



Nutrition in Overweight, Obesity and their Comorbidities

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/physiotherapy/postgraduate-certificate/nutrition-overweight-obesity-comorbidities

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### tech 06 | Introduction

The figures related to cases of overweight and obesity have multiplied considerably in the last decade, motivated by the excessive consumption of ultra-processed foods and the decrease in physical activity associated with sedentary lifestyles. Based on this, the increase of patients who come to the Physiotherapist's office with muscle and bone ailments is very frequent, which, although they can be treated through therapies to alleviate pain, they need a decrease in body mass to really improve.

In order for the specialist to know in detail the latest developments related to Diet Therapy applied to this type of cases, TECH has developed the Postgraduate Certificate in Nutrition in Overweight, Obesity and its Comorbidities. It is a program that includes 150 hours of the best content, thanks to which the graduate will be able to delve into the different aspects of the pathophysiology of this disease, the development of low-calorie diets, the prescription of physical exercise or the possible consequences that may arise from their condition.

It is, therefore, a unique opportunity, not only to get up to date on this subject, but also to perfect your skills in the nutritional management of patients. In addition, you will be able to do it through a 100% online program, with which you will be able to perfectly combine your day-to-day practice with the course of this academic experience.

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

- 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



You will be able to offer your patients not only therapies to alleviate pain, but also nutritional strategies with which they can lose weight and notice a significant improvement"



In the Virtual Classroom you will find real clinical cases of people with obesity in which the best nutritional strategies were applied, developed in a theoretical way in the syllabus"

The program's teaching staff includes professionals from the industry who contribute their work experience to this 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.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

A program with which you will be able to work in an updated way in the elaboration of hypocaloric diet plans.

In addition, you can access it from any device with an Internet connection: whether it is a PC, tablet or mobile phone.







## tech 10 | Objectives



### **General Objectives**

- Acquire a comprehensive and up-to-date knowledge of the current situation of the world's overweight and obese population
- Improve the professional skills and competences necessary to manage overweight and obese patients according to the latest demonstrable scientific evidence







### **Specific Objectives**

- Adequate clinical case evaluation and 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



Whatever your goals are, TECH will provide you with the most innovative academic tools so that you will be able to overcome them in less time than you expect"







### tech 14 | Course Management

#### 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 Medicadie
- · 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**

#### 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 Diaz Foundation
- Researcher and collaborator in the NUTRICOVID study.
- $\bullet$  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

#### 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



### Course Management | 17 tech

#### 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





### tech 20 | Structure and Content

#### Module 1. Nutrition in Overweight, Obesity and its 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 Diabesity
- 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









This Postgraduate Certificate is, without a doubt, the best option you will find to implement in your practice the most effective nutritional strategies that will best adapt to your patients"



This 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.

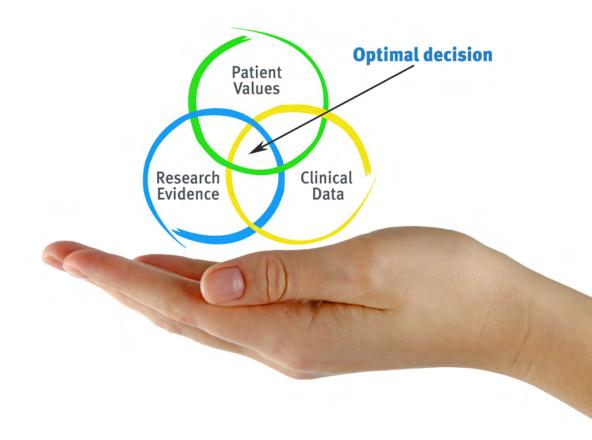


### tech 24 | Methodology

#### 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. Physiotherapists/kinesiologists 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 of professional physiotherapy 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. Physiotherapists/kinesiologists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
- 2. The learning process has a clear focus on practical skills that allow the physiotherapist/kinesiologist 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.

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



### Methodology | 27 tech

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

With this methodology we enabled more than 65,000 physiotherapists/kinesiologists with unprecedented success in all clinical specialties, regardless of the workload. Our educational 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 education, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

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

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

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



#### **Study Material**

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

These contents are then 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.



#### **Physiotherapy Techniques and Procedures on Video**

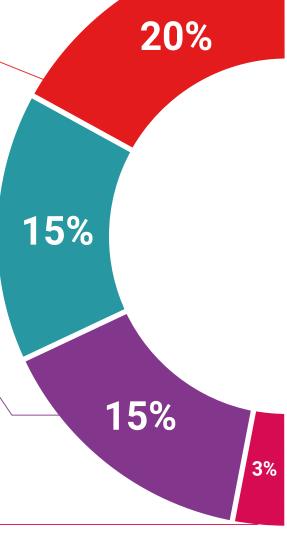
TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, students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



#### **Interactive Summaries**

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

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





#### **Additional Reading**

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

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

#### Classes

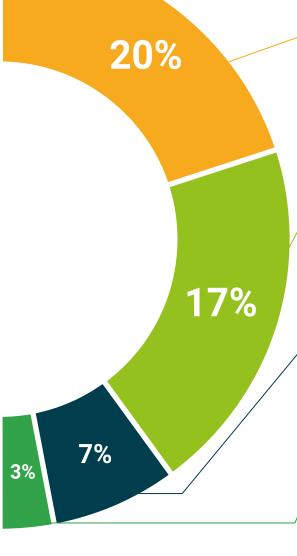


There is scientific evidence suggesting that observing third-party experts can be useful. Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

#### **Quick Action Guides**



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







### tech 32 | Certificate

This **Postgraduate Certificate in Nutrition in Overweight, Obesity and their Comorbidities** 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 Certificate** issued by **TECH Technological University** via tracked delivery\*.

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

Title: Postgraduate Certificate in Nutrition in Overweight, Obesity and their Comorbidities
Official N° of Hours: **150 h**.



<sup>\*</sup>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.



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- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

