Advanced Master's Degree
Obesity and Diabetes

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Advanced Master's Degree
Obesity and Diabetes

- Modality: **online**
- Duration: **2 years**
- Certificate: **TECH Global University**
- Credits: **120 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/medicine/advanced-master-degree/advanced-master-degree-obesity-diabetes

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01

Introduction

Obesity is one of the great pandemics of the 21st century, especially in the most developed societies, so its prevention and care is of great importance, since it can bring with it other types of diseases, such as diabetes, which require chronic treatment. For this reason, the specialization of medical professionals is of vital importance to ensure that patients acquire healthy habits that will improve their state of health.

Acquire among your professional competences the specialization in Obesity and Diabetes, a unique opportunity to help your patients to control their diet and prevent certain diseases"

Obesity is a health problem that affects people all over the world, although it has a higher incidence in more developed countries, largely due to the lifestyle of citizens and the ability to acquire higher calorie foods. Even so, the World Health Organization (WHO) estimates that it may affect 650 million subjects worldwide, with a related mortality of about 2.8 million subjects per year.

The increase in its incidence, the accompanying comorbidities that lead to a significant increase in mortality, especially cardiovascular and cancer mortality, the various medical and surgical treatments available, together with the exponential increase in health care costs it entails, have made obesity a permanent focus of attention.

With this in mind, preventing obesity is essential. Through the use of a multidisciplinary approach, the aim is to implement lifestyle changes, especially physical activity and dietary patterns, and should be introduced as early on in the process as possible. Thus, health education has become essential to prevent situations of obesity.

However, it is also necessary to take into account that obesity can lead to the appearance of other associated diseases, which can cause serious damage to people's health. In this case, with this Advanced Master's Degree we want to focus on Diabetes, since it is a complex and chronic process that requires a comprehensive approach by the physician, which goes beyond glycemic control. In fact, type 2 diabetes is the most widespread form of this disease in adult patients, with overweight and obesity as risk factors. Therefore, a healthy lifestyle can prevent their appearance.

This Advanced Master's Degree offers the possibility of deepening and updating knowledge in this area, with the use of the latest educational technology. It offers a global vision of Obesity and Diabetes, while focusing on the most important and innovative aspects to prevent and treat these diseases. All this in a 100% online specialization, which will allow you to expand your knowledge and, therefore, your professional skills and competencies in a simple way, adapting your study time to the rest of your daily obligations.

This **Advanced Master's Degree in Obesity and Diabetes** contains the most complete and up to date scientific program on the market. The most salient features of the specialization are:

- The development of clinical cases presented by experts in Obesity and Diabetes
- The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Diagnostic and therapeutic novelties on Obesity and Diabetes
- The presentation of hands-on workshops on procedures, diagnostic and therapeutic techniques
- Real images in high resolution and practical exercises where the self-evaluation 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 evidence-based medicine and research methodologies
- Theoretical lessons, questions to the expert, forums for discussion of controversial issues and individual reflection papers
- The availability of access to content from any fixed or portable device with an Internet connection

This program has been designed for professionals seeking the highest qualification, with the best didactic material, working on real clinical cases and learning from the best professionals in the sector"

This Advanced Master's Degree is the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in Obesity and Diabetes, you will obtain a degree from TECH Global University

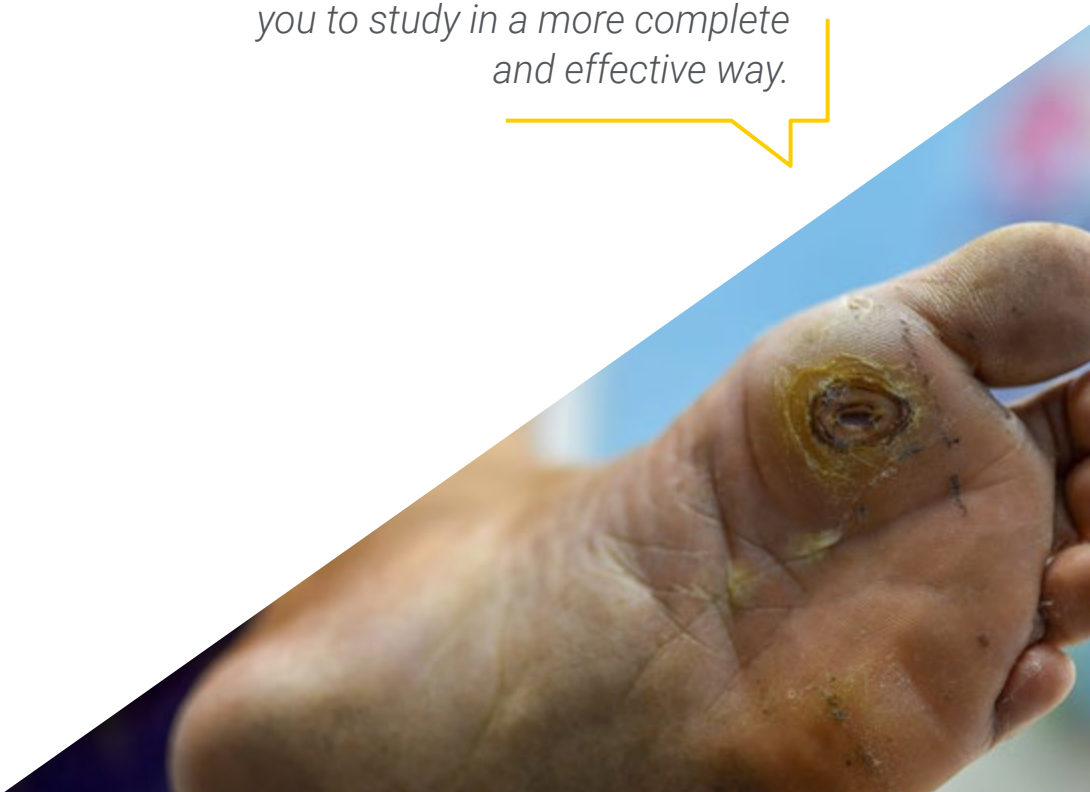
Increase your confidence in decision making by updating your knowledge through this Grand Master, a program created to train the best.

We offer you the best teaching methodology, with a multitude of practical contents that will allow you to study in a more complete and effective way.

Its teaching staff includes health professionals from the medical field, who contribute their work experience to this specialization, as well as renowned specialists from leading scientific societies.

Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning, that is, a simulated environment that will provide an immersive learning programmed to train in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the physician must try to solve the different professional practice situations that arise throughout the specialization. For this, the professional will be assisted by an innovative interactive video system developed by recognized experts in the field of Obesity and Diabetes, with extensive teaching experience.



02

Objectives

This Advanced Master's Degree in Obesity and Diabetes is oriented to offer a complete, detailed and updated vision on this subject to physicians who work with patients suffering from this disease. A high-level specialization to offer detailed expertise to professionals.

This Advanced Master's Degree will allow you to acquire or update your knowledge in Obesity and Diabetes, so that you will be able to offer personalized care to your patients"

General Objectives

- Update the physician's knowledge of 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 the pathologies of both children and adults, where nutrition plays a fundamental role in their therapy
- 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 training
- Encourage professional stimulation through continuing education and research
- Act as a leading professional specialized in Diabetes
- Deepen the knowledge related to the importance of diabetes in our environment, the different states of altered glucose metabolism, its classification and diagnostic criteria
- Deepen the understanding of the complex mechanisms of glycemia regulation; and improve the knowledge of the bases of the physiopathogenesis of type 1 and type 2 diabetes, in order to understand the existing therapeutic approaches and its prevention
- Acquire the knowledge and skills necessary for a comprehensive assessment of the person with diabetes, with special reference to acute complications of glycemic control
- Acquire the knowledge and skills necessary to deepen the chronic complications of diabetes, in order to acquire an adequate management of them
- Know the chronic macrovascular complications related to Diabetes, since they are the main cause of mortality in patients with Diabetes
- Expand knowledge of the skills necessary for the global treatment (nutritional, exercise, healthy habits and therapeutic measures) of the patient with Diabetes
- Acquire the necessary knowledge about the pharmacological treatment of type 2 diabetes in order to be able to prescribe the best pharmacological strategy for each patient with type 2 diabetes according to their comorbidities
- Acquire the knowledge and skills necessary to be able to handle the different blood glucose monitoring devices, as well as insulin injection devices (continuous insulin perfusion pumps) and to be able to interpret the data resulting from these devices
- Attain the knowledge and skills necessary to expertly deal with the treatment of patients with diabetes in special situations such as the elderly, institutionalized, hospitalized, during travel, in the rural world and at work
- Acquire the necessary knowledge and skills of diabetes education, as part of the treatment of diabetes, to facilitate the knowledge, skill and ability necessary for self-management

Specific Objectives

Module 1. Physiology of Appetite and Weight Control Pathophysiology

- Expand understanding of the basic principles of energy balance
- Acquire skills in the calculation of the energy balance
- Analyze the different methods for assessing nutritional status
- Review new pathways, hormonal, metabolic, etc., that regulate neuroendocrine function, energy homeostasis, and metabolism in humans
- Analyze subcutaneous adipose tissue and the role of dysfunctional adipose tissue in the development of obesity
- Explain the role of the intestinal microbiota and its implications in diseases
- Review the basics of a balanced diet

Module 2. Etiopathogenesis of Obesity

- Know in depth the genetic factors of monogenic and polygenic obesity
- Acquire knowledge about how epigenetics may influence the development of Obesity
- List the different causes of secondary obesity in relation to endocrinopathies and drugs
- Analyze advances in nutritional genomics, both in nutrigenetics and nutrigenomics
- Establish the relationship between environmental factors and the development of obesity
- Review and learn about the various endocrine disruptors and their role as obesogenic agents
- Explain the connection between obesity and level of economic status
- Study how circadian rhythm alterations influence the expression of enzymes and hormones involved in metabolism
- Review the risk of loss of muscle mass and subsequent development of sarcopenia in relation to obesity

Module 3. History Definition. Diagnosis and Classification. Epidemiology

- Gain an in-depth understanding of obesity as a clinical condition and its historical evolution
- Interpretation and integration of anthropometric data
- Know and be able to interpret the impact-based obesity classifications (ABCD) and the Edmonton system
- Know the epidemiology of obesity in childhood, adulthood and its complications
- Identify that this is more of a clinical syndrome that requires an exhaustive phenotypic characterization
- Correctly evaluate a patient with Obesity, throughout the different periods of life
- Interpreting the existence of the so-called metabolically healthy obese

Module 4. Comorbidities of Obesity

- Become familiar with the concept of comorbidity associated with obesity
- Deepen understanding of the pathophysiology of these comorbidities
- Study the different endocrine-metabolic and cardiovascular comorbidities
- Identify the pathophysiological mechanisms linking hypertension and obesity
- Recognize the relationship between lipid disorders and obesity, especially atherogenic dyslipidemia
- Specialize in non-metabolic and non-cardiovascular comorbidities associated with obesity, especially respiratory and digestive comorbidities, etc.
- Review the basic concepts on the available scientific evidence of these pathologies and especially the relationship between obesity and cancer
- Review the most current knowledge on covid-19 infection in obese patients

Module 5. Prevention of Obesity and its Comorbidities

- Identify the high prevalence of overweight and obesity in childhood and its importance for the association of other diseases, such as hypertension and diabetes
- Establish recommendations for a healthier lifestyle to prevent childhood overweight and obesity
- Analyze peculiarities of obesity in women
- Review the costs of obesity in different countries and the strategies for Obesity Prevention in Health Systems
- Insist on the interaction between obesity and type 2 diabetes mellitus
- Comprehensive knowledge of the therapeutic approach, insisting on the importance of a multidisciplinary approach

Module 6. Dietary treatment of obesity

- Conduct a review of the evidence regarding carbohydrate and protein intake in the prevention and treatment of obesity
- Deepen the understanding of the basis of the relationship between dietary fat and body weight regulation
- Study eating patterns and the balanced hypocaloric diet as a dietary treatment for obesity
- Acquire knowledge about exchange diets and how to catalog the different generic foods
- Review the Mediterranean diet as a model for the prevention and treatment of obesity
- Review and understand the meaning of light foods and functional foods
- Become familiar with the history and current status of miracle diets and their impact on individuals and society as a whole
- Explain the methodology of a diet to maintain the lost weight
- Learning about very low-calorie diets
- Acquire skills in the use of dietary treatment as therapy for comorbidities

Module 7. Physical Activity and Obesity

- In-depth knowledge of the concepts related to physical activity
- Perform a functional assessment based on scientific evidence
- Establish a physical activity program based on the assessment
- Understand the different types of physical activity programs appropriate for age and physical condition
- Identify exercises with low risk of injury for obese patients
- Physical activity as a habit to prevent Obesity
- Approach of physiotherapy in the comorbidities of obesity and its transcendence in the treatment of these comorbidities
- Deepen the work of physiotherapy in surgical approaches in obesity (pre- and post-surgery)

Module 8. Psychological and Psychiatric Aspects of Obesity

- Obtain an overview of the contributions from the psychological area aimed at increasing the chances of success in multidisciplinary intervention in overweight and obesity
- Make a brief historical review of the different social and cultural considerations of the phenomenon of Obesity from prehistoric times to the present day
- Recognize the main comorbid psychiatric disorders associated with obesity and psychopathology related to eating disorders
- Deepen the knowledge and management of binge eating disorder and its relationship with obesity and overweight
- Learn techniques that promote change in patients towards healthier lifestyles
- Broaden knowledge of psychological examinations before and after bariatric surgery
- Present the psychotherapeutic approach from the cognitive-behavioral therapy approach that has proven to be the most effective treatment to address obesity in both children and adults.
- Stress the importance of early detection of the psychological and educational variables that contribute to the development of eating disorders and obesity in order to carry out preventive activities

Module 9. Pharmacological Treatment of Obesity

- Identify the pharmacological arsenal currently available to treat obesity
- Establish the indications for anti-obesity drugs in each patient
- Analyze how its effect is controlled and the results that we can expect
- Recognize other drugs already marketed in other countries such as the United States
- Present those drugs that produce weight loss, without being their main reason for use
- Miracle drugs that have been used in the treatment of obesity are reviewed
- Know in depth the new lines of research in Precision Medicine
- Establish the pharmacokinetic variations caused in obese patients by excess body fat and those that appear after bariatric surgery

Module 10. Surgical Treatment of Obesity

- Correctly address the indications and contraindications of bariatric surgery
- Establish the preoperative protocol, with surgical risk stratification
- Recognize all the techniques of bariatric surgery
- Identify the appropriate technique for each patient
- In-depth knowledge of the endoscopic therapies currently in use, their indications and clinical management
- Knowing how to indicate metabolic surgery
- Post-operative management of the operated patient
- Identify the possible reasons for urgency after bariatric surgery
- Familiarization in the follow-up of pregnancy after bariatric surgery

Module 11. The Concept of Diabetes. Epidemiology

- Expand and acquire the latest skills and news about Diabetes as a chronic, complex and progressive disease
- Acquire knowledge of the classification of Diabetes, and the wide spectrum of etiologies that lead to its development
- Deepen the epidemiology of type 1 diabetes and its determinants
- Deepen the epidemiological impact of type 2 diabetes as an epidemic in our environment
- Acquire the knowledge and skills to detect diabetes early in the population, through screening techniques
- Incorporate the concept of public health in Diabetes

Module 12. Pathophysiology of Diabetes

- Deepen the basic knowledge of glucose homeostasis
- Analyze the etiopathogenic mechanisms of type 1 diabetes
- Know what insulinitis is and how it occurs in type 1 diabetes
- Deepen in the etiopathogenic mechanisms of type 2 diabetes that will serve as therapeutic targets for the same
- Understand the essential role of adipose tissue and its excess (obesity) in the genesis of type 2 diabetes
- Acquire the knowledge and skills of insulin resistance measurement
- Studying the mediating role of inflammation between obesity and diabetes
- Know the alterations in the regulation of gastrointestinal hormones in type 2 diabetes and what is the incretin effect
- Learn about a new avenue of research in the field of diabetes etiopathogenesis: Intestinal microbiota
- Delve into new mechanisms involved in type 2 diabetes, such as the role of the central nervous system as an organ regulating body weight
- Learn what is the natural history of type 2 diabetes
- Knowing how to prevent or delay the development of type 1 and type 2 diabetes, by acting on the etiopathogenic mechanisms involved

Module 13. Evaluation of diabetes and its comorbidities

- Study in depth the concept of comprehensive assessment of diabetes in order to have a global vision of the patient with diabetes
- Acquire the necessary knowledge to transmit to the patient the priorities in the therapeutic approach
- Acquire the skills to know the patient's preferences, social, economic and cultural environment and expectations in the treatment of Diabetes
- Know the importance of glycemic control
- Learn glycemic control mediation techniques and individualized targets for each patient
- Acquire a mastery of hypoglycemia, both from the pathophysiological point of view, as well as detection, prevention and treatment
- Knowing the consequences of hypoglycemia on the patient
- Differentiate acute hyperglycemic complications for their correct therapeutic approach
- Learn to detect precipitating factors of acute hyperglycemic complications
- Acquire the knowledge and skills for the assessment of cardiovascular risk in the diabetic patient
- Learning how to screen for cardiovascular risk factors
- Identify other endocrinological entities with diabetes
- Acquire knowledge and skills to assess the social and psychological aspects of diabetes

Module 14. Diabetes Complications. Classification

- Learn the etiopathogenic pathways of diabetes complications in order to understand the evolutionary course of these complications and their therapeutic targets
- Learn the classification of the chronic complications of diabetes according to whether the small vessels or large vessels are mainly affected and according to the organ affected
- Acquire epidemiological knowledge about diabetic nephropathy in order to be able to assess the importance of its prevention and diagnosis
- Learn the pathophysiological basis and risk factors involved in diabetic nephropathy
- Know the evolutionary stages of kidney disease and the current classification of kidney disease
- Know when and how screening for DN should be performed in the diabetic population
- Learn the specific treatments for DN
- Acquire epidemiological knowledge about DR in order to be able to assess the importance of its prevention and diagnosis
- Learn the pathophysiological basis and risk factors involved in DR
- Know the evolutionary stages of DR and its current classification
- Know when and how DR screening should be performed in the diabetic population
- Learn about specific DR treatments and new avenues of research in this field
- Acquire epidemiological knowledge about diabetic nephropathy in order to be able to assess the importance of its prevention and diagnosis
- Learn the pathophysiological basis and risk factors involved in diabetic neuropathy (NeuroD)
- Know the evolutionary stages of NeuroD and its current classification

Module 15. Macrovascular complications of diabetes and other medical entities

- Deepen the current data on the epidemiology of macrovascular disease in diabetes
- Deepen the current data on the epidemiology of hypertension in diabetes
- Deepen the knowledge of data on the epidemiology of dyslipidemia in diabetes
- Deepen the knowledge of current data on the epidemiology of smoking in diabetes
- Learn how to design a smoking cessation program
- Acquire the knowledge and skills necessary to screen for coronary heart disease in diabetics
- Acquire the knowledge and skills necessary for the screening of diabetic heart failure
- Acquire the knowledge and skills for the initial management of the diabetic heart failure patient
- Acquire the knowledge and skills necessary to perform screening tests for peripheral arterial disease in diabetics
- Learn to critically interpret glycemic control targets in the diabetic patient in secondary prevention
- Acquire the knowledge and skills necessary to develop the criteria for referral to a hepatologist for a patient with suspected hepatic steatosis
- Acquire the knowledge and skills necessary for the assessment of chronic lung disease in diabetics
- Acquire knowledge about the prevalence and association between diabetes and cancer
- Acquire the knowledge and skills necessary for the screening of mood disorders, especially depression in diabetic patients

Module 16. Diabetes Management (I)

- Specialize in the integral treatment of Diabetes
- Learning the global management of obesity in the diabetic patient
- Know the pharmacological alternatives for the treatment of obesity in patients with diabetes
- Learn what metabolic surgery is, its indications in diabetic patients and its results
- Know the most indicated antihypertensive treatments for diabetic patients and their prescription
- Learn the management of diabetic dyslipidemia, know the indications for its treatment and the drugs available
- Learn how to prescribe a nutritional plan adapted to each person with type 1 or type 2 diabetes
- Acquire the knowledge to prescribe a structured exercise program for the patient with Diabetes
- Know the different insulin treatment guidelines for patients with type 1 diabetes
- Learn to interpret glycemic control results according to individualized treatment guidelines
- Become familiar with more complex therapeutic strategies for patients with type 1 diabetes such as islet or pancreas transplantation
- Acquire a critical view of the recommendations of expert consensus and scientific society guidelines for the management of type 2 diabetes

Module 17. Therapeutic Management of Diabetes (II)

- Acquire knowledge of each of the families of antidiabetic drugs
- Acquire the knowledge and skills necessary to be able to safely prescribe metformin
- Acquire the knowledge and skills necessary to safely prescribe sulfonylureas and glinides
- Acquire the knowledge and skills necessary to be able to safely prescribe acarbose
- Acquire the knowledge and skills necessary to safely prescribe DPP4 inhibitors
- Acquire the knowledge and skills necessary to be able to safely prescribe GLP-1 analogues
- Acquire the knowledge and skills necessary to safely prescribe type 2 sodium-glucose cotransporter inhibitors
- Acquire the knowledge and skills necessary to safely prescribe insulins
- Familiarization with new therapeutic targets in development, as a very novel aspect of this module
- Acquire the knowledge and skills necessary for the management of steroid-induced hyperglycemia
- Acquire the knowledge and skills necessary for the nutritional management of gestational diabetes
- Acquire the knowledge and skills necessary for the pharmacological management of gestational diabetes

Module 18. Diabetes and Technology

- Acquire the knowledge of the use of technology in Diabetes
- Know what self-monitoring of capillary blood glucose means and its interpretation in order to be able to manage patient data to optimize diabetes control
- Learn about continuous glucose monitoring
- Know the available glucose monitoring devices and their use
- Acquire the skills to be able to conduct a training program on glucose sensing
- Acquire the knowledge and skills necessary for the interpretation of the results of continuous glucose monitoring systems
- Learning to read an APG report
- Know the subcutaneous insulin injection devices, their handling and related problems in order to be able to solve them in the diabetic patient who is a user of these devices
- Acquire the necessary knowledge for the handling of continuous glucose monitoring devices and insulin perfusion pumps in infancy
- Acquire the necessary knowledge for the use of continuous glucose monitoring devices and insulin perfusion pumps in pregnancy
- Acquire the basic knowledge of what an artificial pancreas is, what types there are and what they provide to patients with type 1 diabetes
- Know the mobile internet applications available for the diabetic patient
- Learn to recognize the usefulness of information obtained through artificial intelligence data analysis in the field of Diabetes
- Learn how to apply technology in new forms of medical care for diabetic patients (e-consultation, telemedicine, online training programs...)

Module 19. Diabetes in Special Situations

- Acquire the knowledge and skills for the expert management of the adolescent diabetes patient
- Acquire the knowledge and skills to provide guidance in the management of diabetes at the time of initiation of sexual relations
- Acquire the knowledge and skills to guide the patient with Diabetes who consumes alcohol. Learn the repercussions of alcohol on glucose metabolism in order to be able to warn and educate patients with diabetes
- Know how gender influences the control of diabetes from an integral point of view (glycemic control, risk factors and associated comorbidities)
- Know how the estrogenic deficit that occurs during menopause influences Diabetes control and how to prevent it
- Learning to identify the frail elderly, through screening tests
- Acquire the knowledge and skills to reprogram the pharmacological approach to the frail elderly patient with polypharmacy and comorbidities
- Acquire the knowledge and skills to detect these unfavorable socioeconomic situations in order to program patient management
- Know the legal aspects of the patient with Diabetes, since they condition their life, and, therefore, the control of diabetes

Module 20. Diabetic Education. Concept and Fundamentals

- Acquire the necessary knowledge and skills of diabetes education, as part of the treatment of diabetes, to facilitate the knowledge, skill and ability necessary for self-management

03

Skills

After passing the evaluations of the Advanced Master's Degree in Obesity and Diabetes you will have acquired the professional competencies necessary to practice high quality, updated based on the latest scientific evidence, and supported by the largest compendium of knowledge and experience available in the current educational market.

At the end of this Advanced Master's Degree, the doctor will have acquired the necessary skills to act with greater confidence in their daily practice"

General Skills

- Understand the characteristics of obesity and how it can affect the patient's daily life
- Help the patient to prevent diseases associated with obesity
- Perform appropriate management of patients with diabetes at any level of care
- Develop the necessary skills to become a professional in care, therapeutic education and research tasks in an ethical and independent manner, in specialized hospital care, primary care, home care or in universities or research centers
- Achieving excellence in health care services and multidisciplinary management of patients with diabetes

Our goal is very simple: to offer you a quality program with the best teaching system of the moment, so that you can achieve excellence in your profession"

Specific Skills

- Analyze the different methods for assessing nutritional status
- Explain the role of the intestinal microbiota and its implications in diseases
- List the different causes of secondary obesity in relation to endocrinopathies and drugs
- Analyze advances in nutritional genomics, both in nutrigenetics and nutrigenomics
- Gain an in-depth understanding of obesity as a clinical condition and its historical evolution
- Correctly evaluate a patient with Obesity, throughout the different periods of life
- Identify the pathophysiological mechanisms linking hypertension and obesity
- Recognize the relationship between lipid disorders and obesity, especially atherogenic dyslipidemia
- Analyze peculiarities of obesity in women
- Insist on the interaction between obesity and type 2 diabetes mellitus
- Conduct a review of the evidence regarding carbohydrate and protein intake in the prevention and treatment of obesity
- Explain the methodology of a diet to maintain the lost weight
- Perform a functional assessment based on scientific evidence
- Identify exercises with low risk of injury for obese patients
- Obtain an overview of the contributions from the psychological area aimed at increasing the chances of success in multidisciplinary intervention in overweight and obesity

- Recognize the main comorbid psychiatric disorders associated with obesity and psychopathology related to eating disorders
- Analyze how its effect is controlled and the results that we can expect
- Recognize other drugs already marketed in other countries such as the United States
- Identify the appropriate technique for each patient
- Identify the possible reasons for urgency after bariatric surgery
- Know the classification of diabetes and the wide spectrum of etiologies that lead to its development
- Incorporate the concept of public health in Diabetes
- Acquire the knowledge and skills of insulin resistance measurement
- Studying the mediating role of inflammation between Obesity and Diabetes
- Acquire the necessary knowledge to transmit to the patient the priorities in the therapeutic approach
- Acquire the skills to know the patient's preferences, social, economic and cultural environment and expectations in the treatment of Diabetes
- Learn the classification of the chronic complications of diabetes according to whether the small vessels or large vessels are mainly affected and according to the organ affected
- Know when and how screening for DN should be performed in the diabetic population
- Learn the specific treatments for ND
- Deepen the current data on the epidemiology of hypertension in diabetes
- Acquire the knowledge and skills necessary for the screening of mood disorders, especially depression in diabetic patients
- Become familiar with more complex therapeutic strategies for patients with type 1 diabetes such as islet or pancreas transplantation
- Acquire a critical view of the recommendations of expert consensus and scientific society guidelines for the management of type 2 diabetes
- Acquire knowledge of each of the families of antidiabetic drugs
- Acquire the knowledge and skills necessary for the nutritional approach to gestational diabetes
- Acquire the knowledge and skills necessary for the pharmacological management of gestational diabetes
- Learn to recognize the usefulness of information obtained through artificial intelligence data analysis in the field of Diabetes
- Learn how to apply technology in new forms of medical care for diabetic patients (e-consultation, telemedicine, online training programs...)
- Know how gender influences the control of diabetes from an integral point of view (glycemic control, risk factors and associated comorbidities)
- Acquire the necessary knowledge and skills of diabetes education, as part of the treatment of diabetes, to facilitate the knowledge, skill and ability necessary for self-management

04

Course Management

The program includes in its teaching staff reference specialists in Obesity and Diabetes, who pour into this specialization the experience of their work. Additionally, other recognized specialists participate in its design and preparation which means that the program is developed in an interdisciplinary manner. A teaching staff of specialists chosen for their professional trajectory and teaching capacity that will allow you to learn from the direct experience of the best in the sector.

A teaching staff made up of the best professionals in the sector, which will allow you to learn from the direct experience of the most renowned specialists in this field"

Management

Dr. Puigdevall Gallego, Víctor

- Doctor of Medicine and Surgery
- Specialist in Endocrinology and Nutrition
- Soria Hospital Complex
- Associate Professor in Valladolid University (academic courses 2005-2021)

Dr. González Albarrán, Olga

- Degree in Medicine from the Autonomous University Madrid
- PhD in Medicine from the University of Alcalá de Henares. Grade: Outstanding Cum Laude. Outstanding Award in her PhD
- Specialist in Endocrinology and Nutrition
- Head of Endocrinology and Diabetes at the Gregorio Marañón University Hospital in Madrid
- Associate Professor at the Complutense University of Madrid
- Master´s Degree in Clinical Nutrition, Autonomous University of Madrid
- Master's Degree in Cardiovascular Risk from McMaster University. Ontario (Canada)
- Master's Degree in Management of Endocrinology Clinical Units, Meléndez Pelayo University

Professors

Dr. Atencia Goñi, José
- Degree in Medicine from the University of Navarra
- Specialist in Endocrinology and Nutrition
- Assistant Physician in the Endocrinology Department at the Gregorio Marañón Hospital in Madrid

Ms. Cepero Andrés, Ana Belén
- Degree in Psychology. Specialist in Clinical Psychology
- Soria Hospital Complex
- Associate Professor at the University of Valladolid (2009-2010) and at the Complutense University of Madrid (2014-2015)

Dr. Chacín Coz, Juan Simón
- Degree in Medicine from the Central University of Venezuela (2001 - 2007)
- Specialist in Endocrinology and Nutrition
- Assistant Physician in the Endocrinology Department at the Rey Juan Carlos University Hospital in Móstoles, Madrid

Ms. García Lázaro, Sandra
- Graduate in Physiotherapy
- Soria Hospital Complex
- Associate Professor of Physiotherapy at the Faculty of Physiotherapy of Soria

Dr. Galdón Sanz-Pastor, Alba
- Degree in Medicine from the Complutense University of Madrid
- Specialist in Endocrinology and Nutrition
- Assistant Physician in the Endocrinology Department at the Gregorio Marañón Hospital in Madrid

Dr. Fernández Fernández, Luis
- Doctor of Medicine and Surgery
- Specialist in General Surgery
- Soria Hospital Complex

Dr. Laudo Pardos, Consuelo
- PhD in Medicine and Surgery
- Specialist in Family and Community Medicine
- Full-time Associate Professor and Assistant Professor at the University of Valladolid (academic years 1989-2016)

Dr. Ortega Sanchez, Higinio
- Degree in Medicine and Surgery
- Specialist in Endocrinology and Nutrition
- Marqués de Valdecilla Clinical University Hospital (Santander)

Dr. León Tellez, Marta
- Degree in Medicine and Surgery
- Specialist in Internal Medicine
- Soria Hospital Complex

Dr. López Guerra, Aurelio
- Degree in Medicine from the University of Gran Canaria
- Specialist in Endocrinology and Nutrition
- Assistant Physician in the Endocrinology Department at the Gregorio Marañón Hospital in Madrid

Dr. Serrano Valles, Cristina
- Degree in Medicine and Surgery
- Specialist in Endocrinology and Nutrition
- Clinical University Hospital of Valladolid

Dr. Weber, Bettina
- Degree in Medicine from the Complutense University of Madrid
- Specialist in Endocrinology and Nutrition
- Assistant Physician in the Endocrinology Department at the Gregorio Marañón Hospital in Madrid

05

Structure and Content

The structure of the contents has been designed by a team of professionals from the best research centers and universities on a national level. Aware of the relevance of the current specialization and the need to support each study and its application on a solid scientific basis, based on evidence, they have created a didactic path in which each topic will address one of the relevant aspects in the knowledge of a highly competent professional. All this makes up a high educational intensity and unmatched quality syllabus, which includes theory and state-of-the-art virtual practice, and that will propel you to the most complete level of mastery in this area.

This Advanced Master's Degree is an unparalleled opportunity to obtain, in a single specialization, all the necessary knowledge in Obesity and Diabetes, including the most recent advances in intervention techniques and protocols"

Module 1. Physiology of Appetite and Weight Control Pathophysiology

1.1. Energy Balance
1.2. Adequate Energy Intake: Estimation of Energy Expenditure
  1.2.1. Basal Metabolism
  1.2.2. Voluntary and Involuntary Physical Activity
  1.2.3. Total Energy Expenditure
1.3. Nutritional Assessment
  1.3.1 Dietary Surveys
1.4. Gastrointestinal Hormones in the Regulation of Body Weight
  1.4.1. Ghrelin
  1.4.2. Obestatin
  1.4.3. Cholecystokinin
  1.4.4. GLP-1 and Others
1.5. Leptin in Body Weight Regulation
1.6. Metabolic Signals and Weight Control
  1.6.1. Blood Sugar Levels
  1.6.2. Fats
1.7. Hypothalamic Control of Food Intake
1.8. Adipose Tissue as an Endocrine Organ
  1.8.1. Adipogenesis
  1.8.2. Fat Cell Function in Obesity
1.9. Gut Microbiota and its Influence on the Development of Obesity
1.10. Healthy Nutrition

Module 2. Etiopathogenesis of Obesity

2.1. Genetic Factors of Obesity
  2.1.1. Monogenic Obesity
  2.1.2. Polygenic Obesity
2.2. Epigenetics of Obesity
2.3. Secondary Obesity
  2.3.1. Endocrinopathy
  2.3.2. Drugs
2.4. Nutritional Genomics
  2.4.1. Nutrigenetics
  2.4.2. Nutrigenomics
2.5. Environmental Factors and Obesity (i): Changes in Eating Pattern
2.6. Environmental Factors and Obesity (ii): Changes in Physical Activity
2.7. Endocrine Disruptors: Obesogens
2.8. Socioeconomic Status and Obesity. Environment and Obesity
2.9. Chronodisruption and Obesity
2.10. Sarcopenic Obesity

Module 3. History Definition. Diagnosis and Classification. Epidemiology

3.1. Definition. Obesity through the Ages
3.2. Diagnosis
  3.2.1. Body Mass Index
  3.2.2. Waist Circumference
  3.3.3. Body Composition
3.3. Classification Based on Impact of Disease
  3.3.1. ABCD
  3.3.2. Edmonton Obesity Staging System
3.4. Epidemiology of Childhood Obesity
3.5. Epidemiology of Adult Obesity
3.6. Phenotypic Characterization of Obese Patients
  3.6.1. Body composition
  3.6.2. Energy Expenditure
  3.6.3. Associated Comorbilities
  3.6.4. Compulsive Score
3.7. Epidemiology of the Complications
3.8. Obesity in Different Stages of Life
3.9. Metabolically Healthy Obese People
3.10. New Technologies in Obesity Management

Module 4. Comorbidities of Obesity

4.1. Diabetes Mellitus Type 2 and Obesity
  4.1.1. Diabesity
  4.1.2. Pathophysiology
  4.1.3. Prediabetes
4.2. Arterial Hypertension and Obesity
  4.2.1. Mechanisms
4.3. Dyslipidemia and Obesity
  4.3.1. Atherogenic Dyslipidemia
  4.3.2. Pathogenesis
4.4. Metabolic Syndrome. Heart Disease. Peripheral Vascular Disease and Peripheral Venous Insufficiency
  4.4.1. Diagnostic Criteria in Metabolic Syndrome
4.5. Obesity and Cancer
  4.5.1. Molecular Mechanisms
4.6. Respiratory Disorders and Obesity
  4.6.1. Apnea-hypopnea Syndrome Associated with Obesity
  4.6.2. Obesity Hypoventilation Syndrome
  4.6.3. Bronquial Asthma
4.7. Digestive Diseases and Obesity
  4.7.1. Non-alcoholic Steatohepatitis
  4.7.2. Gastroesophageal Reflux Diseases
  4.7.3. Colelitiasis
4.8. Gonadotropic Axis and Obesity
4.9. Other Pathologies Associated to Obesity (articular, etc.)
4.10. Obesity and the COVID-19 Pandemic

Module 5. Prevention of Obesity and its Comorbidities

5.1. Childhood Obesity
5.2. Prevention of Childhood Obesity: (i) Importance of Physical Exercise
5.3. Prevention of Childhood Obesity: (Ii) Importance of Education and Treatment
5.4. Women and Weight Control
5.5. Strategies for the Prevention of Overweight and Obesity
  5.5.1. International Strategies
5.6. The Heart and Diabetes
  5.6.1. Evaluation of Cardiovascular Risk
5.7. Basis of the Therapeutic Approach
5.8. Multidisciplinary Team in the Treatment of Obesity
5.9. Health Systems Costs of Obesity
5.10. Cities and Obesity: Cities Alliance Against Obesity

Module 6. Dietary Treatment of Obesity

6.1. Carbohydrates and Proteins in the Prevention and Treatment of Obesity
6.2. Dietary Fat and its Role in Body Weight Regulation
6.3. Balanced Low-Calorie Diet. Eating Patterns
  6.3.1. Nutrient Distribution
6.4. Exchange Diet
  6.4.1. Plan
  6.4.2. Menus
6.5. The Mediterranean Diet: Prevention and Treatment of Obesity
  6.5.1. PREDIMED
6.6. Food Groups: 'Light' and Functional Foods
6.7. Magic or Miracle Diets
  6.7.1. Dissociated Diets
  6.7.2. Exclusion Diets
  6.7.3. Fasting Diet
6.8. Very Low-Calorie Diet
6.9. Diets and Maintaining Weight Lost
6.10. Diet in the Treatment of Comorbidities

Module 7. Physical Activity and Obesity

7.1. Influence of Physical Activity on Energy Balance
7.2. Functional Assessment of an Obese Patient
  7.2.1. Motor Skills
  7.2.2. Flexibility
  7.2.3. Muscular Strength
  7.2.4. Cardio-respiratory
7.3. Functional Assessment of Obesity Comorbidities
7.4. Quantification of Physical Activity (Questionnaires, Records, etc.)
7.5. Types of Physical Exercise in the Treatment of Obesity
  7.5.1. Aerobic
  7.5.2. HIIT
  7.5.3. Strength Training
7.6. Principles of Physical Exercise
  7.6.1. Frequency (F)
  7.6.2. Duration
  7.6.3. Intensity
7.7. Physical Activity in Childhood and Adolescence in the Prevention of Overweight and Obesity
7.8. Physical Activity: Guidelines and Consensus
7.9. Cardio-respiratory Rehabilitation and Mechanics of Obese Patients. Rehabilitation after Bariatric Surgery
7.10. Importance of Physical Activity in Maintaining Weight

Module 8. Psychological and Psychiatric Aspects of Obesity

8.1. Body Image, Social Stereotypes and Stigmatization of Obesity
  8.1.1. Obesity Throughout History
  8.1.2. Dieting and the Slimming Industry
8.2. Role of Emotional Factors, Anxiety Disorders, Mood Disorders and ADHD in Obesity
  8.2.1. Eating to Alleviate Psychological Distress
  8.2.2. Anxiety
  8.2.3. Depression
  8.2.4. ADHD
  8.2.5. Other Psychological Factors

8.3. Disorders of Eating and Eating Behavior and Food Intake (DSM 5)
- 8.3.1. Snacking
- 8.3.2. Rumination Disorder
- 8.3.3. Food Avoidance/Restriction of Food Intake Disorder
- 8.3.4. Anorexia Nervosa
- 8.3.5. Bulimia Nervosa
- 8.3.6. Binge Eating Disorder
- 8.3.7. Other Conditions: Night Eating Syndrome

8.4. Explanatory Models, Differential Diagnosis and Management of Eating Disorders Comorbid to Obesity
- 8.4.1. Obesity, Binge Eating Disorder and the Theory of Dietary Restraint

8.5. Techniques to Promote Motivation to Change
- 8.5.1. Importance of the Therapeutic Relationship
- 8.5.2. Transtheoretical Model of Prochaska and DiClemente
- 8.5.3. Motivational Interview of Miller and Rollnick

8.6. Psychological Assessment in Bariatric Surgery
- 8.6.1. Areas of Evaluation and Contraindications

8.7. Psychological Intervention in the Treatment of Obesity in Adults
- 8.7.1. Cognitive-Behavioural Treatment Program. Effective Techniques
- 8.7.2. Relapse Prevention

8.8. Treatment Programs in Group Format
- 8.8.1. Intervention Focused on Cognitive Distortions
- 8.8.2. Self-Help Groups

8.9. Psychological Intervention in Childhood Obesity
- 8.9.1. Habit and Behaviour Modifications

8.10. Obesity and Eating Disorders Prevention
- 8.10.1. Early Identification of Risk Factors
- 8.10.2. Prevention Workshops

Module 9. Pharmacological Treatment of Obesity

9.1. Orlistat
- 9.1.1. Xendos Study

9.2. Liraglutide
- 9.2.1. Scale Study

9.3. Naltrexone/Bupropion
- 9.3.1. COR Study

9.4. Anti-obesity Drugs: When to Use Them and How Long to Use Them
- 9.4.1. Treatment Algorithms

9.5. Commercialized Drugs in Europe

9.6. Non-Commercialized Drugs in Europe

9.7. Drugs Causing Unintentional Weight Loss

9.8. Miracle Drugs

9.9. Future Treatments for Obesity

9.10. Pharmacokinetic Modifications in the Obese Patient Before and After Bariatric Surgery

Module 10. Surgical Treatment of Obesity

10.1. Evidence Levels

10.2. Indications and Contraindications

10.3. Preoperative Evaluation and Patient Selection

10.4. Surgical Techniques
- 10.4.1. Malabsorptive
- 10.4.2. Restrictive
- 10.4.3. Mixed

10.5. Metabolic and Adaptive Surgery

10.6. Complications of Bariatric Surgery

10.7. Emergencies in Bariatric Surgery

10.8. Postoperative Aftercare

10.9. Gestation After Bariatric Surgery

10.10. Future of Bariatric Surgery

Module 11. The Concept of Diabetes. Epidemiology

11.1. Diabetes Historical Recollection
11.2. Classification of Diabetes and Other Categories of Glucose Intolerance
11.3. Gestational Diabetes
11.4. Diabetes and Genetic Syndromes
11.5. Diabetes and Exocrine Pancreatic Diseases
11.6. Pharmacological Diabetes
11.7. Epidemiology of Type 1 Diabetes
11.8. Epidemiology of Type 2 Diabetes
11.9. Type 2 Diabetes and Prediabetes Screening
11.10. Diabetes and Population Health

Module 12. Pathophysiology of Diabetes

12.1. Normal Anatomy and Physiology of Pancreatic Function. Glucose Homeostasis
12.2. Pathogenesis of Type 1 Diabetes
12.3. Pathogenesis of Type 2 Diabetes. Overview
12.4. Role of Adipose Tissue in Type 2 Diabetes. Concept of Insulin Resistance
12.5. Implications of Intestinal Hormones in the Pathophysiology of Diabetes: Incretin System. Intestinal Microbiota
12.6. Implications of the Kidney in the Pathophysiology of Diabetes
12.7. The Central Nervous System and the Pathophysiology of Diabetes
12.8. Diabetes and Genetics
12.9. Diabetes and Delay or Prevention of DM1
12.10. Diabetes and Delay or Prevention of DM2

Module 13. Evaluation of Diabetes and its Comorbidities

13.1. Patient-Centered. Facilitating Behavioral Change in Patients with Diabetes
13.2. Glycemic Control Objectives
13.3. Hypoglycemia
13.4. Diabetes and Hyperglycemic Decompensations: CAD
13.5. Diabetes and Hyperosmolar Hyperglycemic Decompensation
13.6. Diabetes and Infections
13.7. Cardiovascular Risk Assessment in Diabetic Patients
13.8. Diabetes and Endocrine Diseases
13.9. Psychological and Social Aspects of Diabetes

Module 14. Diabetes complications. Classification

14.1. Classification of Diabetes Complications and their Impact on the Person with Diabetes
14.2. Pathophysiology of Microvascular Complications
14.3. Pathophysiology of Macrovascular Complications
14.4. Diabetic Retinopathy
14.5. Diabetic Neuropathy
14.6. Diabetic Nephropathy
14.7. Periodontal Disease
14.8. Erectile Dysfunction
14.9. Diabetic Dermatopathy
14.10. Diabetic Foot

Module 15. Macrovascular Complications of Diabetes and Other Medical Entities

15.1. Epidemiology of Macrovascular Disease in Diabetes
15.2. Epidemiology of Hypertension and Dyslipidemia in Diabetes
15.3. Diabetes and Heart
15.4. Cerebrovascular Disease in Diabetes
15.5. Peripheral Arterial Disease
15.6. Effects of Glycemic Control on Cardiovascular Events in Patients with Diabetes
15.7. Diabetes and Hepatic Steatosis/Steatohepatitis
15.8. Diabetes and Lung Disease
15.9. Diabetes and Cancer
15.10. Diabetes and Depression

Module 16. Diabetes Management (I)

16.1. Introduction to Comprehensive Diabetes Management
16.2. Management of Obesity in Diabetes and Prediabetes. Metabolic Surgery for Diabetes Treatment
16.3. Treatment of Risk Factors: Hypertension in Diabetes, Dyslipidemia
16.4. Treatment of Risk Factors: Tobacco use
16.5. Nutrition in Type 1 Diabetes

16.6. Nutrition in Type 2 Diabetes
16.7. Exercise as Part of Diabetes Treatment
16.8. Conventional Treatment of Type 1 Diabetes
16.9. Non-Conventional Treatment of Type 1 Diabetes. Pancreatic Islet Transplant. Pancreas Transplant
16.10. National and International Guidelines and Consensus on the Management of Type 2 Diabetes

Module 17. Diabetes Management (II)

17.1. Metformin
17.2. Sulfonylureas and Glinides
17.3. Acarbose and Thiazolidines
17.4. Glycosurics
17.5. DPP4 Enzyme Inhibitors
17.6. GLP-1 Receptor Agonists
17.7. Recap. Prandial Insulins. Basal Insulins
17.8. New Treatments in Research
17.9. Steroid Diabetes Treatment
17.10. Treatment of Gestational Diabetes

Module 18. Diabetes and Technology

18.1. Overview of the Use of Technology in Diabetes
18.2. Capillary Glycemia Self-Monitoring
18.3. Continuous Glucose Monitoring. Glucose Sensors
18.4. Insulin and Injection Devices. Insulin Pumps
18.5. Artificial Pancreas
18.6. Use of Technology in Diabetes in Pregnancy
18.7. Use of Technology in Diabetes in Infancy
18.8. Diabetes and Big Data
18.9. Diabetes and Internet (Web, Apps...)
18.10. New Ways to Care for the Diabetes Patient

Module 19. Diabetes in Special Situations

19.1. Diabetes in Childhood and Adolescence
19.2. Diabetes, Alcohol and Sexual Relationships
19.3. Diabetes in Women
19.4. Diabetes in the Elderly and in the Institutionalized Patient
19.5. Diabetes and Sports
19.6. Diabetes in the Hospitalized Patient
19.7. Diabetes and Travel
19.8. Diabetes and Work Life/Rural
19.9. Socioeconomic Aspects of Diabetes
19.10. Legal Aspects of Diabetes

Module 20. Diabetic Education. Concept and Fundamentals

20.1. Diabetic Education. Concept. Assessment of the Educational Needs of the Person with Diabetes
20.2. Diabetology Education Training Programs
20.3. Education and Competencies in People with Type 1 Diabetes
20.4. Education and Competencies in People at Risk of Type 2 Diabetes or with Type 2 Diabetes
20.5. Therapeutic Education of the Child and Adolescent, their Parents or Caregivers
20.6. Therapeutic Education for the Detection of Foot Risk in People with Diabetes
20.7. Impact of the "Expert Patient" Program on Diabetology Education
20.8. Impact of Patients' Associations
20.9. Ethical Aspects in Diabetes Education
20.10. Challenges in Chronic Monitoring. Barriers to Adherence and Therapeutic Inertia

06

Methodology

This training program provides you with 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.

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 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:

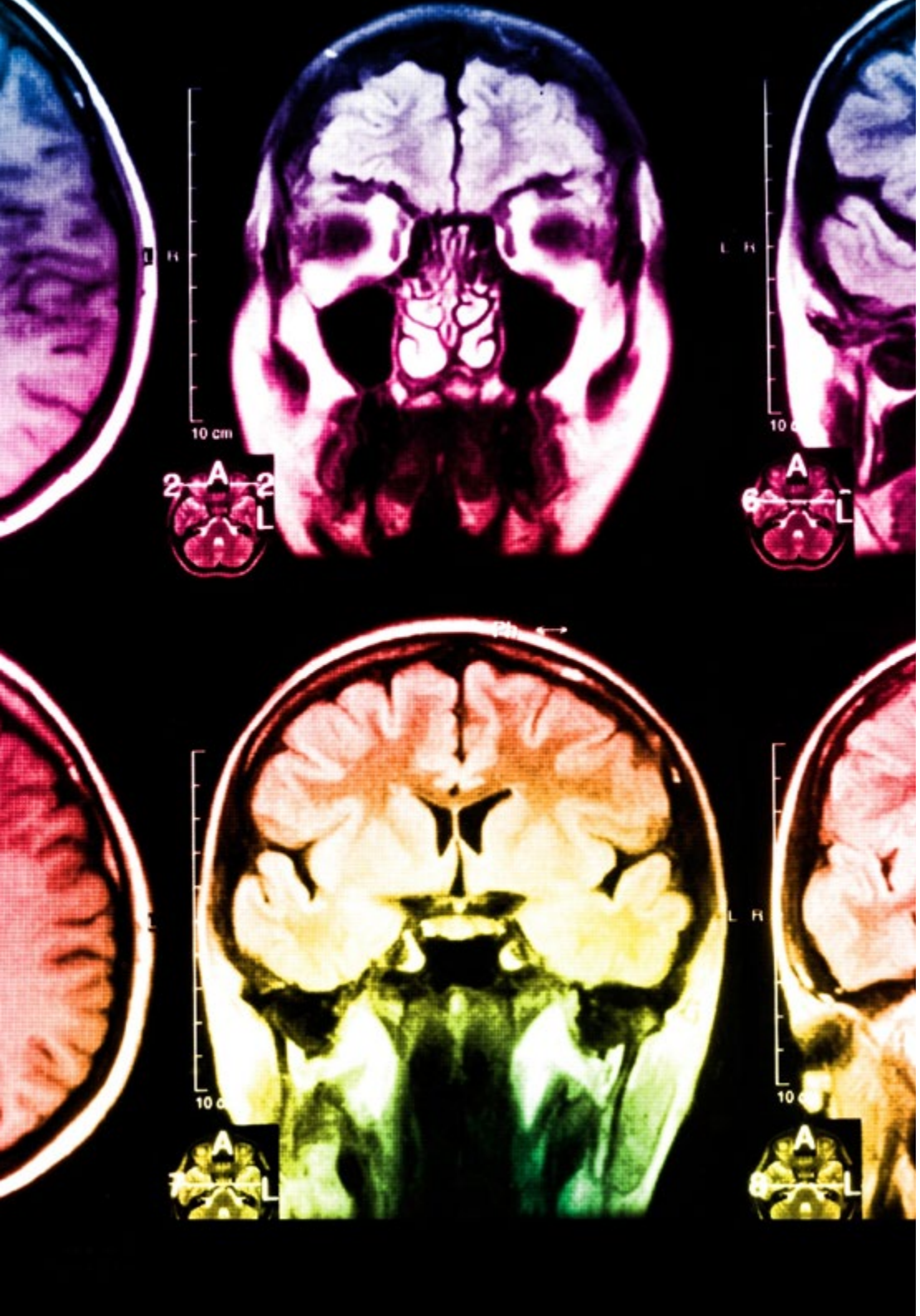
1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better 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 Harvard 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.



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.

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.

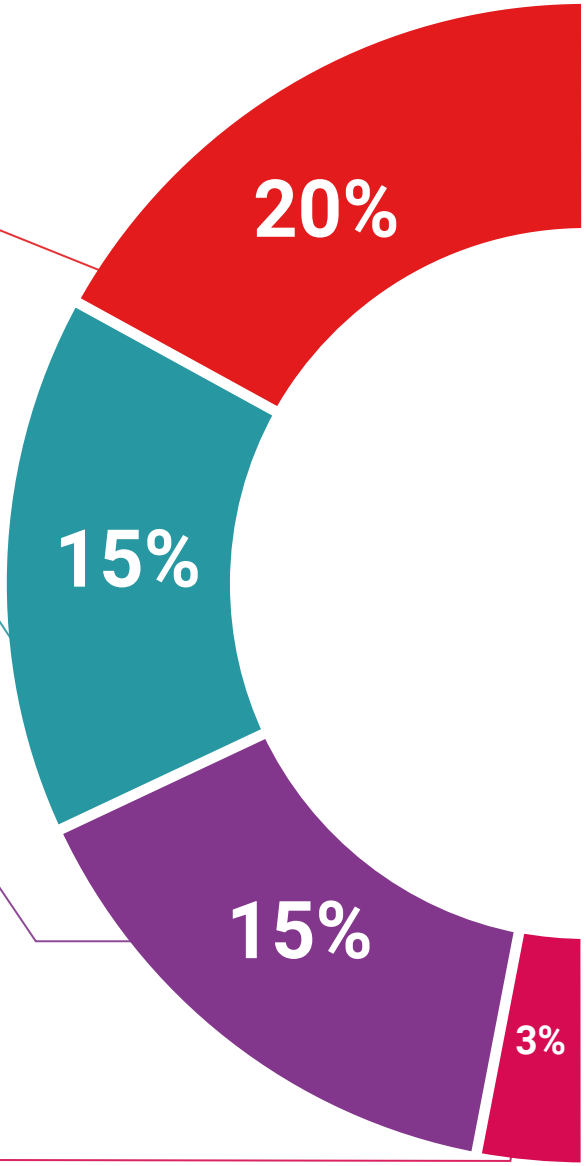
Interactive Summaries

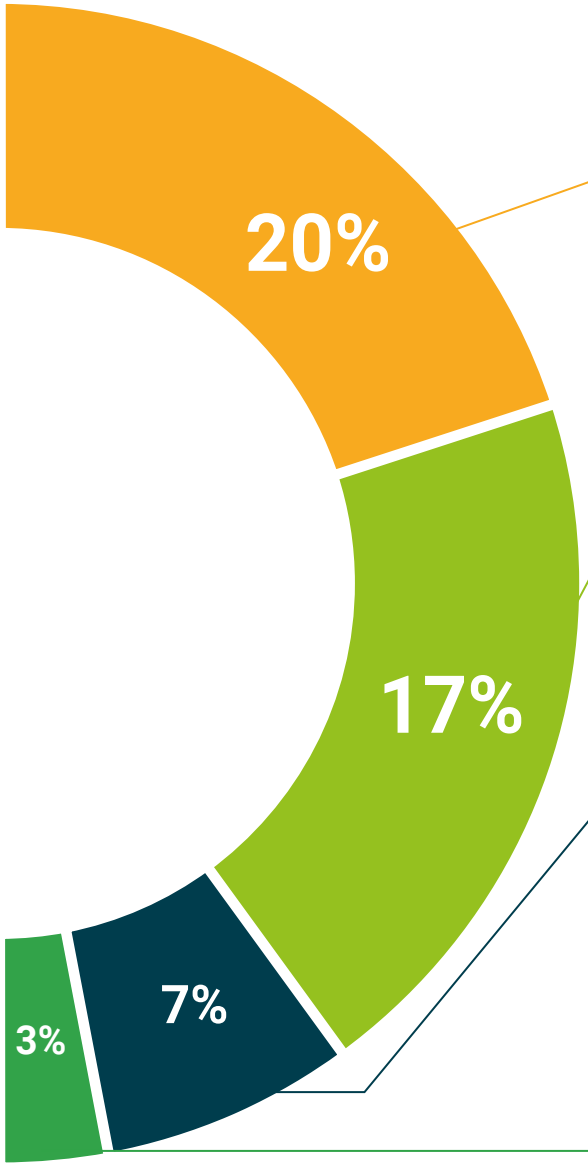
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive multimedia content presentation training Exclusive 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.





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 your goals.

Classes

There is scientific evidence on the usefulness of learning by observing experts: The system termed Learning from an Expert strengthens knowledge and recall capacity, and generates confidence in the face of difficult decisions in the future.

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.

07

Certificate

The Advanced Master's Degree in Obesity and Diabetes guarantees you, in addition to the most rigorous and updated training, access to a Advanced Master's Degree issued by TECH Global University.

Successfully complete this training and receive your university degree without travel or laborious paperwork"

This program will allow you to obtain your **Advanced Master's Degree diploma in Obesity and Diabetes** 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** title 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: **Advanced Master's Degree in Obesity and Diabetes**

Modality: **online**

Duration: **2 years**

Accreditation: **120 ECTS**

tech global university

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

Advanced Master's Degree in Obesity and Diabetes

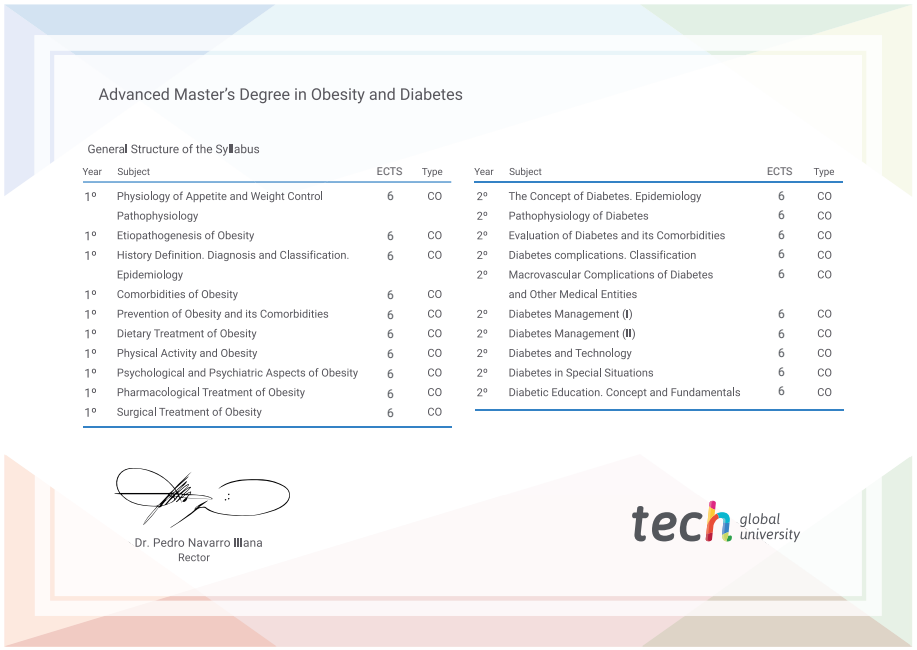
This is a program of 3,000 hours of duration equivalent to 120 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

Dr. Pedro Navarro Illana
Rector

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



Advanced Master's Degree in Obesity and Diabetes

General Structure of the Syllabus

Year	Subject	ECTS	Type
1º	Physiology of Appetite and Weight Control Pathophysiology	6	CO
1º	Etiopathogenesis of Obesity	6	CO
1º	History Definition. Diagnosis and Classification. Epidemiology	6	CO
1º	Comorbidities of Obesity	6	CO
1º	Prevention of Obesity and its Comorbidities	6	CO
1º	Dietary Treatment of Obesity	6	CO
1º	Physical Activity and Obesity	6	CO
1º	Psychological and Psychiatric Aspects of Obesity	6	CO
1º	Pharmacological Treatment of Obesity	6	CO
1º	Surgical Treatment of Obesity	6	CO

Year	Subject	ECTS	Type
2º	The Concept of Diabetes. Epidemiology	6	CO
2º	Pathophysiology of Diabetes	6	CO
2º	Evaluation of Diabetes and its Comorbidities	6	CO
2º	Diabetes complications. Classification	6	CO
2º	Macrovascular Complications of Diabetes and Other Medical Entities	6	CO
2º	Diabetes Management (I)	6	CO
2º	Diabetes Management (II)	6	CO
2º	Diabetes and Technology	6	CO
2º	Diabetes in Special Situations	6	CO
2º	Diabetic Education. Concept and Fundamentals	6	CO

Dr. Pedro Navarro Illana
Rector

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*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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Advanced Master's Degree

Obesity and Diabetes

- Modality: **online**
- Duration: **2 years**
- Certificate: **TECH Global University**
- Credits: **120 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Advanced Master's Degree
Obesity and Diabetes

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