



Vegetarianism and Veganism in Physical Activity and Sports

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Accreditation: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/physiotherapy/postgraduate-certificate/vegetarianism-veganism-physical-activity-sports

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### tech 06 | Introduction

Vegetarianism is gaining more and more popularity among athletes due to a variety of reasons, ranging from moral values to the desire to improve health or sports performance. As a result, physical therapists face a number of challenges during their clinical practice, not the least of which is ensuring that their clients receive adequate nutrition to support their sports activity and promote recovery from potential injuries. In view of this, specialists must stay at the forefront of the most effective vegetable protein sources, as well as other food supplements to cover possible nutritional deficiencies (such as Vitamin B12 or Iron).

To support them in this task, TECH presents an innovative Postgraduate Certificate in Vegetarianism and Veganism in Physical Activity and Sports. Designed by experts in this field, the academic itinerary will examine the different types of vegetarian nutrition, while at the same time delving into the most frequent errors of vegan athletes (among which the energy balance stands out). In line with this, students will analyze the importance of B12 supplementation for muscle recovery, red blood cell production and maintenance of the central nervous system. Therefore, graduates will be able to assess the nutritional status of vegetarian or vegan athletes and plan balanced diets adapted to their specific needs (considering factors such as caloric requirements). In addition, a renowned International Guest Director will give a rigorous Masterclass that will allow specialists to enhance their practical skills and learn about the latest scientific postulates in this booming field.

The course is taught in a 100% online methodology. Therefore, specialists will be able to embark on their learning process at any time of the day with the benefit of time flexibility. For this, all they will need is an electronic device with Internet access to enter the Virtual Campus (such as a computer or tablet).

This Postgraduate Certificate in Vegetarianism and Veganism in Physical Activity and Sports 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 Sports Nutrition in Specific Populations
- The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those 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



A prestigious International Guest Director will offer an intensive Masterclass in which he will address the latest scientific evidence on Vegetarianism and Veganism in relation to sports performance"



You will delve into the factors that decrease nutrient absorption, allowing you to provide individualized dietary advice that will prevent exercise-related injuries"

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

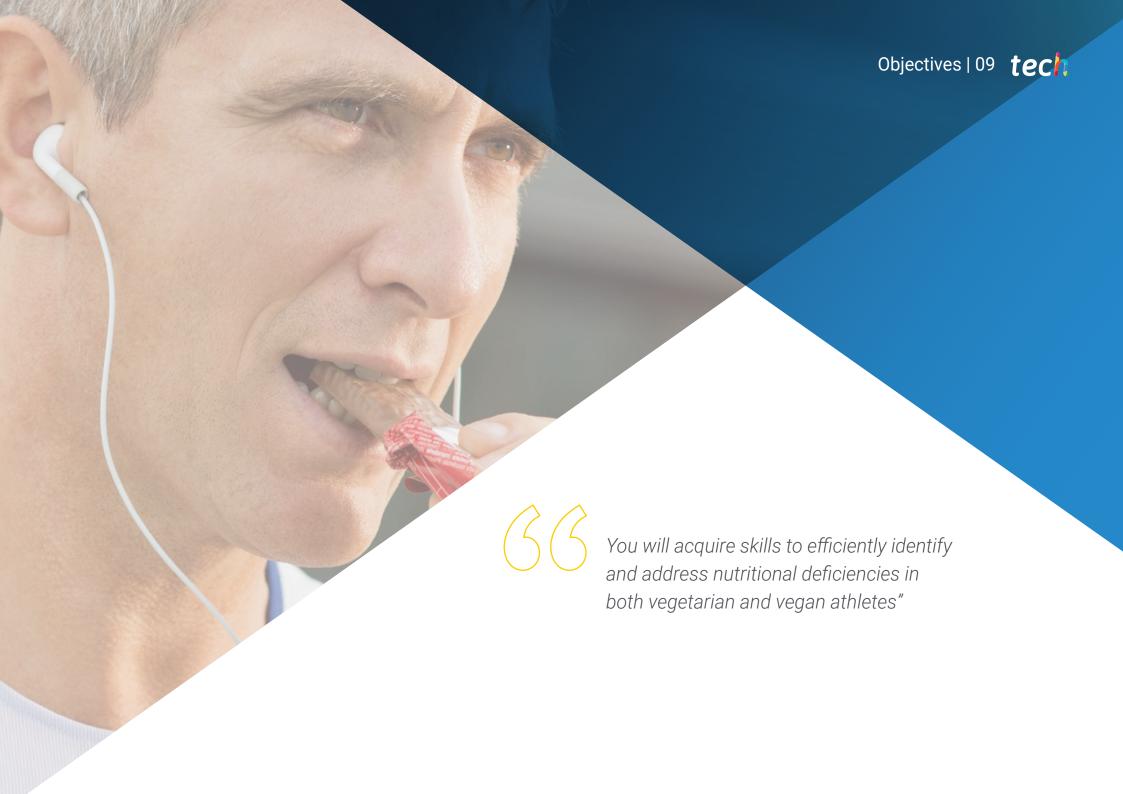
This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

The program will include a wide range of multimedia resources, such as interactive summaries or explanatory videos, for you to delve into Protein Intake in a dynamic way.

Through TECH's disruptive Relearning methodology, you will integrate all the knowledge in an optimal way to successfully achieve the results you are looking for.





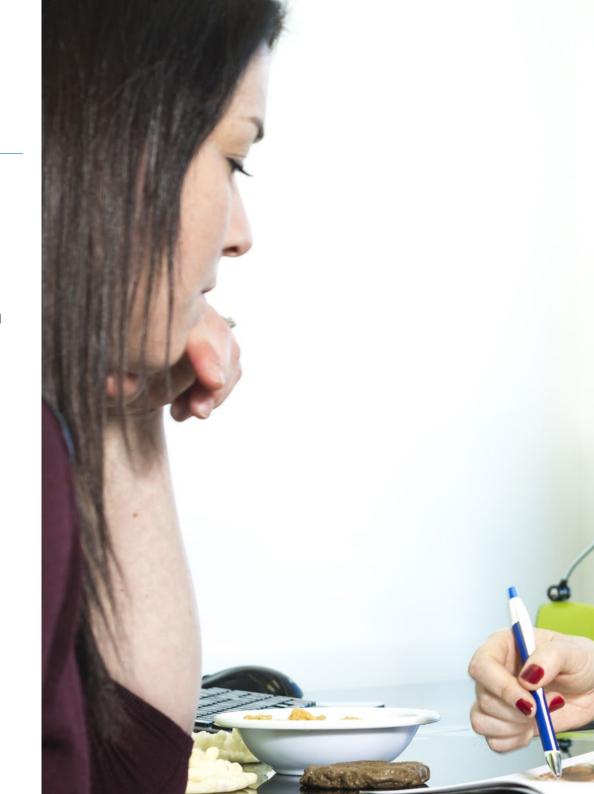


## tech 10 | Objectives



### **General Objectives**

- Handle advanced knowledge on nutritional planning in professional and non-professional athletes for the healthy performance of physical exercise
- Manage advanced knowledge on nutritional planning in professional athletes of various fields in order to achieve maximum sports performance
- Learn advanced knowledge about nutritional planning in professional athletes from team sports to achieve the highest sports performance
- Manage and consolidate the initiative, entrepreneurial spirit to implement projects related to nutrition in physical activity and sport
- Know how to incorporate the different scientific advances into one's own professional field
- Acquire skills to work in a multidisciplinary environment
- Gain an advanced understanding of the context in which the area of their specialty is developed
- Manage advanced skills in the detection of possible signs of nutritional changes associated with sports activities
- Manage the necessary skills through the teaching-learning process that will allow them
  to continue specializing and learning in the field of Nutrition in sports, both through the
  contacts established with teachers and professionals of the Master's Degree as well as
  independently
- Specialize in the structure of muscle tissue and its role in sports
- Gain knowledge about the energetic and nutritional needs of athletes in different pathophysiological situations
- Specialize in the energy and nutritional needs of athletes in different age and gender specific situations
- Specialize in dietary strategies for the prevention and treatment of the injured athlete
- $\bullet\,$  Specialize in the energetic and nutritional needs of child athletes









### **Specific Objectives**

- Differentiate between the different types of vegetarian athletes
- Gain an in-depth understanding of the main mistakes made
- Treat the notable nutritional deficiencies of sportsmen and sportswomen
- Manage skills to provide the athlete with the best tools when combining foods



Your goal of professional improvement will be much closer thanks to the sports performance-oriented nutritional strategies that this university program will offer you"





### tech 14 | Course Management

#### **International Guest Director**

Jamie Meeks has demonstrated throughout her career her dedication to Sports Nutrition. After graduating from Louisiana State University with a degree in Sports Nutrition, she quickly rose to prominence. Her talent and commitment were recognized when she received the prestigious Young Dietitian of the Year award from the Louisiana Dietetic Association, an achievement that marked the beginning of a successful career.

After completing her bachelor's degree, Jamie Meeks continued her education at the University of Arkansas, where she completed her internship in Dietetics. She then went on to earn a Master's Degree in Kinesiology with a specialization in Exercise Physiology from Louisiana State University. Her passion for helping athletes reach their full potential and her tireless commitment to excellence make her a leading figure in the sports and nutrition community.

Her deep knowledge in this area led her to become the first Director of Sports Nutrition in the history of Louisiana State University's athletic department. There, she developed innovative programs to meet the dietary needs of athletes and educate them on the importance of proper nutrition for optimal performance.

Subsequently, she has held the position of Director of Sports Nutrition for the NFL's New Orleans Saints. In this role, she is dedicated to ensuring that professional players receive the best nutritional care possible, working closely with coaches, trainers, physical trainers and medical staff to optimize individual performance and health.

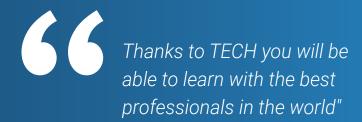
As such, Jamie Meeks is considered a true leader in her field, being an active member of several professional associations and participating in the advancement of Sports Nutrition on a national level.

In this regard, she is also a member of the Academy of Nutrition and Dietetics and the Association of Collegiate and Professional Sports Dietitians.



## Ms. Meeks, Jamie

- Director of Sports Nutrition for the New Orleans Saints of the NFL, Louisiana, U.S.A.
- Sports Nutrition Coordinator at Louisiana State University, Louisiana
- Registered Dietitian by the Academy of Nutrition and Dietetics
- Certified Specialist in Sports Dietetics
- Master's Degree in Kinesiology with specialization in Exercise Physiology from the Louisiana State University
- Graduate in Dietetics from Louisiana State University
- Member of: Louisiana Dietetic Association, Association of Dietitians Collegiate and Professional, and Dietetic Practice Group of Cardiovascular Sports Nutrition and Wellness



### tech 16 | Course Management

#### Management



### Dr. Marhuenda Hernández, Javier

- Professional soccer clubs Nutritionist
- Head of Sports Nutrition. Club Albacete Balompie SAD
- Head of Sports Nutrition. Catholic University of Murcia, UCAM Murcia Football Club
- Scientific Advisor, Nutrium
- Nutritional Advisor. Impulse Center
- Teacher and Coordinator of Postgraduate Studies
- PhD in Nutrition and Food Safety. San Antonio Murcia Catholic University
- Degree in Human Nutrition and Dietetics. San Antonio Murcia Catholic University
- Master's Degree in Clinical Nutrition. San Antonio Murcia Catholic University
- Academic Academia Española de Nutrición y Dietética (AEND)

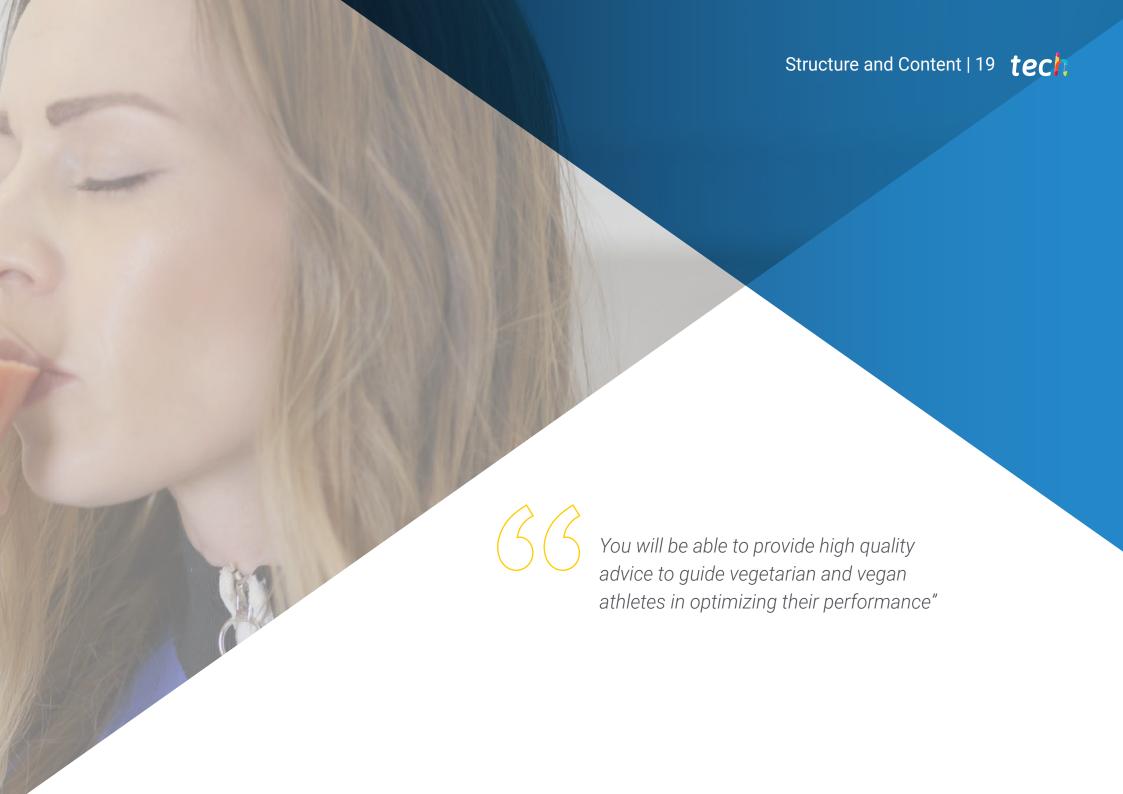
#### **Professors**

#### Mr. Arcusa Saura, Raúl

- Nutritionist. Sport Club Castellón
- Nutritionist in several semi-professional clubs in Castellón
- Researcher. San Antonio Murcia Catholic University
- Undergraduate and Graduate Faculty
- Graduate in Human Nutrition and Dietetics
- Master's Degree in Nutrition in Physical Activity and Sport







### tech 20 | Structure and Content

#### Module 1. Vegetarianism and Veganism

- 1.1. Vegetarianism and Veganism in the History of Sport
  - 1.1.1. The Beginnings of Veganism in Sport
  - 1.1.2. Vegetarian Athletes Today
- 1.2. Different Types of Vegetarian Food
  - 1.2.1. The Vegan Athlete
  - 1.2.2. The Vegetarian Athlete
- 1.3. Common Errors in the Vegan Athlete
  - 1.3.1. Energy Balance
  - 1.3.2. Protein Consumption
- 1.4. Vitamin B12
  - 1.4.1. B12 Supplementation
  - 1.4.2. Bioavailability of Spirulina Algae
- 1.5. Protein Sources in the Vegan/Vegetarian Diet
  - 1.5.1. Protein Quality
  - 1.5.2. Environmental Sustainability
- 1.6. Other Key Nutrients in Vegans
  - 1.6.1. Conversion of ALA to EPA/DHA
  - 1.6.2. Fe, Ca, Vit-D and Zn
- 1.7. Biochemical Evaluation/Nutritional Shortcomings
  - 1.7.1. Anemia
  - 1.7.2. Sarcopenia
- 1.8. Vegan Diet vs. Omnivorous Diet
  - 1.8.1. Evolutionary Food
  - 1.8.2. Current Food
- 1.9. Ergogenic Aids
  - 1.9.1. Creatine
  - 1.9.2. Vegetable Protein
- 1.10. Factors that Decrease Nutrient Absorption
  - 1.10.1. High Fiber Intake
  - 1.10.2. Oxalates





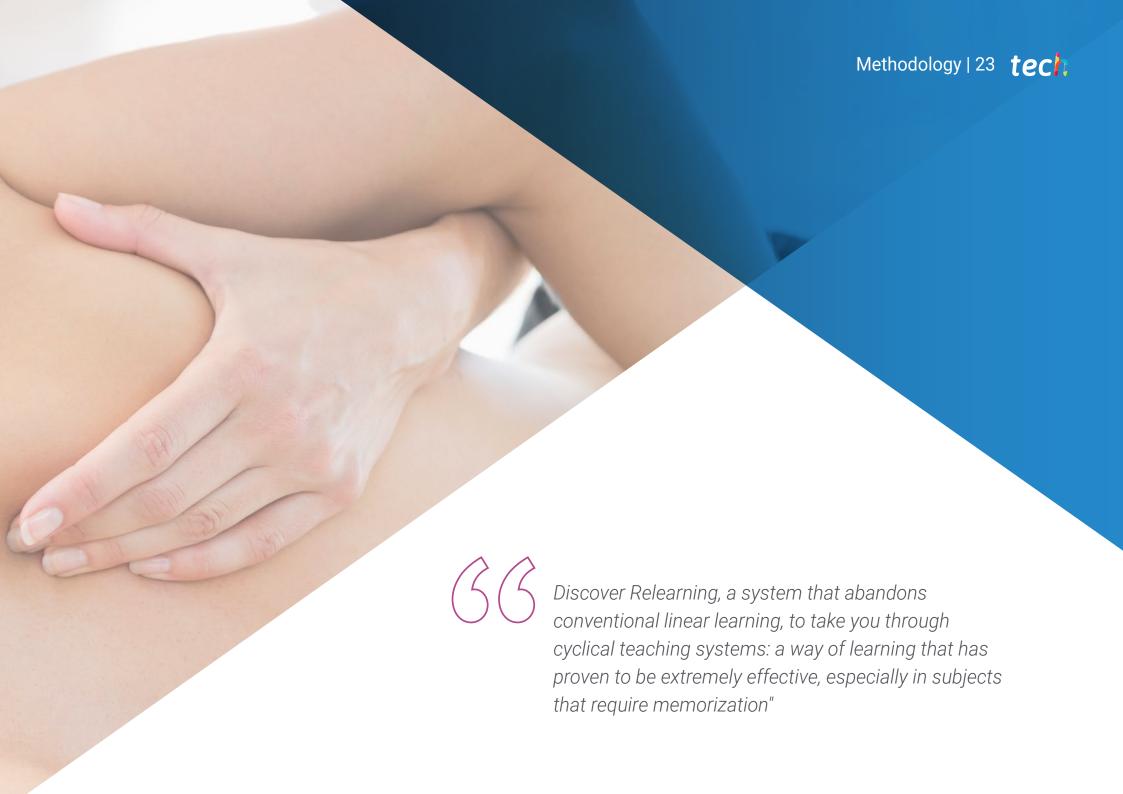


This program gives you the opportunity to expand your knowledge in a real scenario, with the maximum scientific rigor of an institution at the forefront of technology. Enroll now!"



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.

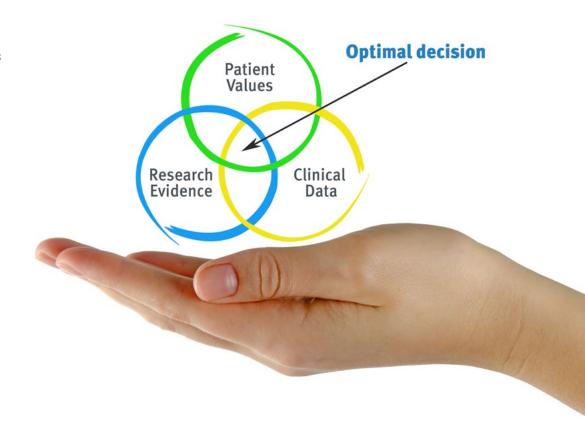


### tech 24 | Methodology

#### 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**

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 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 trained more than 65,000 physiotherapists/kinesiologists with unprecedented success in all clinical specialties, regardless of the workload. 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 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 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 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.



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

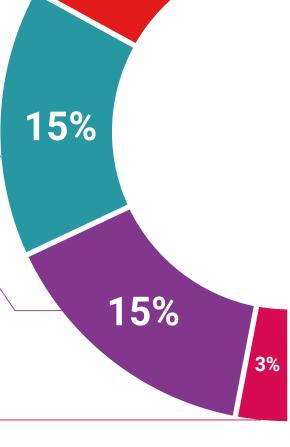
TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can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



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.

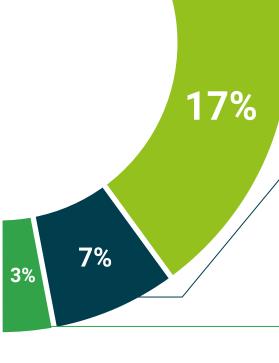
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **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.





20%





### tech 32 | Certificate

This program will allow you to obtain a **Postgraduate Certificate in Vegetarianism and Veganism in Physical Activity and Sports** endorsed by **TECH Global University**, the largest digital university in the world.

**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** private qualification, 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 Vegetarianism and Veganism in Physical Activity and Sports

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



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

### Postgraduate Certificate in Vegetarianism and Veganism in Physical Activity and Sports

This is a private qualification of 180 hours of duration equivalent to 6 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



<sup>\*</sup>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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