



### Postgraduate Diploma

Phytotherapy for Cardiovascular and Respiratory Conditions

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 18 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/nutrition/postgraduate-diploma/postgraduate-diploma-phytotherapy-cardiovascular-respiratory-conditions

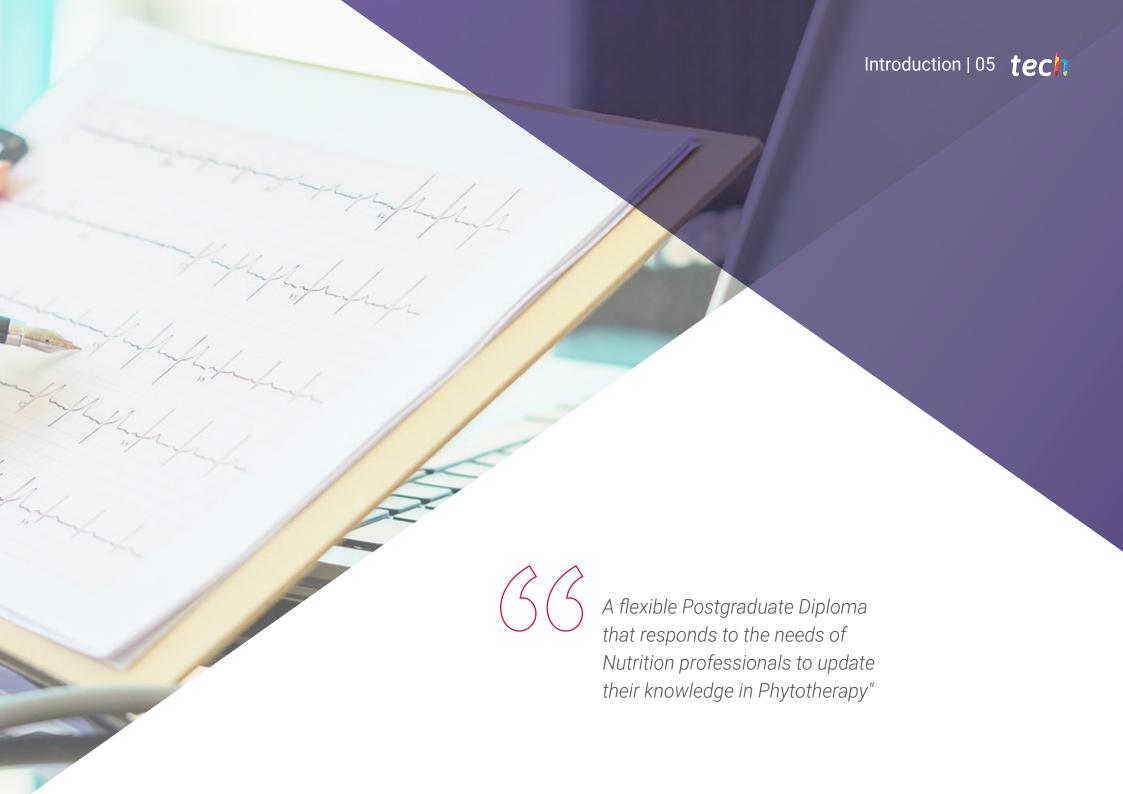
# Index

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### tech 06 | Introduction

The incidence of the population with cardiovascular problems has increased in recent decades due to incorrect eating habits, smoking and sedentary lifestyles. These conditions are often treated by the patients themselves using medicinal plants and without the supervision of a specialist.

In this sense, the work of the nutritionist is essential to be able to optimally address these pathologies, establishing the most appropriate nutritional strategies and incorporating medicinal plants according to each condition. In this regard, TECH offers professionals an excellent opportunity to obtain a complete update through this Postgraduate Diploma in Phytotherapy of Cardiovascular and Respiratory Conditions.

This is a program that will lead the graduate to delve into Phytotherapy, herbal drugs, galenic preparations and their application in cardiac and respiratory pathologies. All of this will be combined in an intensive educational itinerary lasting 6 months and supported by innovative teaching material (video summaries, detailed videos, readings and clinical cases) that can be accessed comfortably at any time of the day, from an electronic device with an internet connection.

In this way, this university institution offers nutritionists an educational option that will allow them to keep abreast of advances in Phytotherapy through a flexible and convenient program. They only need an electronic device with internet connection to be able to visualize, at any time of the day, the content hosted on the virtual platform. An ideal option to combine the most demanding responsibilities with a quality Postgraduate Diploma.

This Postgraduate Diploma in Phytotherapy for Cardiovascular and Respiratory Conditions 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 psychotherapy based on Phytotherapy
- 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 the Interactive learning system
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- The availability of access to content from any fixed or portable device with an Internet connection



Without the obligation to attend classes with fixed schedules, graduates will be able to self-manage their time to access this program"



Do you attend patients with lung cancer and wish to incorporate advances in Phytotherapy into their nutritional program? You are in the right educational program"

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.

Get up to date on phytotherapeutic treatments and their limits in Cardiovascular and Respiratory Conditions.

Find out about advances in Phytotherapy and the management of patients with cardiovascular problems.







### tech 10 | Objectives



### **General Objectives**

- Define the therapeutic limits of Phytotherapy and identify the cases in which it can be used safely
- Describe the use of Phytotherapy oriented to the satisfaction of the needs derived from the patients health problems and the prevention of complications, ensuring a safe and quality practice
- Solve cases related to the field of phytotherapy
- Explain the use and indication of medical devices, food supplements and/or drugs, assessing the expected benefits And associated risks
- Apply theoretical knowledge in daily practice



Delve into Phytotherapy applied to patients with allergic respiratory processes and incorporate it into your nutritional strategies"





### **Specific Objectives**

#### Module 1. Phytotherapy and Herbal Medicines

- Define what a drug is and distinguish it from an active ingredient
- Explain the protocols for drug recognition
- Define the main chemical groups of active ingredients, which are responsible for the effects of drugs and, by extension, of plants
- Explain techniques for the cultivation, collection, processing and conservation of medicinal plants
- Identify botanical nomenclature and species citation
- Classify plant groups according to current regulations
- Define the medicinal utility of mushrooms
- Explain the legislation and regulation related to Phytotherapy

## Module 2. Active Ingredients of the Plants, Pharmaceutical Forms and Galenic Preparations.

- Explain the application of the magistral formulation in Phytotherapy
- Explain the industrial processing of herbal medicines
- Define the main groups and properties with relation to the active ingredients
- Define the therapeutic application of phenols, flavonoids, tannins, isoprenoids, resins, alkaloids and other products

#### Module 3. Phytotherapy for Cardiovascular and Respiratory Conditions

- Define the usefulness of Phytotherapy in the treatment of heart failure
- Define the usefulness of Phytotherapy in the treatment of arterial hypertension
- Define the usefulness of Phytotherapy in the treatment of venous insufficiency
- Define the usefulness of Phytotherapy in the treatment of cough
- Describe phytotherapy treatments and therapeutic limits
   In Cardiovascular Conditions
- Precise phytotherapy treatments and therapeutic limits in the affections of the respiratory system
- Define the usefulness of Phytotherapy in the treatment of allergic respiratory processes





### tech 14 | Course Management

#### **Professors**

#### Dr. Güemes Heras, Jaime

- Director of the Botanical Garden of Valencia
- Biologist and Botanic Expert
- Curator of the Botanical Garden, Cavanilles Institute of Biodiversity and Evolutionary
- Biology University of Valencia
- President of the Ibero-Macaronesian Association of Botanical Gardens
- President of the Spanish Society of Plants conservation
- PhD in Biology
- Author of more than a dozen books and chapters related to biology and Botany
- Naming scientist of 31 new species for science in the International Plant Names Index

#### Dr. Soriano Guarinos, Pilar

- Researcher at the Germplasm Bank of the Botanical Garden of the University of Valencia
- Professor of the Department of Botanics at the Faculty of Pharmacy of the University of Valencia
- Researcher at the Cavanilles Institute of Biodiversity and Evolutionary and Biology
- Doctor of Pharmacy
- Author of more than a dozen scientific articles related to Botany

#### Ms. Izquierdo Palomares, Rosa

- Private Pharmacy Owner in the Attention to the Public and in the elaboration of
- Magistral Formulas
- Head of Industrial Hygiene and Ergonomics at Unión de Mutuas
- Prevention Technician Specialist in Industrial Hygiene at Unión de Mutuas
- Degree in Community Pharmacy from the University of Valencia
- Master's Degree in Industrial Hygiene and Occupational Health

#### Ms. Buendía Sánchez, Esmeralda

- Technical Pharmaceutical Director Arkopharma Laboratories
- Director of the Scientific Department, Arkopharma, S.A.
- Author of El hipérico en el tratamiento de la depresión and co-author of several publications
- Specialist in Pharmacy

#### Dr. Palomino Ruiz-Poveda, Olga

- Professor of the Department of Pharmacology at the Faculty of Pharmacy of the Complutense University Madrid
- Records Technician at Arkoprharma
- Doctor of Pharmacy
- Member of the Herbal Medicinal Products Committee (HMPC) of the European
- Medicines Agency

#### Ms. Ibars Almonacil, Ana

- Professor in the area of Botany and Geology at the University of Valencia
- Co-author of: Helechos de la Comunidad Valenciana
- Member of:itdUPM and GENET Working Group on Basic Income
   Cavanilles Institute of Biodiversity and Evolutionary Biology CBiBE Research Lab
   Scientific Committee of the SEFIT Conference: Phytotherapy in metabolic syndrome

#### Dr. García-Fontestad, Gema Alejandra

- Independent Pharmacist and Expert in Chemical Morphophysiology and its impact on health on health
- Pharmacist in a pharmacy office Editor in Farma13
- PhD in Pharmacy from CEU Cardenal Herrera University
- Author of more than a dozen of research that articles related the pharmacological field

#### Dr. Bejarano, María

- Pharmacist at Pharmacy Office at LKN Strategies Inc
- Trainer and promoter at LKN life
- EFG promoter trainer at Markefarm SL
- Pharmacist in pharmacy office
- Doctor of Pharmacy. CEU Cardenal Herrera University
- Degree in Histology. Botanical Garden at the University of Valencia
- Degree in Pharmacy. University of Valencia

#### González Rosende, Eugenia

- Pharmacist and Researcher Specialized in the Therapeutic Area
- Professor in the Department from Pharmacy at the Faculty of Health Sciences of the CEU Cardenal Herrera University
- Principal Investigator of the group on the Search for New Compounds with Therapeutic Activity. Therapist of the CEU Cardenal Herrera University
- Researcher of the group SEPLAN at CEU Cardenal Herrera University
- Doctor of Pharmacy
- Author of several specialized books on organic chemistry for the clinical profession

#### Dr. Acero de Mesa, Nuria

- Pharmacist expert in Biotechnologies
- Former Professor of vegetable Physiology
- Professor at the Department of Pharmaceutical and Health Sciences, Faculty of Pharmacy, CEU San Pablo University
- Principal investigator of the Natural Products group
- Doctor of Pharmacy
- Co-author of several scientific publications in specialized media
- Member of:itdUPM and GENET Working Group on Basic Income
   Toxi-epidemiology line team of the Observatory on Drug Addictions of the
   Valencian Community National Certification Service of Plants and Mushrooms
   Follow-up Technical Commission

### tech 16 | Course Management

#### Dr. López Castellano, Alicia

- Pharmacist Specialized in Industrial and Galenic Pharmacy
- Researcher and author of outstanding publications in the area of Phytotherapy and Pharmacy
- Expert in Pharmacy and Pharmaceutical Technology.
- Reviewer for leading scientific journals such as: International Journal of Pharmaceutics, Journal of Controlled Release, Journal of Pharmaceutical Science, Drug Development and Industry Pharmacy, Journal of Drug Delivery Science, European Journal of Pharmaceutics and Biopharmaceutics, Technology and Journal of Pharmacy and Pharmacology
- Director of the Department of Physiology, Pharmacology and Toxicology at CEU Cardenal Herrera University
- Dean of the Faculty of Health Sciences, CEU Cardenal Herrera University
- Professor and Senior Research Technician, Department of Pharmacy and Pharmaceutical Technology, University of Valencia
- Participation in presentations and communications at conferences Nationally and Internationally
- PhD. in Pharmacy at University of Valencia
- Degree in Pharmacy
- Member of:itdUPM and GENET Working Group on Basic Income Teacher Evaluation Commission of the Valencian Agency of Evaluation and Prospective (AVAP) of the Generalitat de Valencia

#### Dr. Balaguer Fernández, Cristina

- Vice Dean of the Faculty of Pharmacy, Cardenal Herrera University
- Associate Professor in the Department of Pharmacy at the Faculty of Health
- Sciences of the CEU Cardenal Herrera University
   Coordinator of different Masters at CEU University

   PhD in Pharmacy from CEU Cardenal Herrera University
   Lectures and communications in national and international congresses

#### Dr. Villagrasa Sebastián, Victoria

- Disseminator of the DeCo MICOF Chair on the Study of Cognitive Impairment, CEU Cardenal Herrera University
- Professor of the Department of Pharmacy at the Faculty of Health Sciences, CEU Cardenal Herrera University
- PhD in Pharmacy from the University of Valencia
- Co-author of Manual de farmacología Guía para el uso racional del medicamento
- Member of: Committee for the Evaluation of Veterinary Medicines of the Spanish Agency of Medicines and Health Products

#### Dr. Calatayud Pascual, Araceli

- Assistant pharmacist in a pharmacy office
- Medicine Degree Coordinator
- Coordinator of the External Internships of Medicine
- Coordinator of the second cycle of the Degree in Medicine
- Assistant Professor in the Department university from Pharmacy at the Faculty of Health Sciences of the CEU Cardenal Herrera University
- Professor in charge of Pharmacology in the Grade of Dentistry, CEU Cardenal Herrera University
- Participation in 41 presentations and/or communications at national and international conferences
- Researcher in 8 research projects funded by public and private institutions
- Author of various scientific publications
- Doctor of Pharmacy. Cardenal Herrera University CEU
- Degree in Pharmacy. Cardenal Herrera University CEU
- Master's Degree in Pharmaceutical Attention Pharmacy. University of Valencia
- Postgraduate Certificate in Pharmaceutical in Primary Care. University of Valencia
- Pharmacist specialized in Orthopedics. University of Valencia

#### Dr. Ríos Cañavate, José Luis

- Principal Researcher in 9 National research projects
- Professor of Pharmacology at the Faculty of Pharmacy of the University of Valencia
- Author of several books on Phytotherapy and one on Herbodietetics
- Author of dozens of chapters in scientific and teaching books
- Author of hundreds of articles in international scientific journals and 11 articles in national journals
- Editor of 5 books and 2 international scientific journals
- Speaker at more than 150 international and national congresses and events
- Director of 4 doctoral theses
- PhD in Pharmacy from the University of Valencia
- Degree in Pharmacy from the University of Granada
- Member of:itdUPM and GENET Working Group on Basic Income Scientific Advisory Committee of the Center for Research on Phytotherapy (INFITO) Spanish Society of Phytotherapy (SEFIT)

   (ASP)

American Society of Pharmacognosy (ASP)

Gesellschaft für Arzneipflanzenforschung (GA)

American Society for Pharmacology and Experimental Therapeutics (ASPET)

### tech 18 | Course Management

#### Dr. Muñoz-Mingarro, Dolores

- Professor of the Department of Chemistry and Biochemistry, Faculty of Pharmacy, CEU San Pablo University
- Researcher
- Author of more than 30 scientific articles
- Award to the best initiative granted by Correo Farmacéutico for the book Manual de Fitoterapia
- PhD. in Biological CC from the Complutense University of Madrid
- Degree in CC Biology from the Complutense University of Madrid
- Graduate in Pharmacy from the Complutense University of Madrid
- Member of:itdUPM and GENET Working Group on Basic Income
   Spanish Society of Chromatography and Related Techniques SECYTA
   Iberoamerican Network of Natural Products for Medicinal Use and Research Groups in Ripronamed

#### Dr. Noguera Romero, María Antonia

- Specialist in Pharmacy and Cardiovascular Pharmacology
- Professor of the Department of Pharmacology at the Faculty of Pharmacy of the University of Valencia
- Director of the Official Master's Degree in Research and Rational Use of Medicines at the University of Valencia
- Author of the book Mecanismos contráctiles del músculo liso mediados por la activación
- PhD in Pharmacy and Cardiovascular Pharmacology from the University of Valencia
- Member of: Scientific Committee of the Pharmaceutical Sciences Journal Ocimun







## HERBAL RE

### tech 22 | Structure and Content

#### Module 1. Phytotherapy and Herbal Medicines

- 1.1. Phytotherapy: Definition and Scope of Application
- 1.2. Legislation and Registration of Herbal Medicines in Spain BORRAR
- 1.3. Regulation of the European Market for Medicinal Herbal Preparations: Legal Regulations and Scope of Application
- 1.4. Vegetal structure
- 1.5. Botanical Nomenclature and the Citation of Species in Phytotherapy
- 1.6. Cultivation, Collection, Processing and Preservation of Medicinal Plants
- 1.7. Current Classification of Plant Groups
- 1.8. Plant-Based Drugs: Impact of Drug Recognition on the Quality of Phytotherapeutic Products

## **Module 2.** Active Ingredients of the Plants, Pharmaceutical Forms and Galenic Preparations

- 2.1. Active Ingredients: Main Groups and Properties, as a Basis that Justifies the use of Phytotherapy
- 2.2. Carbohydrates, Lipids, Proteins, and Sulfocyanogenetic Heterosides and their Therapeutic Application
- 2.3. Simple Phenols, Coumarins and Lignans and their Therapeutic Application
- 2.4. Flavonoids and their Therapeutic Application
- 2.5. Tannins and Quinones, and their Application
- 2.6. Isoprenoids, Saponins and Cardiotonic Heterosides and their Application
- 2.7. Resins and their Application
- 2.8. Alkaloids and their Application
- 2.9. Magistral Formulation in Phytotherapy
- 2.10. Other Pharmaceutical Forms in Phytotherapy
- 2.11. Guidelines for the proper manufacture of herbal medicines







MUGWORT



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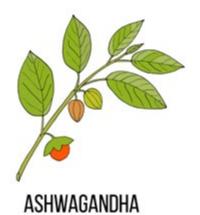




**CAYENNE PEPPER** 



NUTMEG

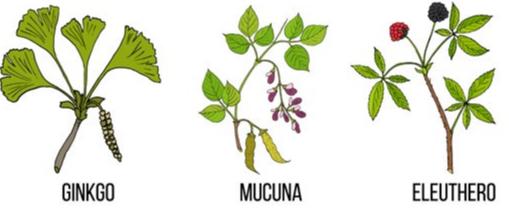






### MEDIES FOR FIBROMYALGIA

### Structure and Content | 23 tech

















A Postgraduate Diploma created to provide an effective update on Phytotherapy applied to cardiovascular and respiratory conditions"

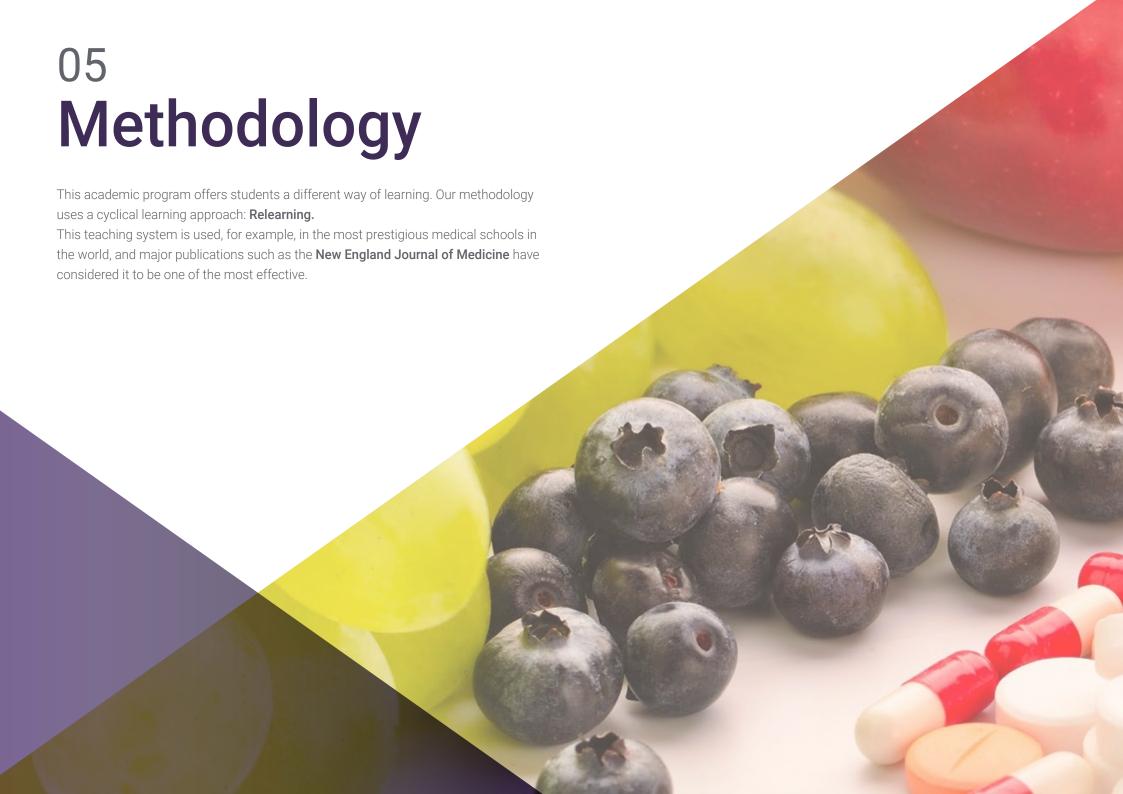








- Phytotherapy in the Treatment of Arterial Hypertension
- Phytotherapy in the Treatment of Hyperlipidemia involved In Cardiovascular Conditions
- Phytotherapy in Venous Insufficiency Conditions
- Phytotherapy in Respiratory Infections
- Phytotherapy in the Treatment of Cough
- Treatment of Asthma with Active Ingredients Derived from Plants. Antispasmodics 3.7.
- Phytotherapy and Herbal Active Ingredients in the Treatment of Lung Cancer



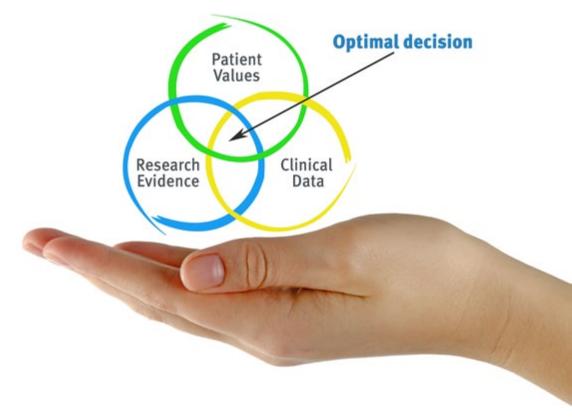


### tech 26 | Methodology

#### At TECH we use the Case Method

In a given situation, what should a professional do? 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, nutritionists can 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 nutritional 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:

- Nutritionists who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity through exercises to evaluate real situations and the application of knowledge.
- 2. Learning is solidly translated into practical skills that allow the nutritionist to better integrate knowledge into clinical practice.
- 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.



### tech 28 | Methodology

#### 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.

The nutritionist 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 | 29 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 45,000 nutritionists have been trained with unprecedented success in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong 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 training, 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 TECH's learning system is 8.01, according to the highest international standards.

### tech 30 | 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.



#### **Nutrition Techniques and Procedures on Video**

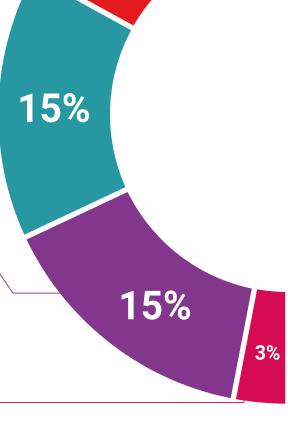
TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current nutritional counselling techniques and procedures. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, 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.



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



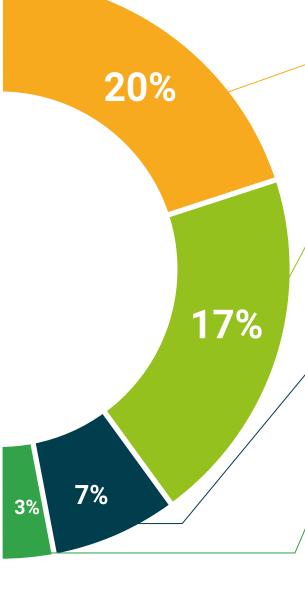
There is scientific evidence suggesting that observing third-party experts can be useful.

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 34 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Phytotherapy for Cardiovascular and Respiratory Conditions** 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 Diploma in Phytotherapy for Cardiovascular and Respiratory Conditions

Modality: online

Duration: 6 months

Accreditation: 18 ECTS



Mr./Ms. \_\_\_\_\_\_ with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

### Postgraduate Diploma in Phytotherapy for Cardiovascular and Respiratory Conditions

This is a program of 450 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024





## Postgraduate Diploma

Phytotherapy for Cardiovascular and Respiratory Conditions

- » Modality: online
- » Duration: 6 months
- Certificate: TECH Global University
- » Credits: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

