



## Postgraduate Diploma

Pediatric Endocrinology and Nutrition in Medicine

» Modality: online

» Duration: 6 months

» Certificate: TECH Technological University

» Schedule: at your own pace

» Exams: online

We bsite: www.techtitute.com/in/medicine/postgraduate-diploma/postgraduate-diploma-pediatric-endocrinology-nutrition-medicine/postgraduate-diploma/postgraduate-diploma-pediatric-endocrinology-nutrition-medicine/postgraduate-diploma-pediatric-endocrinology-nutrition-pediatric-endocrinology-nutrition-pediatric-endocrinology-nutrition-pediatric-endocrinology-nutrition-pediatric-en

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## tech 06 | Introduction

This program offers the student the possibility of expanding and updating knowledge in clinical nutrition, using the latest educational technology. It offers a global vision of child nutrition while focusing on the most important and innovative aspects of feeding in the pediatric age, including from the intrauterine phase to adolescence, as well as the diseases in which feeding plays a highly relevant role.

This program allows specialization in the field of child nutrition in areas of special interest such as:

- Nutrigenetics
- · Nutrigenomics.
- Nutrition and obesity
- Hospital dietetics
- Nutritional trends

This program is methodologically designed for distance learning in order to guarantee optimal supervision.

With this program, students will have the opportunity to study an educational program that brings together the most advanced and in-depth knowledge in the field, where a group of professors of high scientific and extensive international experience offers the most complete and up-to-date information on the latest advances and techniques in Pediatric Endocrinology and Nutrition in Medicine.

This **Postgraduate Diploma in Pediatric Endocrinology and Nutrition in Medicine** 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.
- It contains exercises where the self-assessment process can be carried out to improve learning
- Algorithm-based interactive learning system for decision-making for patients with feeding problems.
- All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments.
- Availability of content from any fixed or portable device with internet connection



Increase your skills in the approach to Pediatric Endocrinology and Nutrition in Medicine with this Postgraduate Diploma"



This Postgraduate Diploma is the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in Pediatric Endocrinology and Nutrition in Medicine, you will obtain a qualification from TECH Technological University"

Its teaching staff includes renowned specialists in nutrition based on clinical practice, who bring the experience of their work to this program.

The multimedia content developed with the latest educational technology will provide the physician with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train in real situations.

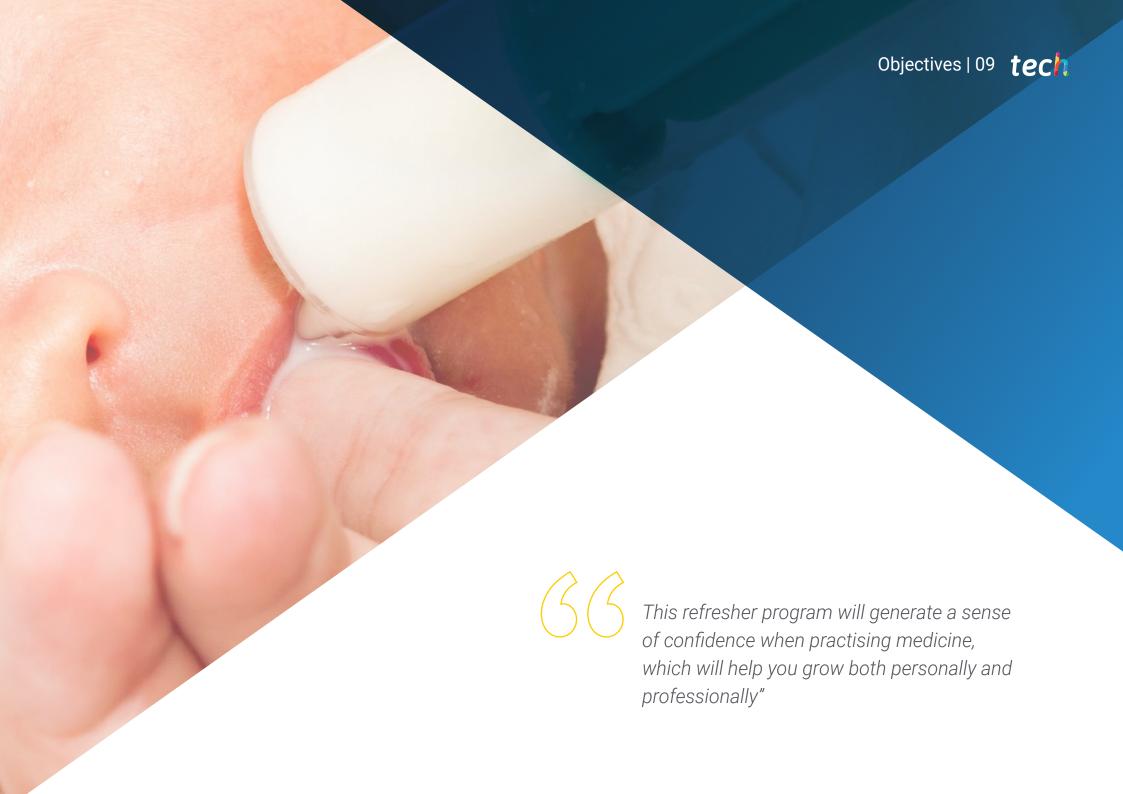
This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise throughout the program.

For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of radiology with extensive teaching experience. This Postgraduate Diploma offers training in simulated environments, which provides an immersive learning experience designed to train for real-life situations.

It includes clinical cases to bring the program as close as possible to the reality of care in medicine.







## tech 10 | Objectives



## **General Objectives**

- Update 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 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 education
- Encourage professional stimulation through continuing training and research
- Train the professional for research into patients with nutritional problems



Seize the opportunity and take the step to get up to date on the latest developments in Pediatric Endocrinology and Nutrition in Medicine"





#### Module 1. Assessment of Nutritional Status and Diet Practical Application

- Analyze the different methods for assessing nutritional status
- Interpret and integrate anthropometric, clinical, biochemical, hematological, immunological, and pharmacological data in the patient's nutritional assessment and dietary-nutritional treatment
- Early detection and assessment of quantitative and qualitative deviations from the nutritional balance due to excess or deficiency
- Describe the composition and utilities of new foods

#### Module 2. Infant Malnutrition

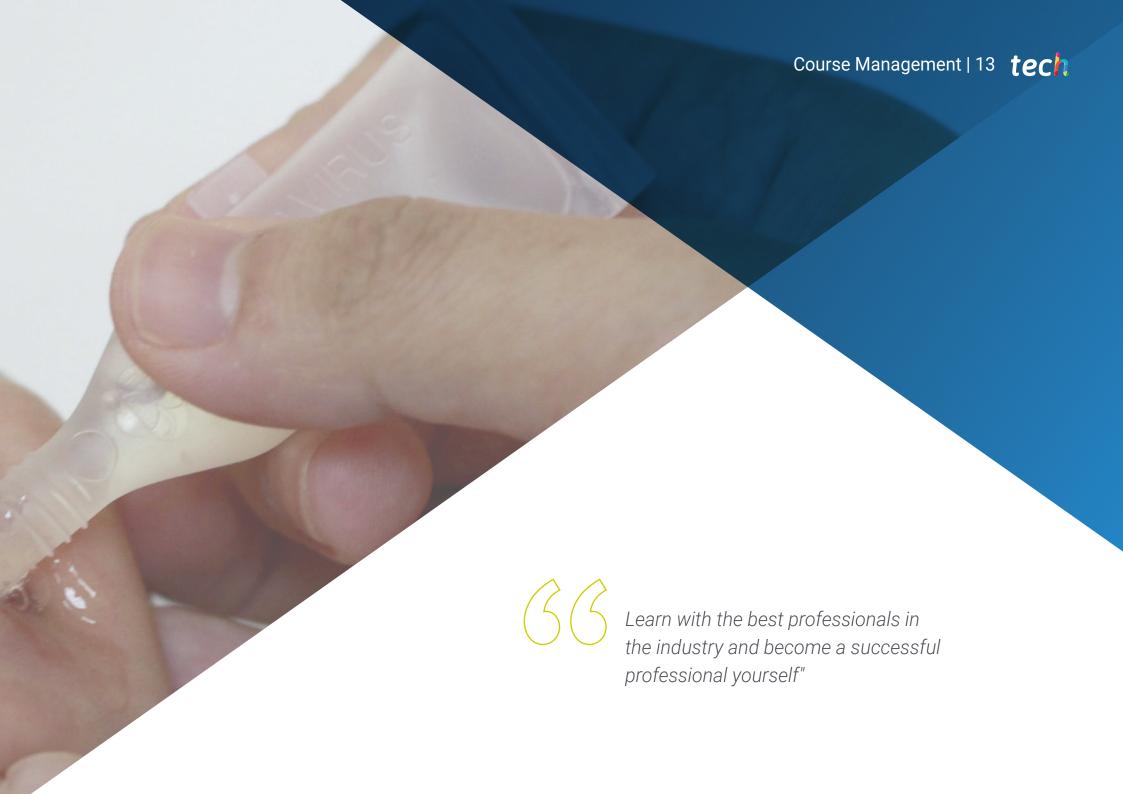
- Explain the relationship of physiology and nutrition in the different stages of infant development
- To describe the nutritional requirements in the different periods of childhood.
- Perform nutritional assessment in pediatrics
- Assess and prescribe physical activity as a factor involved in nutritional status
- Calculate child and adolescent athlete dietary needs and risks
- Reflect on the role of human milk as a functional food
- Describe new formulae used in infant feeding

- · Reflect on new trends and models in infant feeding
- Reflect and identify risk factors in school and adolescent nutrition
- Incorporate the different techniques and products of basic and advanced nutritional support related to pediatric nutrition into clinical practice

#### Module 3. Childhood Nutrition and Pathologies

- Analyze the implications of nutrition in the growth process and in the prevention and treatment of different childhood pathologies
- Explain current trends in the nutrition of infants with delayed intrauterine growth and the implication of nutrition on metabolic diseases
- Identify children at nutritional risk who are eligible for specific support
- Evaluate and monitor the supervision of children on nutritional support





#### **International Guest Director**

Dr. Sumantra Ray is an internationally recognized specialist in **Nutrition** and his main areas of interest are **Nutrition Education in Health Systems** and **Cardiovascular Disease Prevention**. With his outstanding experience in this health field, he has served as a consultant on special assignment for the **Nutrition Management** of the **World Health Organization** Headquarters in Geneva. He has also worked as **Director of Research** in Food Security, Health and Society in the Faculty of Humanities and Social Sciences at the University of Cambridge.

For his constant commitment to the dissemination of **healthy eating habits**, he has received the **Josephine Lansdell Award** from the British Medical Association. Specifically, this recognition highlighted his contributions related to nutrition and **Cardiovascular Prevention**. Also, as an international expert, he has participated in a work program on **Food, Nutrition** and **Education** in India, led by the University of Cambridge and funded by the UK Global Challenges Research Fund.

Dr. Sumantra Ray's studies are worldwide references, focusing on **global food security**, as it is a fundamental aspect for the development of societies. In addition, he has demonstrated his leadership skills as a **Senior Clinical Scientist** at the **Medical Research Council**, focusing on **Nutrition** and **Vascular Health** studies. In this position, he directed an experimental medicine facility dedicated to Human **Nutrition** studies.

Throughout his career he has authored more than 200 scientific publications and has written the Oxford Handbook of Clinical and Health Research, aimed at strengthening the basic research skills of health care workers around the world. In this sense, he has shared his scientific findings in numerous presentations and congresses, in which he has participated in different countries.



## Dr. Ray, Sumantra

- Executive Director and Founder, NNEdPro Global Nutrition and Health
- Centre, Cambridge, UK
- Director of Research in Food Security, Health and Society in the Faculty of Humanities and Social Sciences, University of Cambridge
- Co-Founder and President of the BMJ Scientific Journal Nutrition, Prevention and Health
- Presidential Advisor at the School of Advanced Studies on Food and Nutrition, University of Parma
- Vice President of the Conference of Medical Academic Representatives of the BMA

- Consultant on special assignment for the Nutrition Directorate of the World Health Organization Headquarters in Geneva
- Honorary International Dean of the Cordia Colleges in India
- Senior Clinical Scientist with the Medical Research Council
- Bachelor's Degree in Medicine



## tech 16 | Course Management

#### Management



#### Ms. Aunión Lavarías, María Eugenia

- Pharmacist and Clinical Nutrition Expert
- "Author of the reference book in the field of Clinical Nutrition "Dietetic Management of Overweight in the Pharmacy Office" (Panamerican Medical Publishing House)
- Pharmacist with extensive experience in the public and private sector
- Pharmacist in Valencia Pharmacy
- Pharmacy Assistant in the British pharmacy and health and beauty retail chain Boots, UK
- Degree in Pharmacy and Food Science and Technology. University of Valencia
- Director of the University Course "Dermocosmetics in the Pharmacy Office"







## tech 20 | Structure and Content

#### Module 1. Assessment of Nutritional Status and Diet Practical Application

- 1.1. Bioenergy and Nutrition
  - 1.1.1. Energy Needs
  - 1.1.2. Methods of Assessing Energy Expenditure
- 1.2. Assessment of Nutritional Status
  - 1.2.1. Body Composition Analysis
  - 1.2.2. Clinical Diagnosis. Symptoms and Signs
  - 1.2.3. Biochemical, Hematological and Immunological Methods
- 1.3. Intake Assessment
  - 1.3.1. Methods for Analyzing Food and Nutrient Intake
  - 1.3.2. Direct and Indirect Methods
- 1.4. Update on Nutritional Requirements and Recommended Intakes
- 1.5. Nutrition in a Healthy Adult Objectives and Guidelines Mediterranean Diet
- 1.6. Nutrition in Menopause
- 1.7. Nutrition in the Elderly

#### Module 2. Infant Malnutrition

- 2.1. Child Malnutrition and Undernutrition
  - 2.1.1. Psychosocial Aspects
  - 2.1.2. Pediatric Assessment
  - 2.1.3. Treatment and Monitoring
- 2.2 Nutritional Anemias
  - 2.2.1. Other Nutritional Anemias in Childhood
- 2.3. Vitamin and Trace Element Deficiencies
  - 2.3.1. Vitamins.
  - 2.3.2. Trace Elements
  - 2.3.3. Detection and Treatment
- 2.4. Fats in Infant Diets
  - 2.4.1. Essential fatty acids
- 2.5. Childhood Obesity.





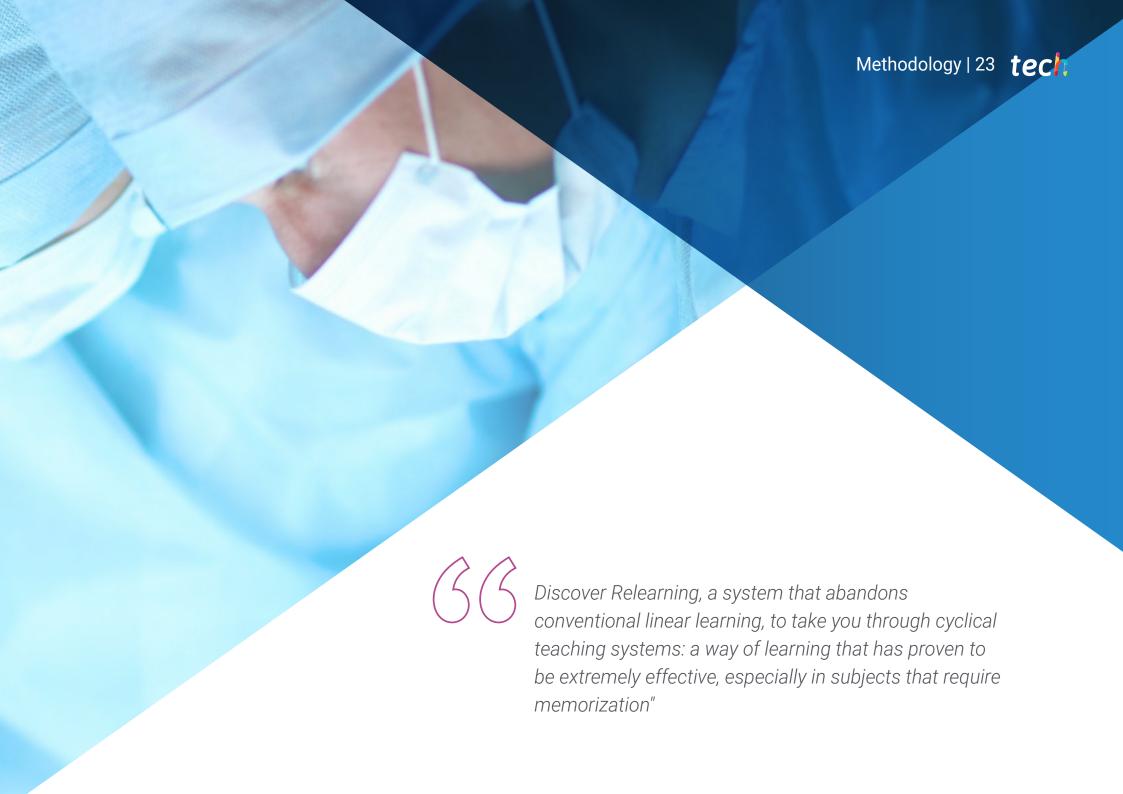
## Structure and Content | 21 tech

- 2.5.1. Prevention
- 2.5.2. Impact of childhood obesity
- 2.5.3. Nutritional Treatment

#### Module 3. Childhood Nutrition and Pathologies

- 3.1. Nutrition of Children with Oral Pathologies
- 3.2. Nutrition in Acute Diarrhea Situation
- 3.3. Nutrition of Infants and Children with Gastroesophageal Reflux
- 3.4. Nutrition in Children with Celiac Disease
- 3.5. Nutrition in Children with Inflammatory Bowel Disease
- 3.6. Nutrition in Children with Digestive Malabsorption Syndrome
- 3.7. Nutrition in Children with Constipation
- 3.8. Nutrition in Children with Liver Disease
- 3.9. Feeding Difficulties and Disorders in Children
  - 3.9.1. Physiological Aspects
  - 3.9.2. Psychological Aspects
- 3.10. Eating Disorders
  - 3.10.1. Anorexia
  - 3.10.2. Bulimia
  - 3.10.3. Others
- 3.11. Inborn Errors of Metabolism
  - 3.11.1. Principles for Dietary Treatment
- 3.12. Nutrition in Dyslipidemias
- 3.13. Nutrition in Diabetic Children
- 3.14. Nutrition in Autistic Children
- 3.15. Nutrition in Children with Cancer
- 3.16. Nutrition in Children with Chronic Pulmonary Pathology
- 3.17. Nutrition in Children with Nephropathy
- 3.18. Nutrition in Children with Food Allergies and/or Intolerances
- 3.19. Childhood and Bone Pathology Nutrition





## 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. 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

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.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-theart 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, 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 28 | 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 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.



#### **Surgical Techniques and Procedures on Video**

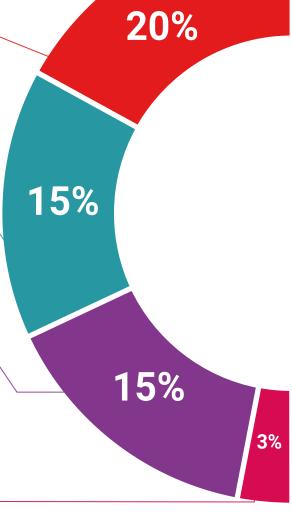
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many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









## tech 32 | Certificate

This **Postgraduate Diploma in Pediatric Endocrinology and Nutrition in Medicine** 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 Diploma** issued by **TECH Technological University** via tracked delivery.

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

Title: Postgraduate Diploma in Pediatric Endocrinology and Nutrition in Medicine Modality: online

Duration: 6 months



#### **POSTGRADUATE DIPLOMA**

in

Pediatric Endocrinology and Nutrition in Medicine

This is a qualification awarded by this University, equivalent to 425 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.

June 17, 2020

Tere Guevara Navarro

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.

ue TECH Code: AFWORD23S techtitute.com/certifi

<sup>\*</sup>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.

technological university

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