

# Postgraduate Diploma

## Nutrition and Disease in Medicine





## Postgraduate Diploma Nutrition and Disease in Medicine

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-nutrition-disease-medicine](http://www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-nutrition-disease-medicine)

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# 01

# Introduction

A healthy and balanced diet helps to prevent diseases as well as to combat or improve the health of people who suffer from some kind of disease.

This prestigious program deepens your knowledge in the latest techniques in nutrition with the help of professionals with extensive experience in the sector. Promote work strategies based on the practical knowledge of the new trends in nutrition and its application to adult pathologies, where nutrition plays a fundamental role in treatment.



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*Improve your knowledge through this program, where you will find the best educational material supported by real clinical cases" Learn here about the latest advances in the specialty to be able to perform a quality medical practice"*

This program offers the student the possibility of deepening and updating knowledge, using the latest educational technology. This program offers a global vision of Clinical Nutrition while focusing on the most important and innovative aspects of adult nutrition. It also includes up-to-date information on nutritional therapy in special or pathological situations, as well as current trends in nutrition that emphasize the proper use of the Mediterranean diet as a key tool for a healthy life.

This program provides specialization in the field of Clinical Nutrition in areas of particular interest such as:

- ♦ Nutrigenetics
- ♦ Nutrigenomics.
- ♦ Nutrition and obesity
- ♦ Hospital dietetics
- ♦ Nutritional Trends

This Postgraduate Diploma is methodologically designed for non-attendance learning in order to guarantee an optimal follow-up.

With this qualification, you will have the opportunity to study a program that brings together the most advanced and in-depth knowledge in the field, where a group of highly regarded professors with extensive international experience provides you with the most complete and up-to-date information on the latest advances and techniques in Nutrition and Disease in Medicine.

This **Postgraduate Diploma in Nutrition and Disease in Medicine** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The graphic, schematic and practical contents of the course are designed to provide all the essential information required for professional practice
- ♦ It contains exercises where the self-assessment process can be carried out to improve learning
- ♦ Algorithm-based interactive learning system for decision-making for patients with feeding problems
- ♦ 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



*Increase your skills in the approach to Nutrition and Disease in Medicine through this Postgraduate Diploma"*

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*This Postgraduate Diploma is the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in Nutrition and Disease in Medicine, you will obtain a qualification from TECH Technological University"*

*This Postgraduate Diploma offers training in simulated environments, which provides an immersive learning experience designed to train for real-life situations.*

*It includes clinical cases to bring the program as close as possible to the reality of care in medicine.*

Its teaching staff includes renowned specialists in nutrition based on clinical practice, who bring the experience of their work to this training.

The multimedia content developed with the latest educational technology will provide the physician with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train 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 educational program.

For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of radiology with extensive teaching experience.



02

# Objectives

The main objective of the program is the development of theoretical and practical learning, so that the doctor can master in a practical and rigorous way Nutrition and Disease in Medicine



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*This refresher program will generate a sense of confidence when practising medicine, which will help you grow both personally and professionally”*



## General Objectives

- Update knowledge on new trends in human nutrition in both health and pathological situations through evidence-based medicine
- Promote work strategies based on the practical knowledge of the new trends in nutrition and its application to adult pathologies, where nutrition plays a fundamental role in treatment
- Encourage the acquisition of technical skills and abilities, through a powerful audiovisual system, and the possibility of development through online simulation workshops and/or specific training
- Encourage professional stimulation through continued specialization and research
- Train the professional for research into patients with nutritional problems



*Take the opportunity and take the step to catch up on the latest developments in Nutrition and Disease in Medicine"*





## Specific Objectives

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### Module 1. Assessment of Nutritional Status and Diet Practical Application

- ♦ 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
- ♦ Early detection and assessment of quantitative and qualitative deviations from the nutritional balance due to excess or deficiency

### Module 2. Nutrition in Digestive System Pathologies

- ♦ Describe the composition and utilities of new foods
- ♦ Explain the different techniques and products of basic and advanced nutritional support related to the nutrition of the patient
- ♦ Reflect on new techniques in digestive and intestinal surgery and their impact on patient nutrition
- ♦ Get up to date on small intestine management procedures
- ♦ Explain the main malabsorption syndromes and how they are treated
- ♦ Describe the different uses of nutritional support for inflammatory diseases

### Module 3. Nutrition in Endocrine-Metabolic Diseases

- ♦ Identify patients with nutritional risk or established malnutrition susceptible to specific support
- ♦ Evaluate and monitor the supervision of nutritional support
- ♦ Gain up-to-date knowledge on the dietetic treatment of oral cavity pathologies in adults paying special attention to sensory disorders and mucositis
- ♦ Identify and assess obesity and know its dietary or surgical treatment

### Module 4. Nutrition in Kidney 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

### Module 5. Nutrition in Neurological Diseases

- ♦ Study the interrelationship between diet and oral disease
- ♦ Get up to date on the management of patients with swallowing problems
- ♦ Identify nutritional factors involved in gastroesophageal reflux and ulcers

### Module 6. Nutrition in Special Situations

- ♦ Identify dietary and lifestyle factors involved in the genesis and treatment of osteoporosis
- ♦ Gain up-to-date knowledge on the most common food allergies and intolerances
- ♦ Identify the signs and symptoms of the most prevalent colonic pathology and its nutritional treatment
- ♦ Describe the dietary treatment for biliary and pancreatic pathologies

### Module 7. Nutrition in Deficiency Diseases

- ♦ Understand the implications that nutrition can have in the treatment of liver diseases
- ♦ Describe the different uses of nutritional support for inflammatory diseases

### Module 8. Artificial Nutrition in Adults

- ♦ Update knowledge of specific formulae for artificial nutrition in adults

03

# Course Management

TECH has assembled an expert teaching team in Nutrition and Disease in Medicine that has a wide prestige in the profession. They are professionals with years of teaching experience who have come together to help give a boost to the graduate's professional career. For this reason, they have developed this Postgraduate Diploma with recent updates on the subject that will allow you to learn and increase your skills in this sector.





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*Learn from leading professionals,  
the latest advances in Nutrition  
and Disease in Medicine”*

## International Guest Director

Dr. Sumantra Ray is an internationally recognized specialist in **Nutrition** and his main areas of interest are **Nutrition Education in Health Systems** and **Cardiovascular Disease Prevention**. With his outstanding experience in this health field, he has served as a consultant on special assignment for the **Nutrition Management** of the **World Health Organization** Headquarters in Geneva. He has also worked as **Director of Research** in Food Security, Health and Society in the Faculty of Humanities and Social Sciences at the University of Cambridge.

For his constant commitment to the dissemination of **healthy eating habits**, he has received the **Josephine Lansdell Award** from the British Medical Association. Specifically, this recognition highlighted his contributions related to nutrition and **Cardiovascular Prevention**. Also, as an international expert, he has participated in a work program on **Food, Nutrition and Education** in India, led by the University of Cambridge and funded by the UK Global Challenges Research Fund.

Dr. Sumantra Ray's studies are worldwide references, focusing on **global food security**, as it is a fundamental aspect for the development of societies. In addition, he has demonstrated his leadership skills as a **Senior Clinical Scientist** at the **Medical Research Council**, focusing on **Nutrition and Vascular Health** studies. In this position, he directed an experimental medicine facility dedicated to Human **Nutrition** studies.

Throughout his career he has authored more than **200 scientific publications** and has written the **Oxford Handbook of Clinical and Health Research**, aimed at strengthening the basic research skills of health care workers around the world. In this sense, he has shared his scientific findings in numerous presentations and congresses, in which he has participated in different countries.



## Dr. Ray, Sumantra

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- ♦ Executive Director and Founder, NNEdPro Global Nutrition and Health Centre, Cambridge, UK
- ♦ Director of Research in Food Security, Health and Society in the Faculty of Humanities and Social Sciences, University of Cambridge
- ♦ Co-Founder and President of the BMJ Scientific Journal Nutrition, Prevention and Health
- ♦ Presidential Advisor at the School of Advanced Studies on Food and Nutrition, University of Parma
- ♦ Vice President of the Conference of Medical Academic Representatives of the BMA
- ♦ Consultant on special assignment for the Nutrition Directorate of the World Health Organization Headquarters in Geneva
- ♦ Honorary International Dean of the Cordia Colleges in India
- ♦ Senior Clinical Scientist with the Medical Research Council
- ♦ Bachelor's Degree in Medicine

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*Thanks to TECH, you will be able to learn with the best professionals in the world”*

## Management



### Ms. Auni3n Lavarías, María Eugenia

- Pharmacist and Clinical Nutrition Expert
- "Author of the reference book in the field of Clinical Nutrition "Dietetic Management of Overweight in the Pharmacy Office". (Panamerican 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
- Director of the University Course "Dermocosmetics in the Pharmacy Office"





04

# Structure and Content

The structure of the contents has been designed by a team of professionals knowledgeable about the implications of the program in daily medical practice, aware of the relevance of training in Nutrition and Disease in Medicine; and committed to quality teaching through new educational technologies.





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*This Postgraduate Diploma contains the most complete and up-to-date scientific program on the market"*

## Module 1. Assessment of Nutritional Status and Diet. Practical Application

- 1.1. Bioenergy and Nutrition
  - 1.1.1. Energy Needs
  - 1.1.2. Methods of Assessing Energy Expenditure
- 1.2. Assessment of Nutritional Status
  - 1.2.1. Body Composition Analysis
  - 1.2.2. Clinical Diagnosis. Symptoms and Signs
  - 1.2.3. Biochemical, Hematological and Immunological Methods
- 1.3. Intake Assessment
  - 1.3.1. Methods for Analyzing Food and Nutrient Intake
  - 1.3.2. Direct and Indirect Methods
- 1.4. Update on Nutritional Requirements and Recommended Intakes
- 1.5. Nutrition in a Healthy Adult Objectives and Guidelines Mediterranean Diet
- 1.6. Nutrition in Menopause
- 1.7. Nutrition in the Elderly

## Module 2. Nutrition in Digestive System Pathologies

- 2.1. Nutrition in Oral Disorders
  - 2.1.1. Taste
  - 2.1.2. Salivation
  - 2.1.3. Mucositis
- 2.2. Nutrition in Esophageal and Gastric Disorders
  - 2.2.1. Gastroesophageal Reflux
  - 2.2.2. Gastric Ulcers
  - 2.2.3. Dysphagia
- 2.3. Nutrition in Post-Surgical Syndromes
  - 2.3.1. Gastric Surgery
  - 2.3.2. Small Intestine
- 2.4. Nutrition in Bowel Function Disorders
  - 2.4.1. Constipation
  - 2.4.2. Diarrhea
- 2.5. Nutrition in Malabsorption Syndromes

- 2.6. Nutrition in Colonic Pathology
  - 2.6.1. Irritable Bowel
  - 2.6.2. Diverticulosis
- 2.7. Nutrition in Inflammatory Bowel Disease (IBD)
- 2.8. Most Frequent Food Allergies and Intolerances with Gastrointestinal Effects
- 2.9. Nutrition in Liver Diseases
  - 2.9.1. Portal Hypertension
  - 2.9.2. Hepatic Encephalopathy
  - 2.9.3. Liver Transplant
- 2.10. Nutrition in Biliary Diseases. Biliary Lithiasis
- 2.11. Nutrition in Pancreatic Diseases
  - 2.11.1. Acute Pancreatitis
  - 2.11.2. Chronic Pancreatitis.

## Module 3. Nutrition in Endocrine-Metabolic Diseases

- 3.1. Dyslipidemia and Arteriosclerosis
- 3.2. Diabetes Mellitus
- 3.3. Hypertension and Cardiovascular Disease
- 3.4. Obesity
  - 3.4.1. Etiology. Nutrigenetics and Nutrigenomics
  - 3.4.2. Pathophysiology of Obesity
  - 3.4.3. Diagnosis of the Disease and its Comorbidities
  - 3.4.4. Multidisciplinary Team in Obesity Treatment.
  - 3.4.5. Dietary Treatment. Therapeutic Possibilities
  - 3.4.6. Pharmacological Treatment. New Drugs
  - 3.4.7. Psychological Treatment.
    - 3.4.7.1. Intervention Models
    - 3.4.7.2. Treatment of Associated Eating Disorders
  - 3.4.8. Surgical Treatments
    - 3.4.8.1. Indications
    - 3.4.8.2. Techniques
    - 3.4.8.3. Complications
    - 3.4.8.4. Dietary Management
    - 3.4.8.5. Metabolic Surgery

- 3.4.9. Endoscopic Treatments
  - 3.4.9.1. Indications
  - 3.4.9.2. Techniques
  - 3.4.9.3. Complications
  - 3.4.9.4. Patient Dietary Management
- 3.4.10. Physical Activity in Obesity
  - 3.4.10.1. Assessment of the Patient's Functional Capacity and Activity
  - 3.4.10.2. Activity-Based Prevention Strategies
  - 3.4.10.3. Intervention in the Treatment of the Disease and Associated Pathologies
- 3.4.11. Update on Diet and Obesity Studies
- 3.4.12. National and International Intervention Strategies for Obesity Control and Prevention

#### Module 4. Nutrition in Kidney Diseases

- 4.1. Glomerular Disorders and Tubulopathies
- 4.2. Predialysis Chronic Renal Failure
- 4.3. Chronic Renal Failure and Dialysis
- 4.4. Gout and Hyperuricemia

#### Module 5. Nutrition in Neurological Diseases

- 5.1. Swallowing Disorders
- 5.2. Disabling Neuromuscular Disorders
- 5.3. Stroke
- 5.4. Parkinson's Disease
- 5.5. Alzheimer's Disease

#### Module 6. Nutrition in Special Situations

- 6.1. Nutrition in Metabolic Stress Situations
  - 6.1.1. Sepsis
  - 6.1.2. Polytrauma
  - 6.1.3. Burns.
  - 6.1.4. Transplant Recipient
- 6.2. Nutrition in Oncology Patients with:

- 6.2.1. Surgical Management
- 6.2.2. Chemotherapy Treatment
- 6.2.3. Radiotherapy Treatment
- 6.2.4. Bone Marrow Transplant
- 6.3. Immune Diseases
  - 6.3.1. Acquired Immunodeficiency Syndrome

#### Module 7. Nutrition in Deficiency Diseases

- 7.1. Malnutrition
  - 7.1.1. Hospital Malnutrition
  - 7.1.2. The Fasting and Refeeding Cycle
- 7.2. Anaemia. Hemochromatosis
- 7.3. Vitamin Deficiencies
- 7.4. Osteoporosis
- 7.5. Oral Disease and its Relation to Diet

#### Module 8. Artificial Nutrition in Adults

- 8.1. Enteral Nutrition
- 8.2. Parenteral Nutrition
- 8.3. Artificial Nutrition at Home
- 8.4. Adapted Oral Nutrition



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

# 05 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.



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*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 face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

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



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



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*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. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of 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

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

*Professionals will learn through real cases and by resolving 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 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. 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 highly specific and precise.

These contents are then adapted in 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.



#### Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and 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 the videos as many times as you like.



#### Interactive Summaries

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

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



#### Additional Reading

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





#### Expert-Led Case Studies and Case Analysis

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



#### Testing & Retesting

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



#### Classes

There is scientific evidence 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.



# 06 Certificate

The Postgraduate Diploma in Nutrition and Disease in Medicine guarantees students, in addition to the most accurate and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.





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

This **Postgraduate Diploma in Nutrition and Disease in Medicine** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Nutrition and Disease in Medicine**

Modality: **online**

Duration: **6 months**



\*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION 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 languages  
virtual classroom



**Postgraduate Diploma**  
Nutrition and Disease  
in Medicine

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online

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