



Pediatric Artificial Nutrition and Hospital Dietetics

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 17 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-pediatric-artificial-nutrition-hospital-dietetics

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# 01 Introduction

In pediatric pathology, nutrition plays a fundamental role as a complement of the treatments, since an adequate nutrition will allow to achieve improvements in the recovery of the patients. There are cases in which this diet has to be carried out artificially to ensure that the patients acquire the necessary nutrients. If the professional wants to specialize in this field, do not think twice and learn with TECH.



### tech 06 | Introduction

The main objective of this Postgraduate Diploma in Pediatric Artificial Nutrition and Hospital Dietetics is to offer complementary and quality education to physicians so that they understand which are the main nutritional tools to be applied in their daily practice.

Hospital dietetics and artificial nutrition require the good work of physicians to achieve an adequate use in patients. Therefore, specialization in nutrition is the essential response of these professionals to the care and preventive needs of the population in matters of food and health

This Postgraduate Diploma allows specialization in the field of clinical nutrition in areas of special interest such as nutrigenetics and nutrigenomics, nutrition and obesity, hospital dietetics, and nutritional trends. It offers the possibility of deepening and actualizing your knowledge with the use of the most current educational technology, as well as showing a global vision of artificial nutrition and child malnutrition, while focusing on the most important and innovative aspects of pediatric nutrition and dietetics.

On the other hand, one of the main advantages is that it is developed in a 100% online format, so that professionals can decide at any time from where and when to study, self-managing their study hours and combining them with the rest of their daily obligations.

This **Postgraduate Diploma in Pediatric Artificial Nutrition and Hospital Dietetics** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of clinical cases presented by experts in Pediatric Artificial Nutrition and Hospital Dietetics
- Its graphic, schematic and practical contents provide scientific and assistance information on those disciplines essential for the professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- Special emphasis on the research methodology used in Pediatric Artificial Nutrition and Hospital Dietetics
- 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



Improve your knowledge through this program, where you will find the best didactic material with real clinical cases"



This Postgraduate Diploma is the best investment you can make in the selection of a professional program for two reasons: in addition to upgrading your knowledge in Pediatric Artificial Nutrition and Hospital Dietetics, you will obtain a diploma from TECH Global University"

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

Increase your decision-making confidence by updating your knowledge with this University Expert course.

Take the opportunity to learn about the latest advances in this field and apply it to your daily practice.







### tech 10 | Objectives



### **General Objectives**

- Provide pediatricians with the latest trends in human nutrition, both in health and in pathological situations
- Promote work strategies based on the practical knowledge of the new trends in nutrition and its application to child 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 continuous education and research
- Prepare the professional for research into patients with nutritional problems



Take the step to get up-to-date on the latest developments in Pediatric Artificial Nutrition and Hospital Dietetics for Nurses"





### Module 1. New Developments in Food

- Review the basics of a balanced diet in the different stages of the life cycle, as well as in exercise
- Manage food databases and composition tables
- Review the chemical composition of foods, their physicochemical properties, their nutritional value, their bioavailability, their organoleptic characteristics and the modifications they undergo as a result of technological and culinary processes
- Describe the composition and utilities of new foods
- Explain basic aspects of food microbiology, parasitology, and toxicology related to food safety
- · Analyze the operation of milk banks
- Explain the new developments and available evidence on probiotics and prebiotics in infant feeding

### Module 2. Clinical Nutrition and Hospital Dietetics

- Assess and calculate nutritional requirements in health and disease at any stage of the life cycle
- 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
- Manage the different types of nutritional surveys to assess food intake
- Assess and maintain adequate hygiene and food safety practices, applying current legislation
- Evaluate and prescribe physical activity as a factor involved in nutritional status

#### Module 3. Artificial Nutrition in Pediatrics

- Perform nutritional assessment in pediatrics
- Reflect on the role of human milk as a functional food
- Describe new formulae used in infant feeding
- Incorporate the different techniques and products of basic and advanced nutritional support related to pediatric nutrition into clinical practice
- Evaluate and monitor the supervision of children on nutritional support

#### Module 4. Infant Malnutrition

- Predict patients' nutritional risk
- Early detection and assessment of quantitative and qualitative deviations from the nutritional balance due to excess or deficiency
- · Identify children at nutritional risk who are eligible for specific support
- Identify children suffering from malnutrition
- Describe the correct nutritional support for a malnourished child
- Classify the different types of malnutrition and their impact on the developing organism
- Identify the appropriate nutritional therapy for pediatric patients with chronic pulmonary pathology



This program includes in its teaching staff health professionals of recognized prestige, who belong to the field of Pediatric Artificial Nutrition and Hospital Dietetics and who pour into this specialization the experience of their work.

In addition, renowned specialists, members of prestigious national and international scientific communities, are involved in designing and preparing the program.





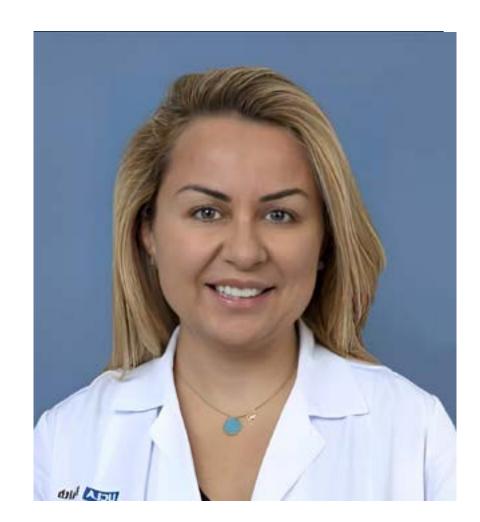
#### **International Guest Director**

Lara Al-Dandachi is one of the few registered dietitians in California, and the rest of the United States, to hold a triple certification in Diabetes Care specialty CDES, Advanced Diabetes Management BC-ADM and in Obesity with Subspecialty Weight Management (CSOWM). Her work as a clinical nutritionist has led her to lead projects such as UCLA Health's Gonda Diabetes Prevention Program, which has received special recognition from the Center for Disease Control and Prevention (CDC) and has allowed her to work with multiple cohorts.

In addition, she coordinates the Obesity Reduction Program (PRO) as Director of Nutrition. From that group, she is in charge of developing and updating the professional curriculum for overweight education in adults and adolescents, as well as training new dietitians. In all of these settings, she counsels her patients on how to improve their lifestyle by incorporating healthy eating habits, increased physical activity and the fundamentals of Integrative Medicine.

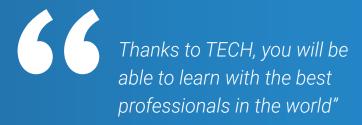
At the same time, Al-Dandachi continually seeks to stay at the forefront of clinical research in Nutrition. She has attended the Harvard Blackburn Course in Obesity Medicine twice. In those participations, she has received the Certificate of Training in Pediatric and Adult Obesity through the Commission on Dietetic Registration (CDR), the accrediting agency of the American Academy of Nutrition and Dietetics.

Also, her mastery of this healthcare field allows her to provide personalized care to patients with rare conditions such as latent Autoimmune Diabetes in adulthood. She has also worked in her Public Health internship as a volunteer, collaborating with underprivileged populations in initiatives for HIV education and prevention, the Head Start program, among others.



### Ms. Al-Dandachi, Lara

- Nutrition Director of the Obesity Reduction Program at UCLA Health, California, United States
- Clinical Dietitian with CareMore Health Plan
- Director of Nutrition at Hollywood Presbyterian Medical Center
- Clinical Dietitian at Sodexho Health Care Services
- · Clinical Dietitian at Beverly Hospital
- Master's Degree in Public Health at Loma Linda University
- Bachelor of Science in Nutrition Science and Dietetics at the American University of Beirut



### tech 14 | Course Management

### Management



### Ms. Aunión Lavarías, María Eugenia

- Pharmacist and Clinical Nutrition Expert
- "Author of the reference book in the field of Clinical Nutrition "Dietary Management of Overweight in the Pharmacy Office".
   (Panamericana 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
- Head of Postgraduate Certificate "Dermocosmetics in the Pharmacy Office"







### tech 18 | Structure and Content

### Module 1. New Developments in Food

- 1.1. Molecular Foundations of Nutrition
- 1.2. Update on Food Composition
- 1.3. Food Composition Tables and Nutritional Databases
- 1.4. Phytochemicals and Non-Nutritive Compounds
- 1.5. New Food
  - 1.5.1. Functional Nutrients and Bioactive Compounds
  - 1.5.2. Probiotics, Prebiotics, and Symbiotics
  - 1.5.3. Quality and Design
- 1.6. Organic food
- 1.7. Transgenic Foods
- 1.8. Water as a Nutrient
- 1.9. Food Safety
  - 1.9.1. Physical Hazards
  - 1.9.2. Chemical Hazards
  - 1.9.3. Microbiological Hazards
- 1.10. New labelling and consumer information
- 1.11. Phytotherapy Applied to Nutritional Pathologies



### Module 2. Clinical Nutrition and Hospital Dietetics

- 2.1. Management of Hospital Nutrition Units
  - 2.1.1. Nutrition in the Hospital Setting
  - 2.1.2. Food Safety in Hospitals
  - 2.1.3. Planning and Managing Hospital Diets. Dietary Code
- 2.2. Hospital Basal Diets
  - 2.2.1. Pediatric Basal Diet
  - 2.2.2. Ovo-Lacto-Vegetarian and Vegan Diet
  - 2.2.3. Diet Adapted to Cultural
- 2.3. Therapeutic Hospital Diets
  - 2.3.1. Uniting Diets
  - 2.3.2. Personalised Menu's
- 2.4. Bidirectional Drug-Nutrient Interaction

#### Module 3. Artificial Nutrition in Pediatrics

- 3.1. Concept of Nutritional Therapy in Pediatrics
  - 3.1.1. Evaluation of Patients in Need of Nutritional Support
  - 3.1.2. Indications
- 3.2. General Information about Enteral and Parenteral Nutrition
  - 3.2.1. Pediatric enteral nutrition
  - 3.2.2. Parenteral Paediatric Nutrition
- 3.3. Dietary Products Used for Sick Children or Children with Special Needs
- 3.4. Implementing and Monitoring Patients with Nutritional Support
  - 3.4.1. Critical Patients
  - 3.4.2. Patients with Neurological Pathologies
- 3.5. Artificial Nutrition at Home
- 3.6. Nutritional Supplements to Support the Conventional Diet
- 3.7. Probiotics and Prebiotics in Infant Feeding

### Module 4. Infant Malnutrition

- 4.1. Childhood Malnutrition and Undernutrition
  - 4.1.1. Psychosocial Aspects
  - 4.1.2. Pediatric Assessment
  - 4.1.3. Treatment and Monitoring
- 4.2. Nutritional Anemias
  - 4.2.1. Other Nutritional Anemias in Childhood
- 4.3. Vitamin and Trace Element Deficiencies
  - 4.3.1. Vitamins
  - 4.3.2. Trace Elements
  - 4.3.3. Detection and Treatment
- 4.4. Fats in Infant Diets
  - 4.4.1. Essential Fatty Acids
- 4.5. Childhood Obesity
  - 4.5.1. Prevention
  - 4.5.2. Impact of Childhood Obesity
  - 4.5.3. Nutritional Treatment



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





### 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

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.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.





### Methodology | 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 applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



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

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



#### **Interactive Summaries**

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive 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 30 | Certificate

This private qualification will allow you to obtain a **Postgraduate Diploma in Pediatric Artificial Nutrition and Hospital Dietetics** 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** 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 Diploma in Pediatric Artificial Nutrition and Hospital Dietetics

Modality: online

Duration: 6 months

Accreditation: 17 ECTS



### Postgraduate Diploma in Pediatric Artificial Nutrition and Hospital Dietetics

This is a private qualification of 510 hours of duration equivalent to 17 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





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