. Pathophysiology and Etiopathogenesis of Hypercholesterolemia
  - 3.7.2. Nutritional Objectives
  - 3.7.3. Nutritional Supplementation and/or Supplementation from the Community Pharmacy
  - 3.7.4. Hygienic and Sanitary Measures

- 3.8. Nutrition Associated with Pathologies of the Digestive System IV: Hypercholesterolemia
  - 3.8.1. Anatomy and Physiology of the Endocrine System
  - 3.8.2. Pathophysiology and Etiopathogenesis of the Endocrine System
  - 3.8.3. Nutritional Objectives
  - 3.8.4. Nutritional Supplementation and/or Supplementation from the Community Pharmacy
  - 3.8.5. Hygienic and Sanitary Measures
- Module 4. Nutritional Advice from the Community Pharmacy in Special Situations
- 4.1. Nutrition in Neoplastic Diseases
  - 4.1.1. Effects of Cancer on Nutrition
  - 4.1.2. The Effect of Oncotherapy on Nutrition
  - 4.1.3. Cancer and the Immune System
  - 4.1.4. Nutritional Care of Oncology Patients
  - 4.1.5. Current Trends The Role of Nutrition in Chemoprevention
- 4.2. Adverse Reactions to Food
  - 4.2.1. Introduction. Adverse Reactions to Food: Advice and Prevention
  - 4.2.2. Adverse Reactions to Food by the Non-immunological Mechanism: Food Intolerance and DAO Deficiency
  - 4.2.3. Adverse Reactions to Food involving the Immunological Mechanism: Food Allergy, Celiac Disease and Chronic Histaminosis.
  - 4.2.4. Food Allergy in Infancy
- 4.3. Immunonutrition
  - 4.3.1. Functioning of the Immune System Immunonutrition in Health and in Sickness
  - 4.3.2. Micronutrients and the Immune System
  - 4.3.3. Antioxidants and the Immune System
  - 4.3.4. Fatty Acids and Immune System
  - 4.3.5. Prebiotics and Probiotics and the Immune System
  - 4.3.6. Diet, Physical Activity and the Immune System
- 4.4. Other Current Concepts
  - 4.4.1. Epigenetics
  - 4.4.2. Nutrigenomics
  - 4.4.3. Functional food

## Module 5. Sports Nutrition

- 5.1. Nutritional Requirements
  - 5.1.1. Energy Requirements in Different Types of Sports
  - 5.1.2. General Nutritional Advice in Sport and in Different Types of Sports
  - 5.1.3. Micronutrients and Hydration in Sports
  - 5.1.4. Most Frequent Pathologies in Sports
- 5.2. Supplementation
  - 5.2.1. Ergogenic Aids
  - 5.2.2. Doping

## Module 6. Drug-Nutrient Interactions

- 6.1. Basic Pharmacology
  - 6.1.1. Stages of Drug Action
  - 6.1.2. Metabolism of Drugs
  - 6.1.3. Drug Excretion
- 6.2. Drugs that Affect Nutrient Metabolism
  - 6.2.1. Antivitamins
  - 6.2.2. MAOI
  - 6.2.3. Drugs of Abuse
  - 6.2.4. Nutrient Excretion
- 6.3. The Influence of Nutrition on Pharmacotherapy
  - 6.3.1. Risk Factors for Interactions
  - 6.3.2. Types of Interactions
  - 6.3.3. Special Situations and Preventive Measures

## Module 7. Scientific Evidence, Legislation and Food Safety and Supplementation in Community Pharmacy

- 7.1. Nutritional Supplements Food Supplements
  - 7.1.1. Composition of Food Supplements Consumption Levels
  - 7.1.2. Scientific Evidence
  - 7.1.3. Borderline Between Food and Medicine
  - 7.1.4. The Interaction Between Nutritional Supplementation and Pharmacological Treatment



- 7.2. Legislative Aspects Food Supplements
  - 7.2.1. European Legislation
  - 7.2.2. Spanish Legislation ACs
  - 7.2.3. Food Safety

### Module 8. Implementation of a Nutritional Counseling Service in Community Pharmacies

- 8.1. Training the Team Involved in the Service
- 8.2. Economic Management in the Nutritional Counseling Service: Pricing, Accounting Treatment, etc.
- 8.3. Designing a Standardized Work Protocol
- 8.4. Legal Aspects, Implementation and Necessary Resources
- 8.5. Planning and Design of Nutrition Education Campaigns for the Population

“*A unique, key and decisive training experience to boost your professional development*”

06

# 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

What should a professional do in a given situation? Throughout the program, students will be confronted with multiple simulated clinical cases based on real patients, in which they will have to investigate, establish hypotheses and ultimately, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Pharmacists learn better, more quickly and more sustainably over time.

*With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.*



According to Dr. Gervas, 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, attempting to recreate the actual conditions in a pharmacist's professional 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. Pharmacists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
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.

Our 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, which represent a real revolution with respect to simply studying and analyzing cases.

*Pharmacists 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 115,000 pharmacists have been trained with unprecedented success in all clinical specialties, regardless of the surgical load. This pedagogical methodology is developed in a highly demanding environment, with a university student body with a high socioeconomic 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 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 created specifically for the course by specialist pharmacists who will be teaching the course, so that the didactic development is highly specific and accurate.

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.



### Video Techniques and Procedures

TECH introduces students to the latest techniques, to the latest educational advances, to the forefront of current pharmaceutical care procedures. All of this, first hand, and explained and detailed with precision to contribute to assimilation and a better 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 unique multimedia content presentation training system 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, we will present you with real case developments in which the expert will guide you through 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 on the usefulness of learning by observing experts. The system known as 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.



07

# Certificate

The Professional Master's Degree in Nutritional Counseling in Community Pharmacy guarantees, in addition to the most rigorous and up-to-date training, access to a Professional Master's Degree issued by TECH Global University.



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*Successfully complete this training program and receive your university certificate without travel or laborious paperwork”*

This private qualification will allow you to obtain a **Professional Master's Degree diploma in Nutritional Counseling in Community Pharmacy** 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.

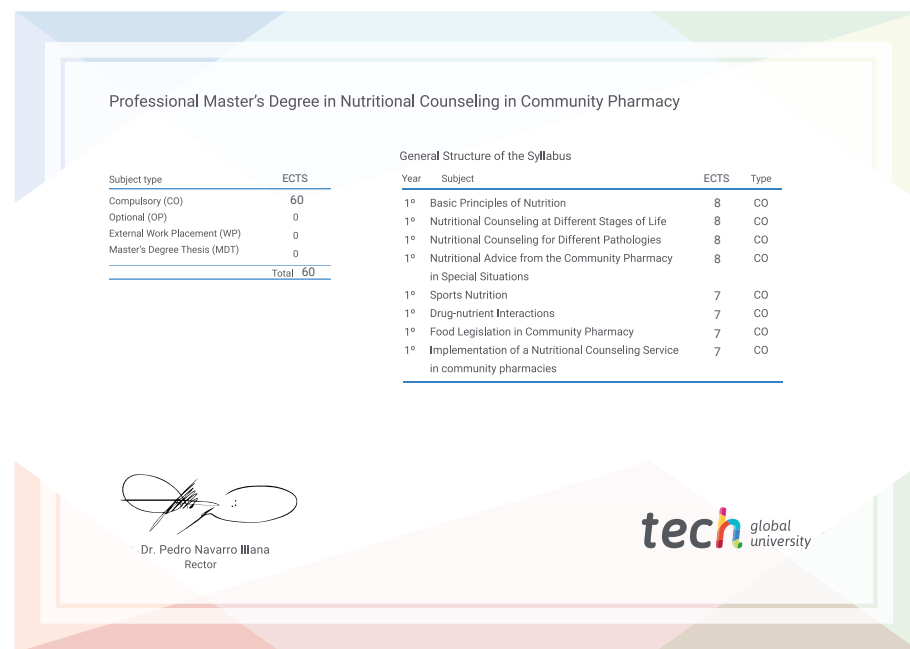
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Professional Master's Degree in Nutritional Counseling in Community Pharmacy**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**



\*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.



future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
development language  
classroom



## Professional Master's Degree

### Nutritional Counseling in Community Pharmacy

- » Modality: **online**
- » Duration: **12 months**
- » Certificate: **TECH Global University**
- » Credits: **60 ECTS**
- » Schedule: **at your own pace**
- » Exams: **online**

# Professional Master's Degree

## Nutritional Counseling in Community Pharmacy

Endorsed by:

