



# Postgraduate Certificate

# Pharmacological Treatment of Obesity

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/pharmacological-treatment-obesity

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# tech 06 | Introduction

Obesity, the true epidemic of the 21st century until the arrival of COVID-19, represents a major global health problem. The WHO estimates that it could affect 650 million people worldwide, with a mortality rate of some 2.8 million people each year.

It is a heterogeneous syndrome whose pathophysiology and etiopathogenesis (genetics, epigenetics, new hormonal control mechanisms, nutrigenomics, microbiomics, etc.) are continuously advancing. These advances are allowing us to better understand the factors that affect the processes involved in energy homeostasis and in the development of obesity.

Obesity is a permanent focus of concern due to the ever increasing number of cases and the related comorbidities. These lead to a significant increase in death, especially from cardiovascular illnesses and cancer. Furthermore, the various medical and surgical treatments available and the exponential increase in health care costs related to obesity, also makes it a focus of attention.

With this in mind, preventing obesity is essential. Through the use of a multidisciplinary approach, the aim is to implement lifestyle changes, especially physical activity and dietary patterns, and should be introduced as early on in the process as possible.

Professionals should know how to correctly diagnose obesity and the associated complications and propose appropriate treatment strategies for the three main areas of action: nutrition, physical exercise and attitudes towards food. Drugs and bariatric surgery may be added to this list for patients who demonstrate appropriate indications for such treatments.

In the last decade, there have been enormous advances in the understanding of obesity. This has brought Precision Medicine to the forefront of treatment, requiring the professional to be adequately prepared to provide new therapeutic responses. The enormous development of new technologies such as health apps, brought about by COVID-19, allows patient empowerment and decision-making support.

This **Postgraduate Certificate in Pharmacological Treatment of Obesity** contains the most complete and up-to-date educational program on the market. The most important features of the program include:

- Practical cases presented by experts in Obesity
- The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- The latest information on Obesity
- Practical exercises where the self-assessment process can be carried out to improve learning
- A special emphasis on innovative methodologies in Obesity
- 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



This program is the best option you can find to specialize in Pharmacological Treatment of Obesity"



This Postgraduate Certificate is the best investment you can make when selecting a refresher program for two reasons: In addition to updating your knowledge of Obesity, you will obtain a qualification endorsed by TECH Technological University"

The teaching staff includes professionals from the field of Obesity, who bring their experience to this specialization 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 training programmed to train 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 professional will be assisted by an innovative interactive video system created by renowned and experienced experts in Obesity with extensive medical experience.

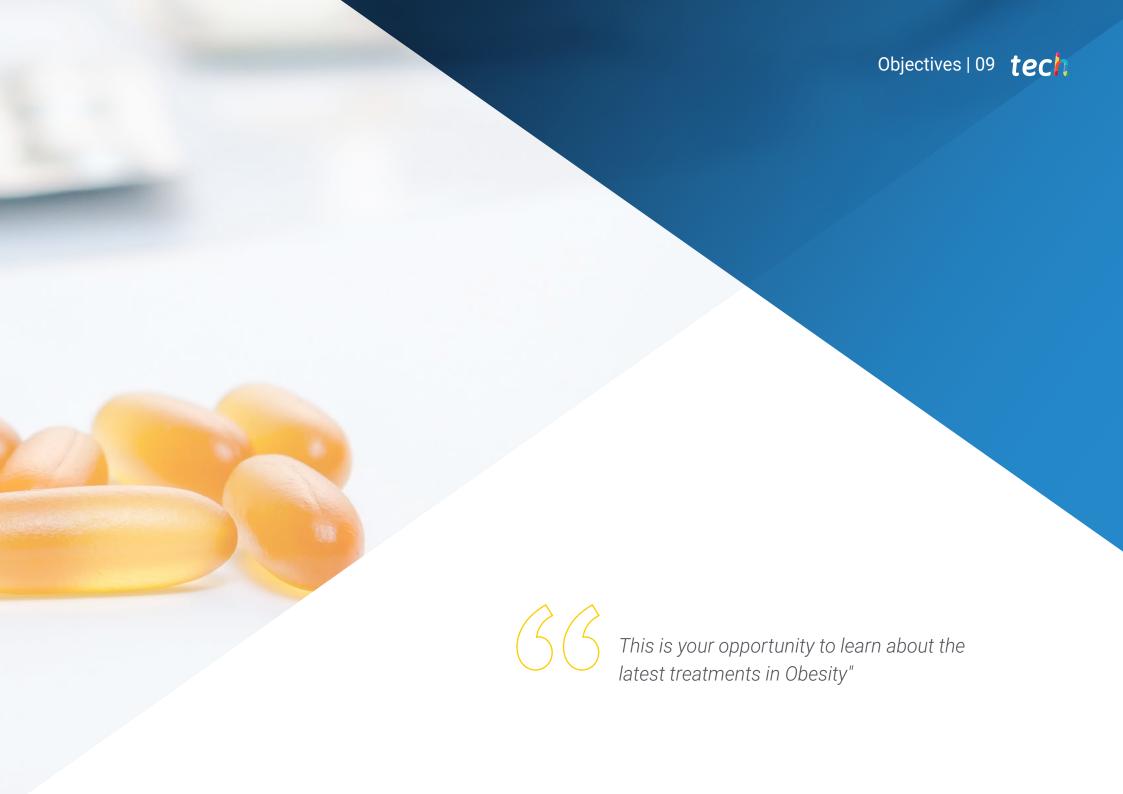
Take the step and join our team. You will find the best educational material to enhance your studies.

This 100% online Postgraduate Certificate will allow you to combine your studies with your professional work while increasing your knowledge in this field.





The Postgraduate Certificate in Pharmacological Treatment of Obesity is designed to facilitate the performance of medical professionals by providing them with the latest advances and the most innovative treatments in the sector.



# tech 10 | Objectives



# **General Objectives**

- Update the physician's 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 child and 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 continuing education and research



An opportunity created for professionals who are looking for an intensive and effective course with which to take a significant step forward in the practice of their profession"





# Objectives | 11 tech



# **Specific Objectives**

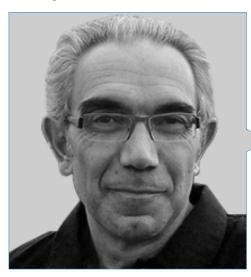
- Identify the pharmacological arsenal currently available to treat obesity
- Specialize in the development of clinical research on commercialized drugs for the treatment of obesity
- Establish the indications for anti-obesity drugs in each patient
- Analyze how its effect is controlled and the results we can expect
- Identify other drugs which are already commercialized in other countries such as the USA
- Identify those drugs that produce weight loss, without this being their main reason for use
- Review miracle drugs that have been used in the treatment of obesity
- Gain in-depth knowledge of the new lines of research in Precision Medicine





# tech 14 | Course Management

### Management



## Dr. Puigdevall Gallego, Víctor

- Doctor of Medicine and Surgery
- Specialist in Endocrinology and Nutrition in Soria Hospital Complex
- Associate Professor in Valladolid University (academic courses 2005-2021)



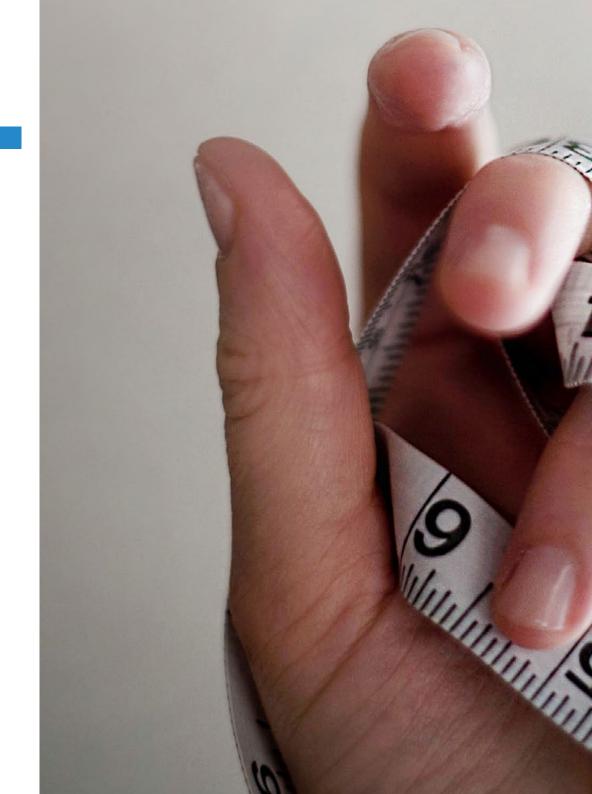




# tech 18 | Structure and Content

### Module 1. Pharmacological Treatment of Obesity

- 1.1. Orlistat
  - 1.1.1. Xendos Study
- 1.2. Liraglutide
  - 1.2.1. Scale Study
- 1.3. Naltrexone/ Bupropion
  - 1.3.1. COR Study
- 1.4. Anti-Obesity Drugs: When to Use Them and For How Long
  - 1.4.1. Treatment Algorithms
- 1.5. Commercialized Drugs in Europe
- 1.6. Non-Commercialized Drugs in Europe
- 1.7. Drugs Causing Unintentional Weight Loss
- 1.8. Miracle Drugs
- 1.9. Future Treatments of Obesity
- 1.10. Pharmacokinetic Modifications in the Obese Patient Before and After Bariatric Surgery













# tech 22 | 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. 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.



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:

- 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 Harvard 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.



### Methodology | 25 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, 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.

# tech 26 | Methodology

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**

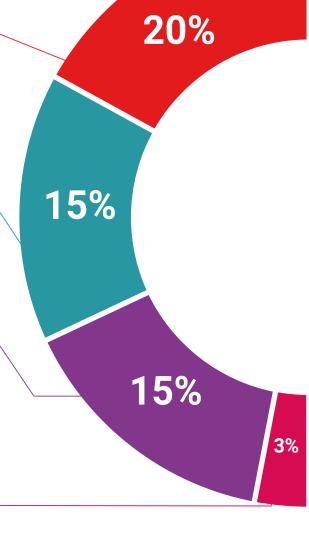
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many 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 multimedia content presentation training Exclusive 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.

17% 7%

### **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 your goals.



### Classes

There is scientific evidence on the usefulness of learning by observing experts: The system termed Learning from an Expert strengthens knowledge and recall capacity, and generates confidence in the face of difficult decisions in the future.



### **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 30 | Certificate

This **Postgraduate Certificate in Pharmacological Treatment of Obesity** contains the most complete and updated scientific program on the market.

After the student has passed the evaluations, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** by 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 Pharmacological Treatment of Obesity

Official N° of hours: 150 h.



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### Pharmacological Treatment of Obesity

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

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Tere Guevara Navarro

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Unique TECH Code: AFWORD23S tec

<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.

technological university

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