

# Postgraduate Certificate

## Sports Nutrition in People with Type 1 Diabetes for Nursing

Endorsed by the NBA





## Postgraduate Certificate

### Sports Nutrition in People with Type 1 Diabetes for Nursing

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/in/nursing/postgraduate-certificate/sports-nutrition-people-type-1-diabetes](http://www.techtute.com/in/nursing/postgraduate-certificate/sports-nutrition-people-type-1-diabetes)

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# 01

# Introduction

During sports practice, different problems arise that have their origin or solution in nutrition and/or sports supplementation. This program will teach the different strategies to solve and anticipate problems that may arise during a test or training. In addition, the student will learn how to solve the doubts that may arise when dealing with a type 1 diabetic athlete, as well as how to teach in the best possible way the basic aspects of nutrition to an athlete.



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*Food and sport must go hand in hand, as it is essential that athletes follow a proper diet to help them improve their performance"*

The Postgraduate Certificate has multimedia content that helps to acquire the knowledge that is taught, developed with the latest educational technology in turn, will allow the student a situated and contextual learning, within a simulated environment that provides training focused on solving real problems.

This program seeks to educate the nurse in the nutritional and physical assessment of the athlete with diabetes, with the aim of obtaining maximum sports performance. The aim is to provide a comprehensive training that covers different situations that we can find in an athlete of these characteristics, with a high scientific-technical quality and a very high practical component that stands out from the rest of the qualifications available in Spanish.

This training covers the physiological and biochemical aspects necessary to understand how diabetes affects both daily life and exercise, and the possible problems that may arise. With this high-level training the student will be able to acquire the necessary knowledge to establish a nutritional plan for people with diabetes who want to take care of their health and athletes of different modalities based on current scientific evidence.

As it is an online course, the student is not restricted by fixed schedules or the need to move to another physical location, but can access the contents at any time of the day, balancing their work or personal life with their academic life.

This **Postgraduate Certificate in Sports Nutrition in People with Type 1 Diabetes for Nursing** contains the most complete and up-to-date scientific program on the market.

The most important features include:

- ♦ The graphic, schematic and practical contents of the course are designed to provide all the essential information required for professional practice
- ♦ Exercises where the self-assessment process can be carried out to improve learning
- ♦ An algorithm-based interactive learning system, designed for decision making for patients with nutritional challenges
- ♦ 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



*Learn the most suitable diets for each type of athlete and you will be able to give more personalized advice”*

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*This Postgraduate Certificate is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Sports Nutrition, you will obtain a certificate from the leading online university in spanish: TECH”*

*This course allows training in simulated environments, which provide immersive learning programmed to train for real situations.*

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

Its teaching staff includes professionals belonging to the field of nutrition, 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. The professional will be assisted by an innovative interactive video system created by renowned and experienced experts in sports nutrition.



# 02 Objectives

The main objective of the program is the development of theoretical and practical learning, so that the nursing professional can master in a practical and rigorous way the study of sports nutrition in special populations.





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*This refresher program will provide you with a sense of confidence in your daily work, which will help you grow both personally and professionally”*



## General Objectives

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- ♦ 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 and entrepreneurial spirit needed to launch projects related to nutrition in physical activity and sport
- ♦ Know how to incorporate the different scientific advances into one's own professional field
- ♦ Ability to work in a multidisciplinary environment
- ♦ Advanced understanding of the context in which their area of expertise is being 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 educating and learning in the field of sports nutrition, both through contacts established with teachers and professionals of this training, as well as in an autonomous way
- ♦ 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 situations specific to age and gender
- ♦ Specialize in dietary strategies for the prevention and treatment of the injured athlete
- ♦ Specialize in the energetic and nutritional needs of child athletes
- ♦ Specialize in the energetic and nutritional needs of Paralympic athletes



## Specific Objectives

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- ◆ Establish the physiological and biochemical mechanism of diabetes both at rest and during exercise
- ◆ Develop an in-depth understanding of how the different insulins or medications used by diabetics work
- ◆ Assess the nutritional requirements for people with diabetes both in their daily life and in exercise, to improve their health
- ◆ Delve into the necessary knowledge to be able to plan nutrition for athletes of different disciplines with diabetes, in order to improve their health and performance
- ◆ Establish the current state of evidence on Performance Enhancing Drugs in diabetics



*Take advantage of the opportunity and take the step to get up to date on the latest developments in Sports Nutrition in People with Type 1 Diabetes for Nurses”*

03

# Course Management

Our teachers, made up of experts in Sports Nutrition, are well known in the profession and are professionals with years of teaching experience who have come together to help you boost your career. To this end, they have developed this program with recent updates in the field that will allow you to train and increase your skills in this sector.





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*Learn from the best professionals and become a successful professional yourself”*

## Management



### Dr. Marhuenda Hernández, Javier

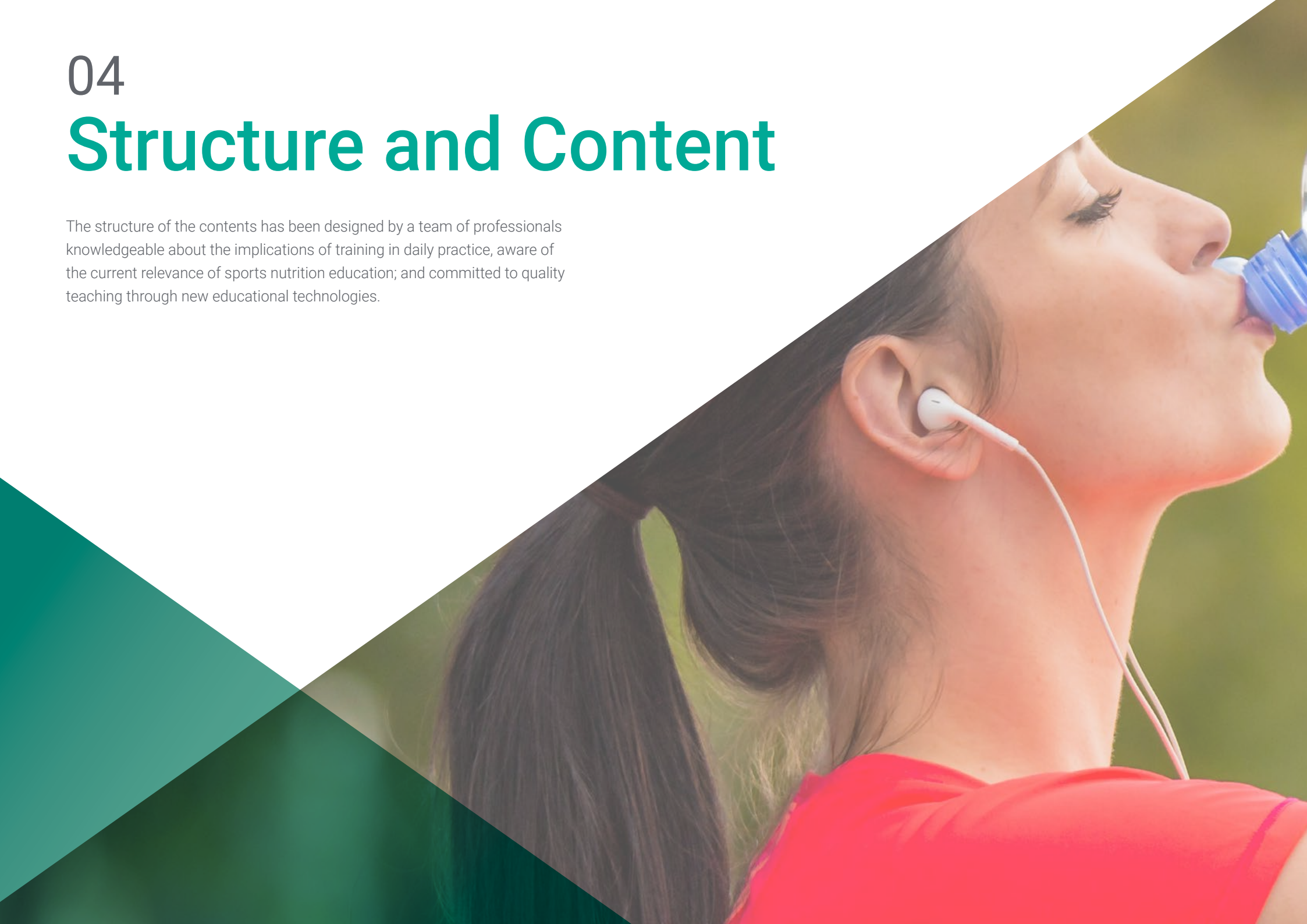
- Nutritionist in professional soccer clubs
- Responsible for the sports nutrition area of Albacete Balompié
- Responsible for the sports nutrition area of UCAM Murcia de Fútbol
- Scientific advisor at Nutrium
- Nutritional advisor at Centro Impulso
- Teacher and coordinator of postgraduate studies
- Doctor in Nutrition and Food Safety by UCAM
- Graduate in Human Nutrition and Dietetics by the UCAM
- Master's Degree in Clinical Nutrition from UCAM
- Full member of the Spanish Academy of Nutrition and Dietetics



04

# Structure and Content

The structure of the contents has been designed by a team of professionals knowledgeable about the implications of training in daily practice, aware of the current relevance of sports nutrition education; and committed to quality teaching through new educational technologies.



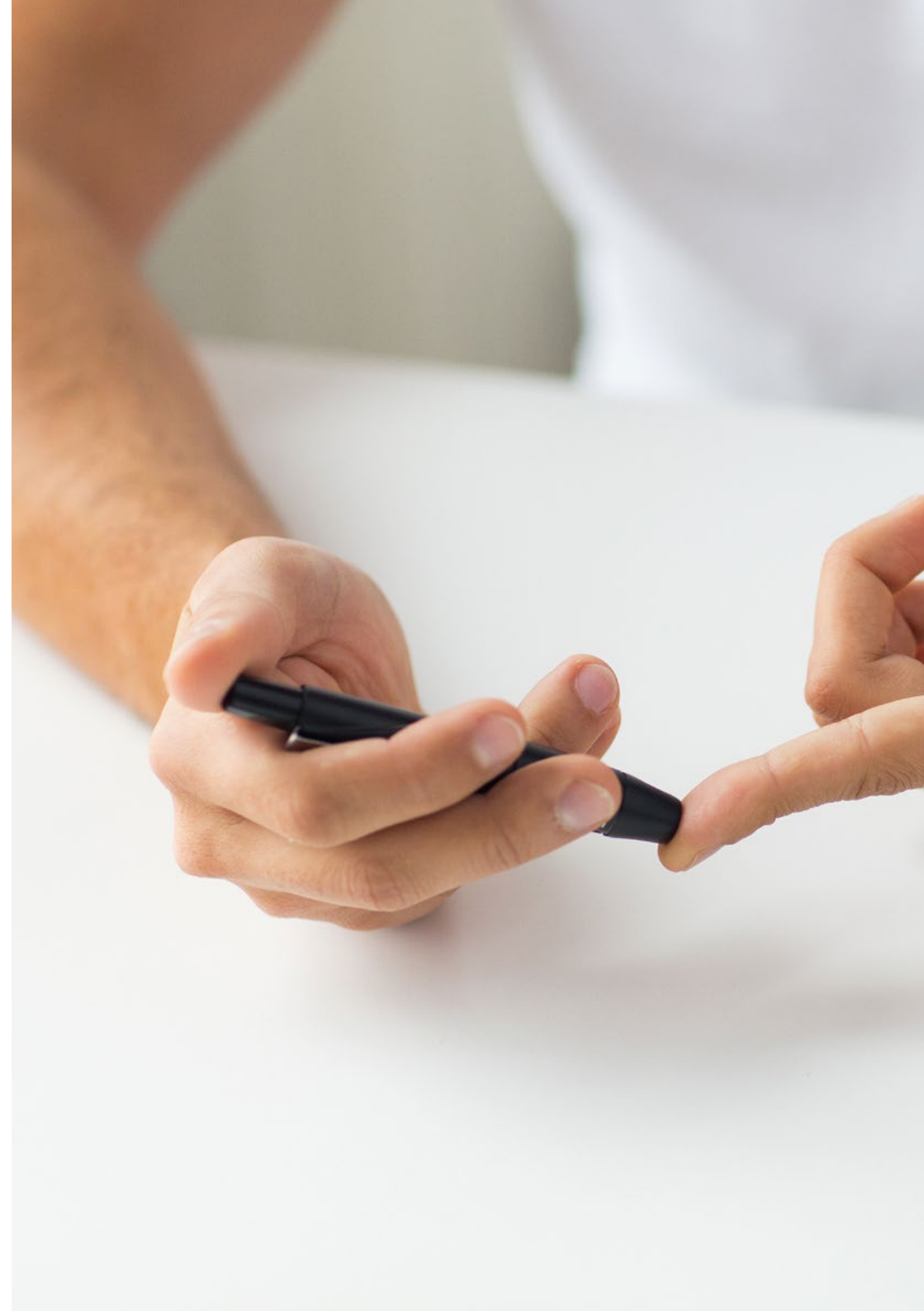


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*This Postgraduate Certificate in Sports Nutrition in People with Type 1 Diabetes for Nursing contains the most complete and up-to-date scientific program on the market”*

## Module 1. The Type 1 Diabetic Athlete

- 1.1. Knowing about Diabetes and its Pathology
  - 1.1.1. The Incidence of Diabetes
  - 1.1.2. Pathophysiology of Diabetes
  - 1.1.3. The Consequences of Diabetes
- 1.2. Exercise Physiology in People with Diabetes
  - 1.2.1. Maximal, Submaximal Exercise and Muscle Metabolism during Exercise
  - 1.2.2. Differences in the Metabolic Level during Exercise in People with Diabetes
- 1.3. Exercise in People with Type 1 Diabetes
  - 1.3.1. Exercise in People with Type 1 Diabetes
  - 1.3.2. Exercise Duration and Carbohydrate Intake
- 1.4. Exercise in People with Type 2 Diabetes. Blood Sugar Control
  - 1.4.1. Risks of Physical Activity in People with Type 2 Diabetes
  - 1.4.2. Benefits of Exercise in People with Type 2 Diabetes
- 1.5. Exercise in Children and Adolescents with Diabetes
  - 1.5.1. Metabolic Effects of Exercise
  - 1.5.2. Precautions during Exercise
- 1.6. Insulin Therapy and Exercise
  - 1.6.1. Insulin Infusion Pump
  - 1.6.2. Types of Insulins
- 1.7. Nutritional Strategies during Sport and Exercise in Type 1 Diabetes
  - 1.7.1. From Theory to Practice
  - 1.7.2. Carbohydrate Intake Before, During and After Physical Exercise
  - 1.7.3. Hydration Before, During and After Physical Exercise
- 1.8. Nutritional Planning in Endurance Sports
  - 1.8.1. Marathon
  - 1.8.2. Cycling
- 1.9. Nutritional Planning in Team Sports
  - 1.9.1. Soccer
  - 1.9.2. Rugby
- 1.10. Sports Supplements and Diabetes
  - 1.10.1. Potentially Beneficial Supplements for Athletes with Diabetes





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*A unique, key, and decisive educational experience to boost your professional development”*

# 05

# 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 Nursing School 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. Nurses learn better, faster, and more sustainably over time.

*With TECH, nurses can experience a learning methodology 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, in an attempt to recreate the real conditions in professional nursing 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. Nurses 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 nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
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 case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.



*The nurse 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.*



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 have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical 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 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 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.



### Nursing Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, 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 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 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 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.



# 06 Certificate

The Postgraduate Certificate in Sports Nutrition in People with Type 1 Diabetes for Nursing guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.





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

This **Postgraduate Certificate in Sports Nutrition in People with Type 1 Diabetes for Nursing** 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 certificate 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 Sports Nutrition in People with Type 1 Diabetes for Nursing**

Official Nº of Hours: **150 h.**

Endorsed by the NBA.

Spanish Federation of Health care Technology Companies



\*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
development language  
virtual classroom



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Sports Nutrition in  
People with Type 1  
Diabetes for Nursing

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

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