

# Postgraduate Certificate

Nutrition in Overweight,  
Obesity and their  
Comorbidities



## Postgraduate Certificate

### Nutrition in Overweight, Obesity and their Comorbidities

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/nutrition-overweight-obesity-comorbidities](http://www.techtute.com/us/medicine/postgraduate-certificate/nutrition-overweight-obesity-comorbidities)

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# 01

# Introduction

Obesity and overweight is a current epidemic that has serious physical and mental consequences for people, but also entails a high social cost, in a health system that demands a comprehensive, personalized and interdisciplinary response to address them. An approach that will be discussed in depth in this 100% online program, where the medical professional will acquire a renewed knowledge about the integral therapeutic response and associated comorbidities. All of this, with the highest quality multimedia content that can be accessed 24 hours a day from any device with an Internet connection.





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*A 100% online qualification that allows medical professionals to update their interdisciplinary knowledge in the field of nutrition”*

Stress, lack of mobility and exercise or poor eating habits have led to a large part of the world's population to be overweight and obese. A problem that in turn leads to other serious health problems such as cardiac or diabetic, that require health personnel to be aware of the latest techniques and scientific advances in this area to ensure that affected people achieve a weight commensurate with their characteristics and the changes necessary so that the patient does not relapse into harmful routines.

The medical professional, guided by the specialized team that teaches this qualification, will delve into the latest treatments applied in hypocaloric diets, the physical exercises most used today to reduce overweight and obesity, at the same time it renews the knowledge in psychonutrition. Comorbidities associated with obesity are particularly relevant, where students may be aware of their involvement in patients who do not tolerate insulin and suffer from diabetes.

In addition, this program provides the medical professional with the latest scientifically based advances achieved with bariatric and endoscopic surgeries, as well as the nutritional adaptations that must be made by people affected by this disease. An excellent opportunity for health personnel who want to be aware of everything concerning overweight and obesity, and the latest methods and techniques used to address it.

The methodology of teaching 100% online in all TECH degrees facilitates the medical professional the renewal of knowledge in a simple and agile way, since it can access all the content from the first day. You only need a tablet, mobile or computer with internet connection to access the agenda, video summaries and specialized readings. This will facilitate the updating and compatibility of professional responsibilities with quality teaching.

This **Postgraduate Certificate in Nutrition in Overweight, Obesity and their Comorbidities** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ◆ The development of practical cases presented by experts in Nutrition and Endocrinology
- ◆ 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
- ◆ Practical exercises where the self-assessment process can be carried out to improve learning
- ◆ Its special emphasis on innovative methodologies
- ◆ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



*Delve into digestive pathologies associated with obesity and dysbiosis with this course"*

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*Renew your knowledge in cardiovascular problems that affect the overweight patient”*

*Access the latest techniques and physical exercises to achieve great results in people with obesity.*

*Update your knowledge in the pharmacological treatments used for weight loss in overweight patients.*

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

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 immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, through which the professional will try to solve the different situations will be assisted by an innovative interactive video system made by renowned experts.



# 02 Objectives

This Postgraduate Certificate, aimed at medical professionals, has as its main purpose the updating of knowledge in the field of nutrition, with special emphasis on treatments and follow-up plans applied to people with overweight and obesity. This way, at the end of the six weeks of this course, students will be aware of the latest developments and scientific contributions in this field and their comorbidities. To achieve these goals, students will have a Relearning system, based on the reiteration of content, which will speed up the updating of their knowledge and reduce the long hours of study applied in other teaching methods.





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*The Relearning system of this qualification gives you a more agile and practical knowledge update”*



## General Objectives

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- ◆ Broaden knowledge and incorporate advanced and innovative knowledge in food and nutrition in the daily clinical practice of the Dietitian-Nutritionist
- ◆ Revise the fundamental aspects of healthy eating, with a current approach aimed at risk prevention
- ◆ Delve into the correct management of daily nutrition
- ◆ Examine the most common syndromes and symptoms related to nutritional problems





## Specific Objectives

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- ◆ Adequate assessment of the clinical case, interpretation of causes of overweight and obesity, comorbidities and risks
- ◆ Calculate and individually prescribe the different models of hypocaloric diets
- ◆ Plan consultations and multidisciplinary team in obesity

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*Delve into this Postgraduate Certificate in nutrition plans currently used to address obesity”*

# 03

## Course Management

In line with its commitment of offering an elite education for all, TECH has reference professionals for students to obtain a quality education. In this Postgraduate Certificate, the students have specialists with a long career in the field of nutrition in clinical and hospital centers where they have worked in the departments of Endocrinology. The teaching team will pour all their knowledge into this course, where it will provide simulations of real cases of great utility and application in practice regular clinic.



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*An expert team in Nutrition will provide you with the most used techniques currently in nutritional management in metabolic syndrome"*

## Management



### Dr. Vázquez Martínez, Clotilde

- Corporate Head in the University Hospital Endocrinology and Nutrition Departments, Fundación Jiménez Díaz
- Head of the Endocrinology and Nutrition Service at Ramón y Cajal University Hospital
- Head of the Endocrinology and Nutrition Service at Severo Ochoa University Hospital
- President of The Society of Endocrinology, Nutrition, and Diabetes of the Community of Madrid SENDIMAD ()
- Coordinator Therapeutic Education Group Group of the Spanish Society of Diabetes
- Doctor of the Faculty of Medicine of the Autonomous University of Madrid
- Degree in Medicine and Surgery from the Faculty of Medicine of the University of Valencia
- Specialist in Endocrinology and Nutrition via Medical Residency by the University Hospital Fundación Jimenez Díaz
- Abraham García Almansa Clinical Nutrition Lifetime Achievement Award
- Recognized among the 100 best Doctors in Spain according to Forbes list
- Castilla - La Mancha Diabetes Foundation (FUCAMDI) Diabetes and Nutrition Lifetime Achievement Award



### **Dr. Sánchez Jiménez, Álvaro**

- ♦ Specialist in Nutrition and Endocrinology at Jiménez Díaz Foundation University Hospital
- ♦ Nutritionist at Medicadiet
- ♦ Clinical Nutritionist specialized in Prevention and Treatment of Obesity, Diabetes and their Comorbidities
- ♦ Nutritionist in the Predimed Plus Study
- ♦ Nutritionist at Eroski
- ♦ Nutritionist at Axis Clinic
- ♦ Professor of the Master's Degree in Obesity and Comorbidities at the Rey Juan Carlos University
- ♦ Professor at the Course of Excellence in Obesity at the University Hospital Fundación Jimenez Díaz
- ♦ Graduate in Human Nutrition and Dietetics from the Complutense University of Madrid
- ♦ Nutrition and Food for the Elderly by the Complutense University of Madrid
- ♦ Nutrition and Sports for Professionals by the Fundación Tripartita
- ♦ Refresher Course on Practical Diabetes Type 1 and 2 for Health Professionals



### Dr. Montoya Álvarez, Teresa

- ♦ Head of the Endocrinology and Nutrition Service of the Infanta Elena University Hospital
- ♦ Head of Volunteering at the Garrigou Foundation
- ♦ Graduate in Medicine and Surgery from Universidad de Navarra
- ♦ Master's Degree in Obesity and its Comorbidities: Prevention, Diagnosis and Integral Treatment at the University Rey Juan Carlos
- ♦ Course in Bariatric Antecedents of Surgery Patient Emergencies: Key References for the Attending Physician
- ♦ Member of: Institute for Health Research Foundation Jiménez Díaz, Health Commission of FEAPS Madrid and Trisomy 21 Research Society

## Professors

### Ms. Labeira Candel, Paula

- ♦ Clinical nutritionist in the Bariatric Endoscopy Unit at HM Hospitales
- ♦ Sports and clinical nutritionist at the Clinical Institute of Overweight and Obesity
- ♦ Nutritionist Sports and Clinical at Medicadiet, Slimming & Nutrition
- ♦ Sports Nutritionist at the CF TrivalValderas de Alcorcón
- ♦ Food and water quality analyst in the Andalusian Health Service
- ♦ Diploma in Human Nutrition and Dietetics at the Pablo Olavide University of Seville
- ♦ Bachelor's Degree in Food Science and Technology
- ♦ Diploma in Human Nutrition and Dietetics
- ♦ Master's Degree in Sports Training and Nutrition at the European University of Madrid

### Dr. Sanz Martínez, Enrique

- ♦ Clinical Nutritionist at the University Hospital General de Villalba and Rey Juan Carlos University Hospital
- ♦ Dietitian in the project PLUS researcher in the Health Research Institute of the Jiménez Díaz Foundation
- ♦ Researcher and collaborator in the NUTRICOVID study
- ♦ Researcher and collaborator in the cross-sectional prospective OBESTIGMA study
- ♦ Graduate in Human Nutrition and Dietetics at the Complutense University of Madrid
- ♦ Master's Degree in Clinical Nutrition at the Catholic University of San Antonio in Murcia
- ♦ Master's Degree in Obesity and its Comorbidities: Prevention, Diagnosis and Integral Treatment at the University Rey Juan Carlos





**Dr. Prieto Moreno, Ana**

- ◆ Nutritionist in the Department of Endocrinology and Nutrition at University Hospital Fundación Jiménez
- ◆ Nutritionist at the General Hospital of Villalba
- ◆ Nutritionist at the Infanta Elena University Hospital
- ◆ Nutritionist in the Superior Sports Council
- ◆ Nutritionist at the WWF
- ◆ Nutritionist at Medicadiet
- ◆ Nutritionist at anitas Sociedad Anónima de Seguros
- ◆ Nutritionist at La Paz University Hospital
- ◆ Nutritionist at Fundación Mapfre
- ◆ Nutritionist at Copernal Publishing
- ◆ Nutritionist at Revista Diabetes
- ◆ Master's Degree in Obesity and its Comorbidities, Prevention Strategies, Diagnosis and Integral Treatment at the University of Alcalá
- ◆ Master's Degree in Physical Anthropology, Human Evolution and Biodiversity at the Complutense University of Madrid
- ◆ Degree in Human Nutrition and Dietetics at the Autonomous University of Madrid

# 04

## Structure and Content

The syllabus of this Postgraduate Certificate has been prepared by a teaching team highly qualified in nutrition and experienced in referral hospitals. This will favor the medical professional who wants to delve into overweight, obesity and their comorbidities. In this way, students will delve into the most effective diagnoses and treatments used recently ranging from physical exercise, prescription of drugs and surgical interventions in those patients at higher risk. In addition, students have the complete syllabus at their disposal from the beginning, which will allow them to distribute the teaching load according to their needs.





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*An expert study plan to keep you up to date on the latest advances in nutrition in patients with hypertension, dyslipidemia and atherosclerosis”*

## Module 1. Nutrition in Overweight, Obesity and their Comorbidities

- 1.1. Pathophysiology of Obesity
  - 1.1.1. Precision Diagnosis
  - 1.1.2. Analysis of Underlying Causes
- 1.2. Phenotypic Diagnosis
  - 1.2.1. Body Composition and Calorimetry and Impact on Personalized Treatment
- 1.3. Treatment Target and Hypocaloric Diet Models
- 1.4. Prescription of Physical Exercise in Overweight and Obesity
- 1.5. Psychology Associated with Slimming Nutrition: Psychonutrition
- 1.6. Comorbidities Associated with Obesity
  - 1.6.1. Nutritional Management in Metabolic Syndrome
  - 1.6.2. Insulin Resistance
  - 1.6.3. Type 2 Diabetes and Diabetes
- 1.7. Cardiovascular Risk and Nutritional Adaptations in Hypertension, Dyslipidemias and Atherosclerosis
- 1.8. Digestive Pathologies Associated with Obesity and Dysbiosis
- 1.9. Pharmacological Treatment in Obesity and Drug-Nutrient Interactions and Adaptation of the Nutritional Plan
- 1.10. Bariatric and Endoscopic Surgery
  - 1.10.1. Nutritional Adaptations





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*A program designed to show the latest advances in bariatric and endoscopic surgeries”*

# 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

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

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

*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 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.



#### 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 Certificate in Nutrition in Overweight, Obesity and their Comorbidities guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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

This program will allow you to obtain your **Postgraduate Certificate in Nutrition in Overweight, Obesity and their Comorbidities** endorsed by **TECH Global University**, the world's largest online university.

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

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

Title: **Postgraduate Certificate in Nutrition in Overweight, Obesity and their Comorbidities**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 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.





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