Postgraduate Certificate
Animal Nutrition and Diet for Nutritionists

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Postgraduate Certificate
Animal Nutrition and Diet for Nutritionists

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

Website: **www.techtitute.com/pk/nutrition/postgraduate-certificate/postgraduate-certificate-animal-nutrition-diet-nutritionists**

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01

Introduction

This program's innovative format allows nutritionists to learn autonomously and to make the best use of their time. A unique program, designed by professionals in the field, which stands out for its high scientific rigor.

Become one of the most demanded professionals of the moment: learn from our Postgraduate Certificate in Animal Nutrition and Diet for Nutritionists"

This Postgraduate Certificate in Animal Nutrition and Diet for Nutritionists is unique given its level of specialization and the logical learning sequence in which the content is organized.

The study of animal nutrition is based on two fundamental pillars: animals and food; hence, nutrition is conceived as a set of interrelated phenomena through which a living organism assimilates food and uses it to carry out different processes, such as growing, repairing and maintaining tissues or manufacturing products.

This Postgraduate Certificate is designed for Nutrition Professionals to update and perfect their technical and practical knowledge in this field. A comprehensive and effective Postgraduate Diploma that will help you to achieve a higher level of skills.

An ambitious, broad, structured and interconnected proposal which covers everything from the fundamental and relevant principles of nutrition to feed manufacturing.
A program that includes all the high-level features of a scientific, educational and technological course.

Join the elite with this highly informative and effective program, and open new paths to your professional progress”

In short, it is an ambitious, broad, structured and interconnected proposal which covers everything from the fundamental and relevant principles of nutrition to feed manufacturing. A program that includes all the high-level features of a scientific, educational and technological course.

These are some of its most notable features:

- The latest technology in online teaching software
- A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- Practical cases presented by practising experts
- State-of-the-art interactive video systems.
- Teaching supported by telepractice
- Continuous updating and recycling systems
- Autonomous learning: full compatibility with other occupations
- Practical exercises for self-evaluation and learning verification
- Support groups and educational synergies: questions to the expert, debate and knowledge forums.
- Communication with the teacher and individual reflection work
- Content that is accessible from any fixed or portable device with an Internet connection
- Supplementary documentation databases are permanently available, even after the Postgraduate Certificate

A Postgraduate Certificate that will enable you to work in food production sectors for or from animals, with the solvency of a high-level professional"

Our teaching staff is made up of professionals from different fields related to this specialty. In this way we ensure that we deliver the educational update we are aiming for. A multidisciplinary team of professionals with training and experience in different environments, who will develop the theoretical knowledge in an efficient way, but above all, will bring their practical knowledge from their own experience to the course: one of the differential qualities of this program.

This mastery of the subject matter is complemented by the effectiveness of the methodology used in the design of this Postgraduate Certificate. Developed by a multidisciplinary team of e-learning experts, it integrates the latest advances in educational technology. Thus, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the educational opportunity you need.

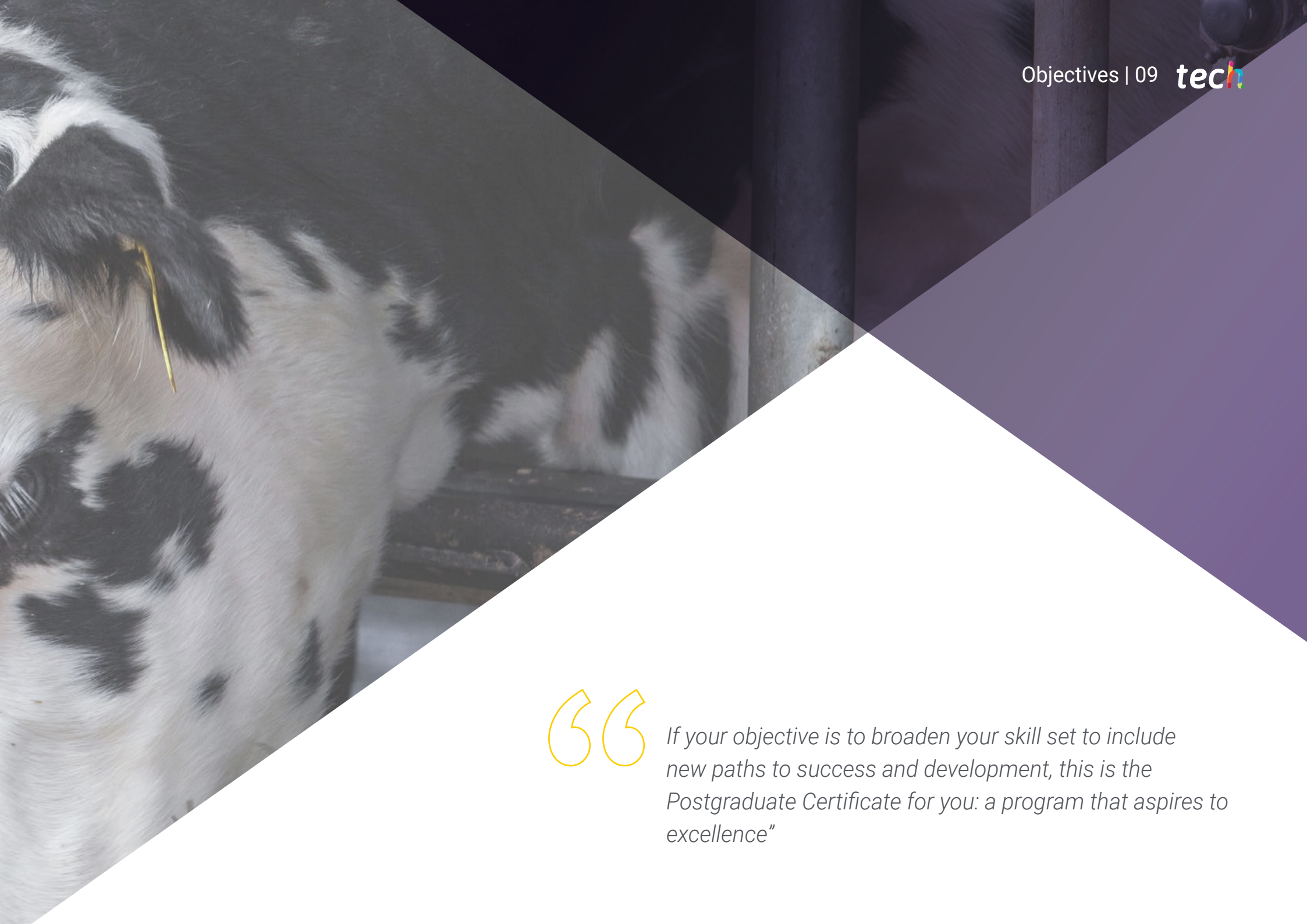
The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, we will use telepractice: with the help of an innovative interactive video system, and learning from an expert, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

With a methodological design based on proven teaching techniques, this Postgraduate Certificate in Animal Nutrition and Diet for Nutritionists will take you through different teaching approaches to allow you to learn in a dynamic and effective way"

02

Objectives

Our objective is to train highly qualified professionals for the working An objective that is complemented, moreover, in a global manner, by promoting human development that lays the foundations for a better society. This objective is focused on helping medical professionals reach a much higher level of expertise and control. A goal that you will be able to achieve thanks to a highly intensive and detailed course.



If your objective is to broaden your skill set to include new paths to success and development, this is the Postgraduate Certificate for you: a program that aspires to excellence"

General Objective

- Determine the properties, use and metabolic transformations of nutrients in relation to the nutritional needs of an animal.
- Provide clear and practical tools so that the Professional can identify and classify the different diets available in the region, and have more elements of judgment to make the most appropriate decision in terms of differential costs, etc.
- Posit a series of technical arguments which allow for a better quality of diet and nutrition and, therefore, improve the end produce (meat or milk).
- Analyze the different raw material components with both positive and negative effects on animal nutrition, and how animals use them for the production of animal protein.
- Identify and understand the different levels of digestibility for each of the various nutritional components according to their origin.
- To analyze the key aspects for the design and creation of diets (food) aimed at achieving the maximum utilization of nutrients by animals intended for animal protein production.
- Provide specialized training on the nutritional requirements for the two main Swine species to be used in animal protein production.
- Develop specialized understanding of the nutritional requirements of the porcine species and the different feeding strategies needed in order to guarantee that they reach the expected welfare and production standards according to their production stage.
- Provide practical, theoretical and specialized knowledge on the physiology of Ruminat digestive systems.
- Analyze the digestive system of ruminants and their particular way of assimilating nutrients from fiber-rich feeds.
- Analyze the main additive groups used in the food production industry, focused on ensuring the quality and performance of different food products.
- Analyze, in a clear way, how the complete animal feed manufacturing process is developed: the phases and processes which feed undergoes to guarantee its nutritional composition, quality and safety.

Specific Objectives

- Describe the digestive systems of the different animal species, recognising the differences in metabolism
- Recognise the nutritive components in raw materials and learn to analyze them.

A pathway to educational and professional growth that will propel you toward greater competitiveness in the job market"

03

Course Management

For our course to be of the highest quality, we are proud to work with a teaching staff of the highest level, chosen for their proven track record. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.

An impressive teaching staff, made up of professionals from different areas of expertise, will be your teachers during the program: a unique opportunity not to be missed"

Management

D. Cuello Ocampo, Carlos Julio

- Veterinarian with extensive experience in the areas of Health, Production, Nutrition and Feeding in the line of Poultry, Swine and Cattle Farming
- Master's Degree in Ration Formulation for Productive Species
- Experience in the use and formulation of additives for animal nutrition.
- Experience in farm management and feed mill consulting for the development of balanced feeds.
- Technical Director in Huvepharma NV Laboratories (Bulgaria)

Professors

D. Cuello Ocampo, Carlos Julio

- Veterinarian with extensive experience in the areas of Health, Production, Nutrition and Feeding in the line of Poultry, Swine and Cattle Farming
- Master's Degree in Ration Formulation for Productive Species
- Experience in the use and formulation of additives for animal nutrition.
- Experience in farm management and feed mill consulting for the development of balanced feeds.
- Technical Director in Huvepharma NV Laboratories (Bulgaria)

Dr. Fernández Mayer, Anibal Enrique

- PhD in Veterinary Science
- Postdoctorate of Veterinary Science, with a focus on: Animal Nutrition in Institute of Animal Science (IAS)
- Agricultural Engineer, National University of La Plata (1975-1979), Buenos Aires.

Dr. Sarmiento García, Ainhoa

- Phd in Science and Chemical Technology. (09/ 09.2017 / 2019) University of Salamanca.
- University Master's in Innovation of Biomedical Sciences and Health. (10- 10.2015 - 2016) University of Leon
- Degree in Veterinary Medicine. (09- 10.2015 - 2014) University of Leon

Dr. Páez Bernal, Luis Ernesto

- PhD in Monogastric Nutrition and Production
- Doctor Scientiae in Zootechnics, Nutrition and Monogastric Production. Federal University of Viçosa (UFV), MG, Brazil. 2008, MSc in Zootechnics, Nutrition and Monogastric Production. Federal University of Viçosa (UFV), MG, Brazil. 2004
- Medical veterinary with a Master's Degree in Monogastric Nutrition and Production
- Lecturer

Lic. Ordoñez Gómez, Ciro Alberto

- Animal technician
- Master's Degree in Animal Nutrition
- University Professor in the area of animal nutrition focusing on ruminants

Dña. Portillo Hoyos, Diana Paola

- Professional Graduated from the National University of Colombia.

D. Rodríguez Patiño, Leonardo

- Animal technician with a Master's Degree in Animal Nutrition

04

Structure and Content

The contents of this program have been developed by the different experts in this course with a clear purpose: to ensure that our students acquire each and every one of the necessary skills to become true experts in this field.

A complete and well-structured program that will take you to the highest standards of quality and success.

A comprehensive teaching program, structured in well-developed teaching units, oriented towards learning that is compatible with your personal and professional life"

Module 1. Introduction to Animal Nutrition and Diet

1.1. Animal Nutrition and Diet for Nutritionists Concepts
- 1.1.1. Introduction to the Concepts of Nutrition and Diet
- 1.1.2. Nutrients: Definition and Characteristics
- 1.1.3. The Importance of Animal Nutrition

1.2. Digestive Systems and Diet Adjustment
- 1.2.1. Digestive System and the Digestion Process in Birds
- 1.2.2. Digestive System and the Digestion Process in Pigs
- 1.2.3. Digestive System and the Digestion Process in Ruminants
- 1.2.4. Digestive System and the Digestion Process in Fiish (aquatic poikilotherms)
- 1.2.5. Gastrointestinal Functionality in Animal Nutrition and Health

1.3. Digestive System in Ruminants
- 1.3.1. The Rumen as a Source of Nutrients
- 1.3.2. Ruminal Physiology
- 1.3.3. The Digestion Process in Ruminants
- 1.3.4. Volatile Fatty Acids
- 1.3.5. Protein of Bacterial Origin

1.4. Measurements of Nutritional Value of Foods and Evaluation Methods
- 1.4.1. Characterization of Context
- 1.4.2. Physical and Chemical Characterization
- 1.4.3. Obtaining Information on the Composition of Nutrients:
- 1.4.4. Weende Proximate Analysis
- 1.4.5. Van Soest Analysis
  - 1.4.5.1. Analysis Using Specialized Analytical Methods
  - 1.4.5.2. Heat Meter Pump
  - 1.4.5.3. Amino Acid Analysis
  - 1.4.5.4. Atomic Absorption Spectrophotometry
  - 1.4.5.5. Automized Analysis Equipment
  - 1.4.5.6. Biological and Nutritional Characterization

1.5. Forms of Food Energy
- 1.5.1. Forms of Energy Expression
- 1.5.2. Gross Energy
- 1.5.3. Digestive Energy
- 1.5.4. Metabolizable Energy
- 1.5.5. Net Energy
- 1.5.6. Calculation of Values (EB-ED-EM-EN) according to the NRC and ARC Systems

1.6. Energy Content of Food Ingredients
- 1.6.1. Energy Sources
- 1.6.2. Energy and Consumption
- 1.6.3. Energy Balance.
- 1.6.4. Energetic Density

1.7. Protein and Amino Acid Content of Food Ingredients
- 1.7.1. Animal Protein Functions
- 1.7.2. Protein Food Resources
  - 1.7.2.1. Plant Sources - Oilseeds
  - 1.7.2.2. Plant Sources - Legumes
  - 1.7.2.3. Animal Sources

1.8. Protein Quality and Digestibily
- 1.8.1. Protein Quality
  - 1.8.1.1. Amino Acid Profile
- 1.8.2. Digestibility
  - 1.8.2.1. Apparent Digestibility
  - 1.8.2.2. Real Digestibility
  - 1.8.2.3. Nitrogen Balance
  - 1.8.2.4. Biological Value
  - 1.8.2.5. Net Usage of Protein
  - 1.8.2.6. Protein Efficiency Ratio or Rate
  - 1.8.2.7. Chemical Score
  - 1.8.2.8. Protein Digestion

1.9. Other Important Nutrients in Veterinary Nutrition
- 1.9.1. Minerals and Microminerals
  - 1.9.1.1. Classification, Functions, General Requirements
  - 1.9.1.2. Principal Minerals: Calcium, Phosphorous, Magnesium, Sodium
  - 1.9.1.3. Microminerals: Cobalt, Iodine.
- 1.9.2. Vitamins.
- 1.9.3. Fibre
- 1.9.4. Water:

1.10. Nomenclature and Classification of Foods (NRC)
- 1.10.1. Forage or Dry Roughage
- 1.10.2. Forage or Fresh Coarse Feed
- 1.10.3. Silage
- 1.10.4. Concentrated Energy
- 1.10.5. Protein Energy
- 1.10.6. Mineral Supplement
- 1.10.7. Vitamin Supplement
- 1.10.8. Non-nutritious Additives

This program will allow you to comfortably advance in your career”

05

Methodology

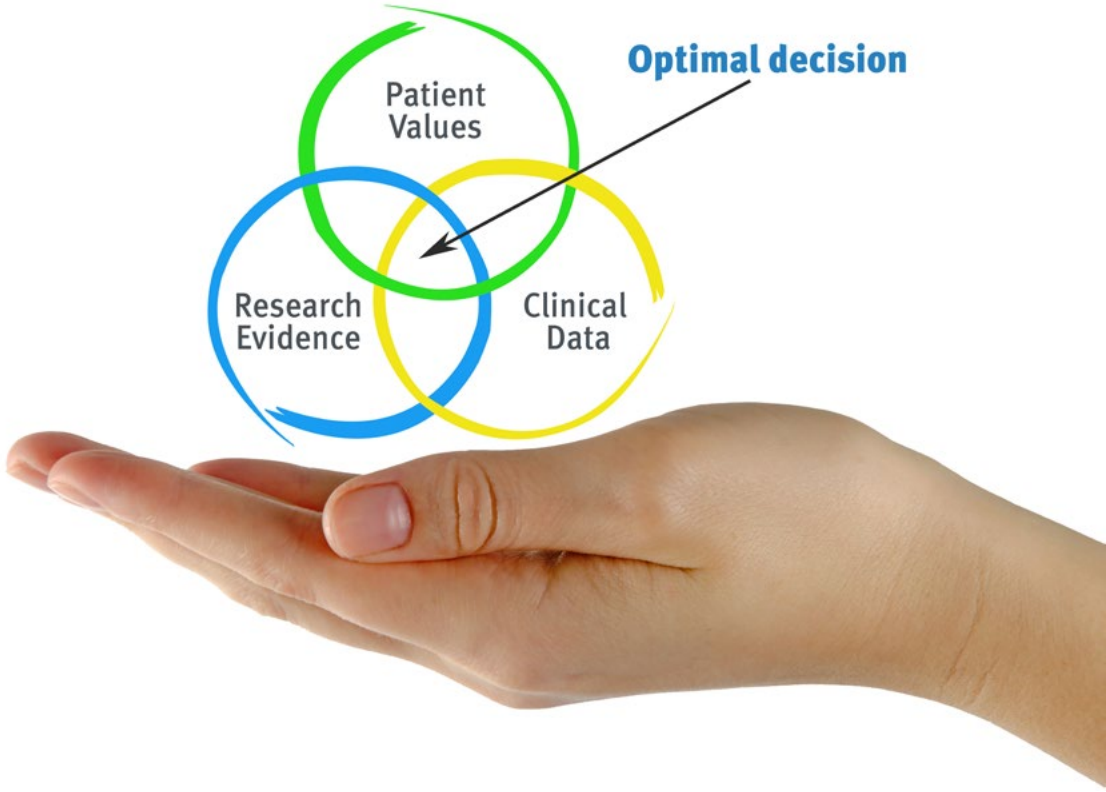
This program provides you with a different way of learning. Our methodology uses a cyclical learning approach: Relearning. This teaching system is used in the most prestigious medical schools in the world, and major publications such as the New England Journal of Medicine have considered it to be one of the most effective.

Discover Re-learning, 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 we use the Case Method

In a given clinical situation, what would you do? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Nutritionists 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 potential 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 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:

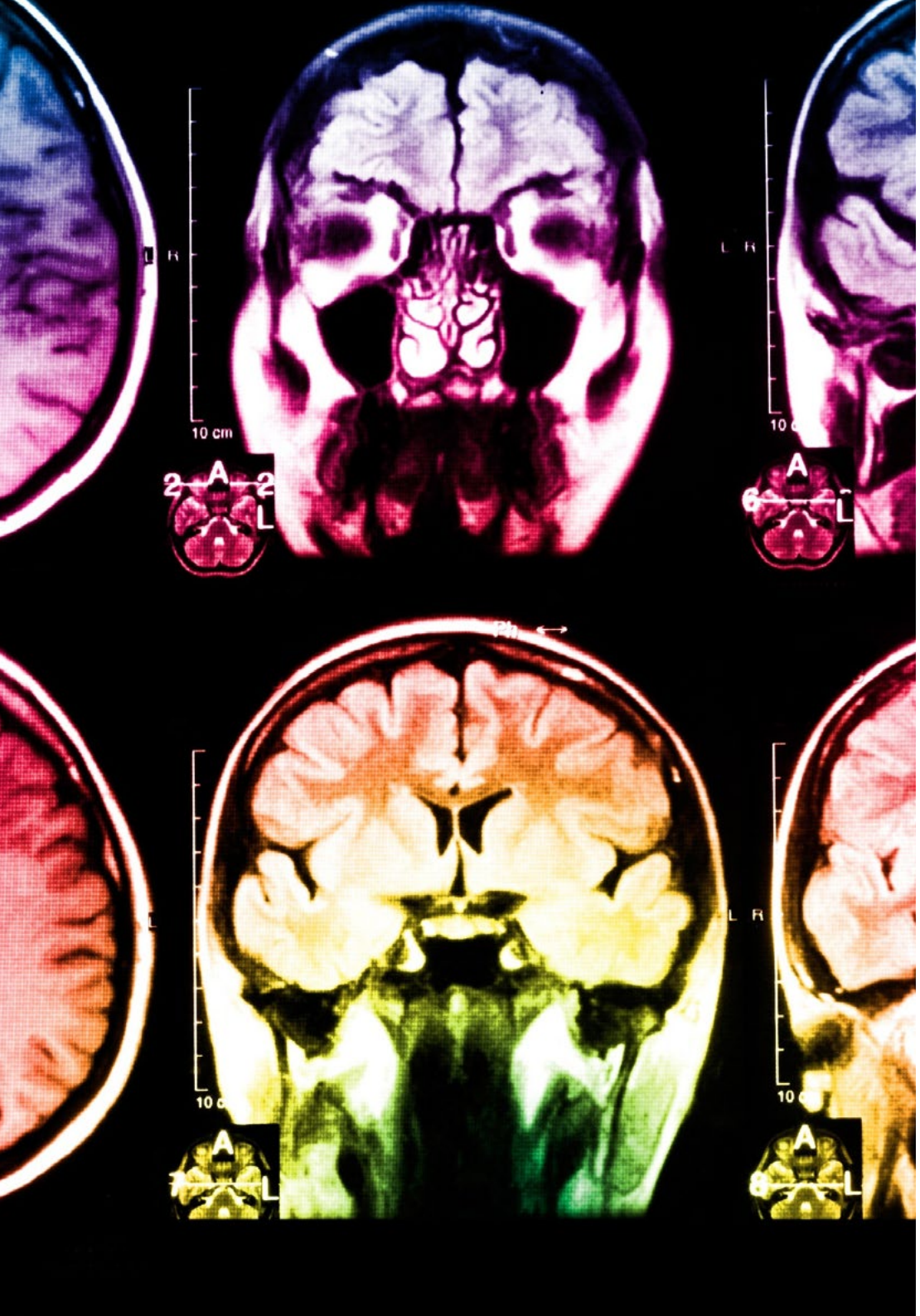
1. Nutritionists who follow this method not only grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
2. The learning is solidly focused on practical skills that allow the nutritionist to better integrate the knowledge into clinical practice.
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.

Re-learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our 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, which represent a real revolution with respect to simply studying and analyzing 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.



At the forefront of world teaching, the Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have have trained more than 45,000 nutritionists with unprecedented success, in all clinical specialties regardless of the workload. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Re-learning 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 (we 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.

In this program you will have access to the best educational material, prepared with you 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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.

Rehabilitation techniques and clinical procedures on video

We bring you closer to the latest techniques, to the latest educational advances, to the forefront of current affairs in biomedicine. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.

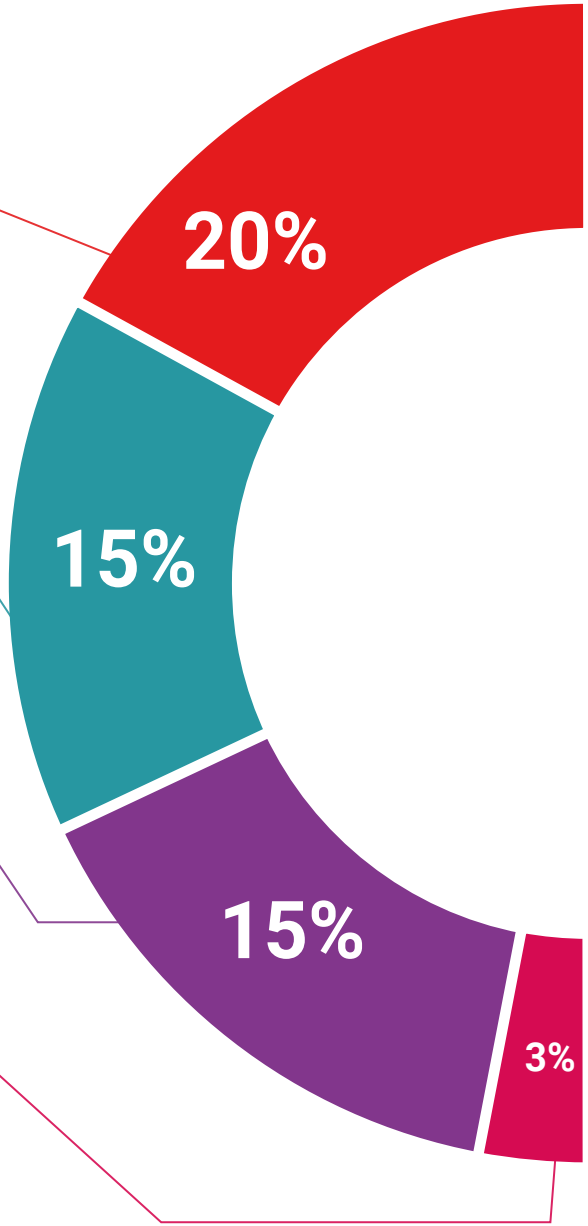
Interactive Summaries

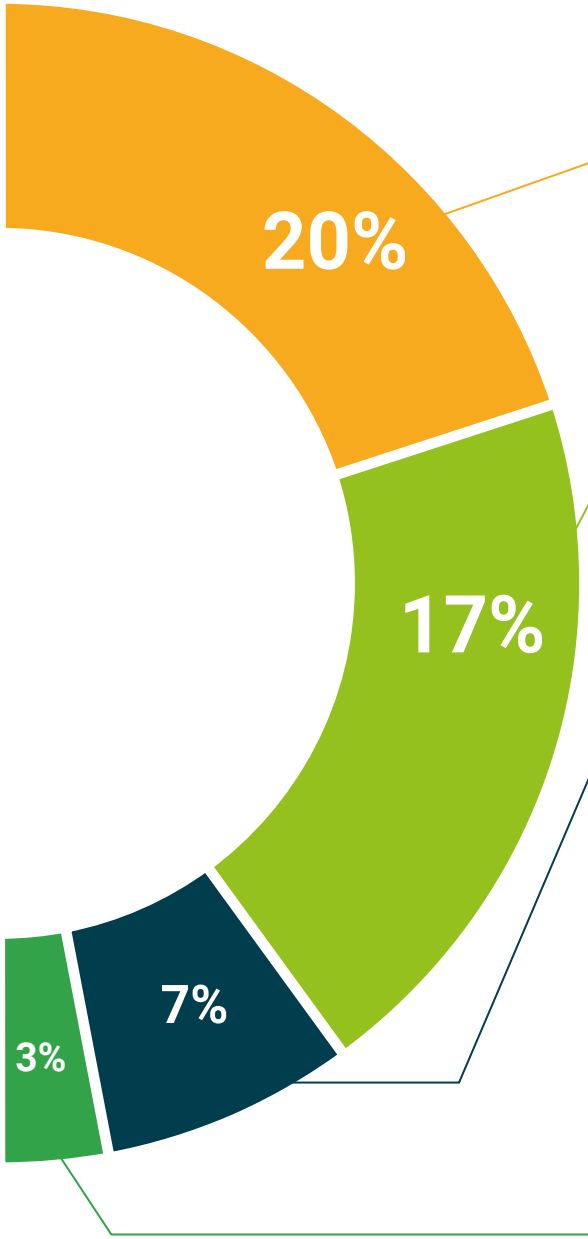
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge. This unique training system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Additional Reading

By participating in this course you will have access to a virtual library where you will be able to complement and keep your training up-to-date with the latest articles on the subject, consensus documents, international guidelines...

An invaluable resource that you will be able to use even when you finish your course with us.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. That is why we will present you with real case scenarios in which the expert will guide you through primary care practice, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

Testing & Re-testing

We periodically evaluate and re-evaluate your knowledge throughout the program through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.

Learning from an expert

Observing an expert performing a task is the most effective way to learn. It is called Learning from an expert: a proven way to reinforce knowledge and recall what has been learned. For this reason, we include this type of learning in our course 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 our future difficult decisions.

Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.

06

Certificate

Through a different and stimulating learning experience, you will be able to gain the necessary skills to take a big step in your education. An opportunity to progress, with the support and monitoring of a modern and specialized university, which will propel you to another professional level.

Add to your qualifications this Postgraduate Certificate in Animal Nutrition and Diet for Nutritionists: a highly valued certificate for any professional in this field"

This **Postgraduate Certificate** in **Animal Nutrition and Diet for Nutritionists** contains the most complete and up-to-date scientific program on the market.

After students have passed the assessments, they will receive their **Postgraduate Certificate** issued by **TECH Technological University and sent by certified mail.**

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

Title: **Postgraduate Certificate in Animal Nutrition and Diet for Nutritionists**

ECTS: **6**

Official Number of Hours: **150**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Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Animal Nutrition and Diet for Nutritionists

This is a qualification awarded by this University, with 7 ECTS credits and equivalent to 150 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

Dean

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

Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

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