

# Professional Master's Degree

## Dysphagia





## Professional Master's Degree Dysphagia

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/pk/medicine/professional-master-degree/master-dysphagia](http://www.techtute.com/pk/medicine/professional-master-degree/master-dysphagia)

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# 01

# Introduction

The pandemic caused by COVID-19 has resulted in a high prevalence of patients with Oropharyngeal Dysphagia during and post infection. In this sense, there has been a greater awareness on the part of specialists of their correct diagnosis, treatment and rehabilitation, which is essential for this type of patient. This is in addition to advances in evaluation instruments, as well as in the techniques used to treat all types of swallowing problems. As a result of these advances, this 100% online program was born, allowing professionals to complete a complete update in just 12 months. It is an update with numerous clinical case studies and high quality pedagogical material, which will allow an effective update.





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*Update yourself in Dysphagia through this Professional Master's Degree and its 100% online methodology that adapts to your daily responsibilities"*

COVID 19 has undoubtedly focused attention on the problem of respiratory pathologies and their consequences. In addition, there is a high incidence of patients with stroke and other neurological pathologies that directly affect swallowing. In this context, healthcare professionals adopt new therapeutic techniques and integrate the latest advances for the evaluation and diagnosis of disorders associated with swallowing difficulties.

In this sense, scientific research and advances in the approach to patients with neuromuscular, structural, neurological or musculoskeletal disorders, among others, have intensified in recent years. For this reason, TECH has designed this 12-month Professional Master's Degree in Dysphagia.

It is a program developed by real experts in Otorhinolaryngology and Speech Therapy with clinical experience in the care of patients with this disorder. In this way, the professional will have the guarantee of access to a quality syllabus that rigorously delves into the etiology and diagnosis, the physiology of normal swallowing, as well as the processes of evaluation and treatment in pediatric patients or patients with various pathologies.

To this end, this educational institution provides a comprehensive syllabus that is complemented with video summaries of each topic, detailed videos, simulations of case studies and specific readings that allow the graduate to expand the information of this program.

In addition, the graduate is faced with a program that offers a flexible methodology for updating knowledge. And the fact is that, with no classroom attendance or class schedules, the students will be able to manage their own access time with greater freedom. Furthermore, to do so, all you need is a cell phone, tablet or computer with an Internet connection. Undoubtedly, an excellent opportunity to be up-to-date in Dysphagia through an unparalleled educational option.

This **Professional Master's Degree in Dysphagia** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Otorhinolaryngology and Speech Therapy
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- 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



*Thanks to this program you will be aware of the scientific evidence on the treatment of patients with Dysphagia caused by COVID"*

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*Increase your clinical skills in the evaluation and treatment of swallowing disorders with the best teaching material"*

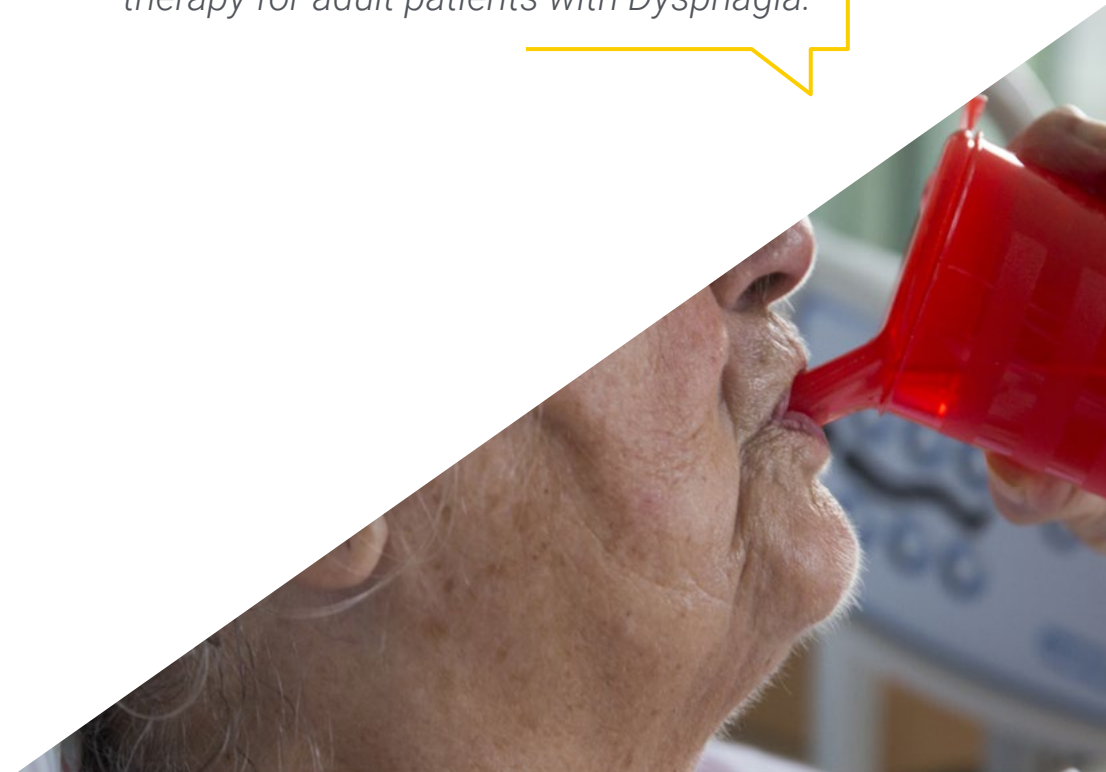
*Specialized medical literature is available to further extend the information provided in this program.*

*You will be up-to-date with the latest scientific findings on the most suitable therapy for adult patients with Dysphagia.*

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 educational year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.





# 02

# Objectives

This Professional Master's Degree offers an effective update in Dysphagia from a multidisciplinary perspective. In this way, this program integrates approaches from different areas such as Medicine, Speech Therapy, Nutrition, or Occupational Therapy, allowing the graduate to approach this disorder from a holistic viewpoint. In this way, in order to achieve this goal successfully, you will have a specialized team of teachers who will answer any questions you may have about the content of this program.







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*The numerous clinical cases will allow you to integrate the most current diagnostic and therapeutic methodology on Dysphagia in pediatric patients or with other pathologies"*



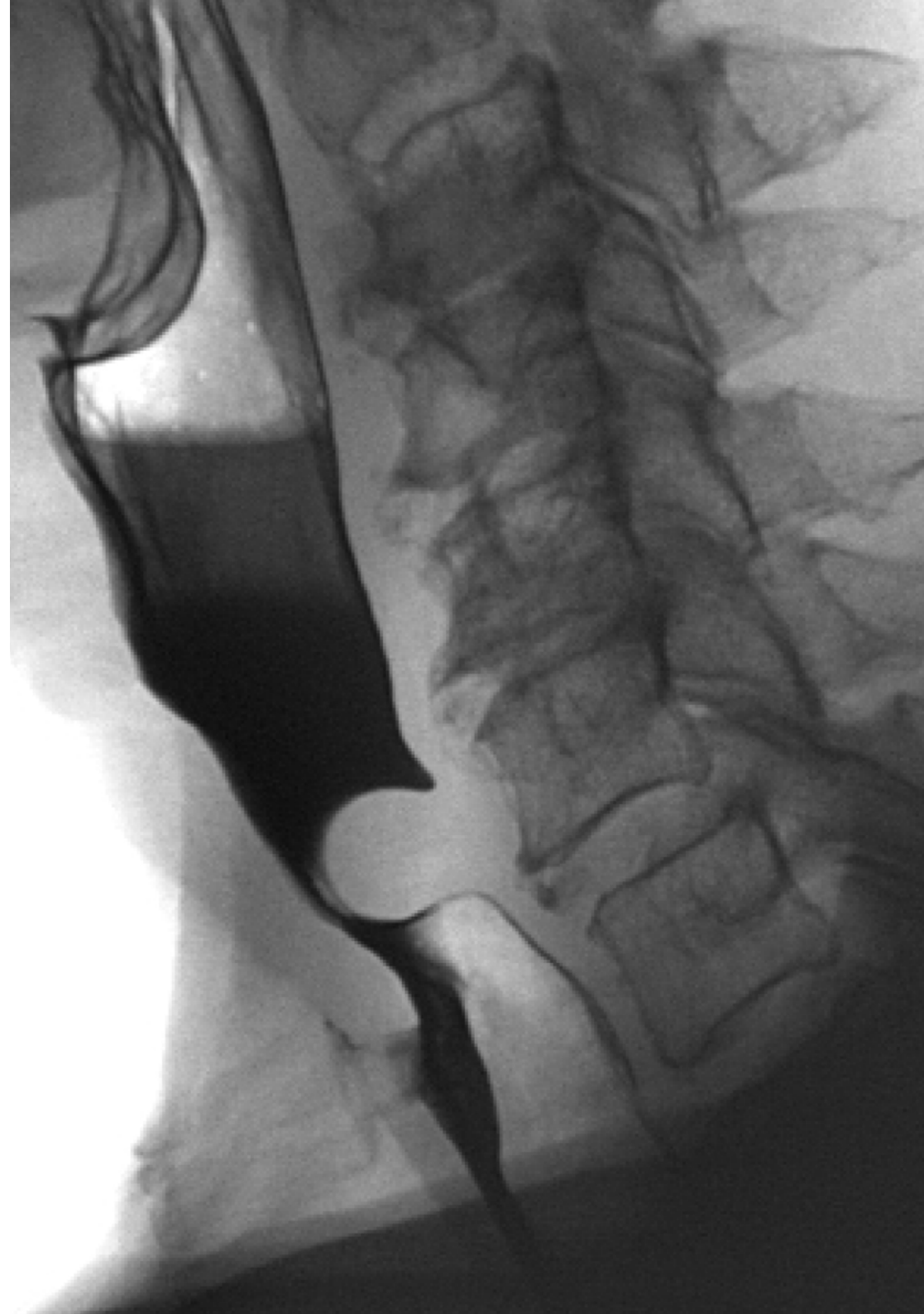
## General Objectives

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- Update theoretical and practical knowledge about Dysphagia
- Develop clinical assessment skills
- Design and implement treatment plans according to the most current procedures
- Delve into the most up-to-date technologies and techniques
- Encourage interdisciplinary collaboration



*With this program you will be up-to-date on advances in supplementation and nutrition for patients with Dysphagia and ALS"*





## Specific Objectives

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### Module 1. Etiology and diagnosis of Dysphagia

- ♦ Describe the normal physiology of swallowing
- ♦ Identify the causes and etiologies of Dysphagia
- ♦ Inquire about the symptoms and signs of Dysphagia
- ♦ Delve into clinical evaluation techniques

### Module 2. Anatomy and physiology of normal swallowing and Dysphagia

- ♦ Describe the protective mechanisms and function of anatomical structures during swallowing
- ♦ Delve into the neurophysiological basis of swallowing
- ♦ Identify the physiological changes associated with Dysphagia

### Module 3. Evaluation of Dysphagia

- ♦ Delve into the different evaluation approaches and methods used in the field
- ♦ Identify the instrumental tests used in the evaluation of Dysphagia
- ♦ Learn how to interpret clinical assessment findings

### Module 4. Dysphagia in Neonatology

- ♦ Delve into the anatomy and physiology of swallowing in neonates
- ♦ Recognize the signs and symptoms of Dysphagia in neonates

### Module 5. Pediatric dysphagia

- ♦ Delve into the anatomical and physiological characteristics of swallowing in children
- ♦ Describe the different medical conditions and disorders that can cause dysphagia in children
- ♦ Delve into the techniques of clinical evaluation in pediatric dysphagia

### Module 6. Neurological Dysphagia

- ♦ Describe Neurological Dysphagia
- ♦ Point to neurological diseases that can cause Dysphagia
- ♦ Explore disorders such as stroke, Parkinson's disease
- ♦ Identify the signs and symptoms of neurological Dysphagia

### Module 7. Dysphagia due to organic pathology

- ♦ Inquire about dysphagia due to organic pathology
- ♦ Describe the causes and anatomical or structural alterations that can lead to swallowing difficulties
- ♦ Establish state-of-the-art diagnostic tests and evaluations

### Module 8. Psychogenic dysphagia

- ♦ Delve into Psychogenic Dysphagia
- ♦ Identify the triggering and predisposing factors of psychogenic dysphagia
- ♦ Delve into strategies for the management and treatment of psychogenic dysphagia

### Module 9. Treatment of Dysphagia

- ♦ Delve into the basics of the treatment of Dysphagia
- ♦ Delve into the therapeutic options available
- ♦ Identify specific therapeutic objectives
- ♦ Delve into the techniques of swallowing therapy

### Module 10. Dysphagia and feeding

- ♦ Delve into the effects of Dysphagia on feeding
- ♦ Delve into changes in the consistency of foods and liquids
- ♦ Identify adaptive feeding techniques
- ♦ Identify nutritional and hydration challenges

# 03 Skills

This educational option has a comprehensive theoretical framework, but also a practical approach that will lead the specialist to increase their clinical skills in providing a solid foundation of clinical skills in the evaluation and treatment of swallowing disorders. To this end, the graduates have clinical cases provided by the excellent faculty of this program, which will lead them to integrate the latest diagnostic and therapeutic advances in their practice or clinical center.



A close-up photograph of a person's mouth and hand, showing the tongue and fingers near the mouth, likely demonstrating a swallowing or oral motor exercise. The image is partially obscured by a dark blue diagonal overlay.

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*With this program you will delve into the most effective therapies currently available to address neurogenic Dysphagia”*





## General Skills

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- ♦ Enhance skills for performing a complete clinical evaluation of swallowing in neonates
- ♦ Develop clinical observation and palpation skills
- ♦ Master the evaluation techniques used in the diagnosis of Dysphagia
- ♦ Develop specialized skills in the management of Dysphagia in neonatology
- ♦ Address the main clinical complications in pediatric Dysphagia
- ♦ Evaluate Dysphagia caused by organic pathologies
- ♦ Identify psychogenic aspects associated with Dysphagia and its treatment
- ♦ Develop skills in the design and application of treatments for Dysphagia





## Specific Skills

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- Perform a complete clinical evaluation to identify the presence and severity of dysphagia
- Interpret results of instrumental tests used in the evaluation of dysphagia
- Establish differential diagnoses and specific treatment plans for neonatal dysphagia
- Identify and address feeding difficulties in children with pediatric dysphagia
- Evaluate and treat Dysphagia in patients with neurological disorders
- Address Dysphagia caused by structural and functional diseases
- Be able to manage Dysphagia in patients with psychogenic components
- Design individualized treatment programs tailored to the needs of each patient
- Implement effective therapeutic strategies and techniques to improve swallowing and feeding
- Counsel and educate patients, their families, and other health professionals about Dysphagia and its implications on eating and quality of life

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*Increase your skills in performing videofluoroscopy and swallowing endoscopy evaluations”*



# 04

# Course Management

One of the elements that distinguishes this university program is the management and specialized teacher team that integrates it. Their clinical experience and skills in the care of both adult and pediatric patients with Dysphagia provides in-depth knowledge in this area. Furthermore, these professionals have developed their careers as researchers, disseminators and teachers in various high-level educational spaces. For this reason, the graduate will receive a complete update from authentic specialists.





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*Distinguished professionals in the field of Otorhinolaryngology and Speech Therapy integrate this high-level educational option"*

## Management



### Mr. Maeso i Riera, Josep

- ♦ Director of the Otorhinolaryngology Section of the Otorhinolaryngology Ophthalmology Center of Egara
- ♦ Assistant Physician of the Otorhinolaryngology Service in the Head and Neck Section of the Mútua de Terrass University Hospital
- ♦ Physician in charge of the Dacryology Section (Ophthalmology Service) of the Delfos Medical Center
- ♦ Head of the Otorhinolaryngology Department at Sanitas CIMA Hospital
- ♦ Collaborating physician in the Otorhinolaryngology office of the Sanitas offices
- ♦ Specialist in Otorhinolaryngology
- ♦ Doctor in Medicine and Surgery from the Autonomous University of Barcelona
- ♦ Degree in Medicine and Surgery from the Autonomous University of Barcelona
- ♦ Diploma in Hospital Management from the School of Business Administration and Management
- ♦ Member of the Spanish Society of Otorhinolaryngology and Cervico-Facial Pathology
- ♦ Member of American Academy of Otolaryngology-Head and Neck Surgery



### **Ms. Marcos Galán, Victoria**

- ◆ Director of the Crecemos contigo center and Neuro-logist
- ◆ Specialist in Voice Pathology and Myofunctional Therapy
- ◆ Professor, Department of Physiotherapy in Health Sciences, Castilla La Mancha University
- ◆ Trainer in health specialization courses in Speech Therapy Intervention
- ◆ Specialist in Voice Pathology from the University of Alcalá de Henares
- ◆ Degree in Speech Therapy from the Complutense University of Madrid



## Professors

### Ms. Meneses Gómez, Ainhoa

- ◆ speech therapist at Neuro-logo
- ◆ Speech therapist in the Support Service for people with disabilities
- ◆ Speech therapist at Policlinic Dalí
- ◆ Speech therapist in Centro Fisiogestión
- ◆ Speech therapist at the Association of parents of students with disabilities in Alcobendas
- ◆ Support Service for Persons with Disabilities (UCLM)
- ◆ Graduate in Speech Therapy from the University of Castilla-La Mancha

### Ms. Aniceto, Elena

- ◆ speech therapist at Neuro-logo Center
- ◆ Specialist in infant audiology and auditory-verbal therapy
- ◆ Speech therapist from the Complutense University of Madrid

### Ms. Casero Tapiador, Claudia

- ◆ Speech therapist at Neuro-Logo Center
- ◆ Graduate in Speech Therapy from the University of Castilla-La Mancha
- ◆ Expert in Psychomotricity and Neuromotor skills by the International University of La Rioja
- ◆ Training in Early Childhood Language Stimulation and Early Childhood Care by the Antonio de Nebrija University
- ◆ Member of the Breastfeeding Committee of the General University Hospital of Ciudad Real

### Ms. Gallego, Indira

- ◆ Speech therapist at Neuro-logo Center
- ◆ Speech therapist at the Public School of Special Education BIOS in Talavera de la Reina
- ◆ Erre que erre Speech Therapy Center of Toledo





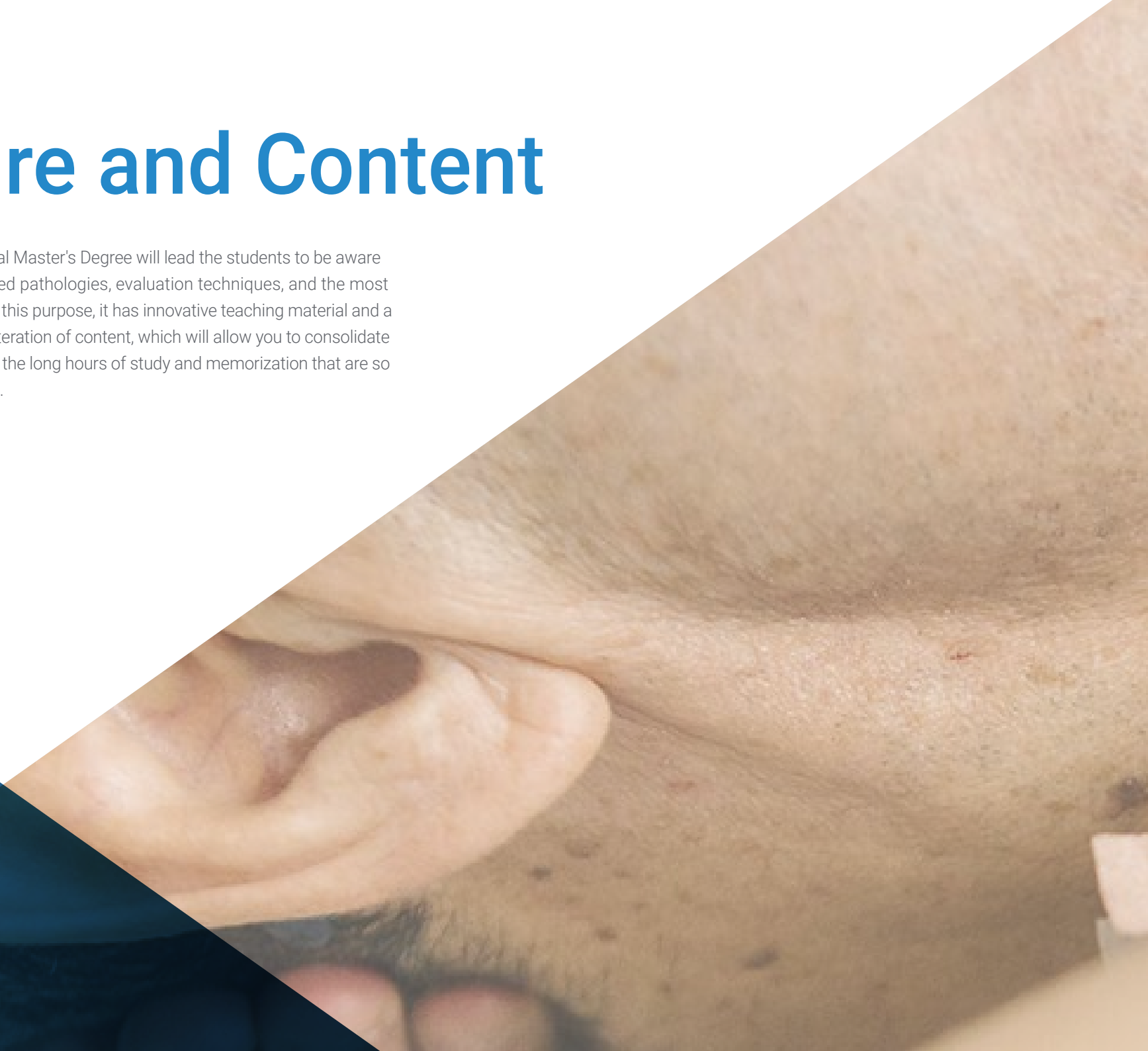
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*Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice”*

05

# Structure and Content

The plan of study of this Professional Master's Degree will lead the students to be aware of swallowing physiology, associated pathologies, evaluation techniques, and the most effective treatment approaches. For this purpose, it has innovative teaching material and a Relearning system, based on the reiteration of content, which will allow you to consolidate the concepts addressed and reduce the long hours of study and memorization that are so frequent in other teaching methods.







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*Delve whenever and wherever you want,  
from any digital device in Dysphagia due  
to organic pathology”*

## Module 1. Etiology and diagnosis of Dysphagia

- 1.1. Dysphagia Impaired Nonverbal Oral Function
  - 1.1.1. Altered Nonverbal Dysphagia
  - 1.1.2. Non-Verbal Oral Function: Swallowing
  - 1.1.3. Physiological Phases of Swallowing
  - 1.1.4. Oropharyngeal Dysphagia and Its Impact on Nonverbal Oral Function
- 1.2. Differential Diagnosis of Dysphagia
  - 1.2.1. Normal Swallowing
  - 1.2.2. Pathological Swallowing
  - 1.2.3. Painful Swallowing: Odynophagia
  - 1.2.4. Pharyngeal Globe
- 1.3. Classification of Dysphagia
  - 1.3.1. Types of Dysphagia
  - 1.3.2. Oropharyngeal Dysphagia
  - 1.3.4. Esophageal Dysphagia
  - 1.3.5. Functional Dysphagia
- 1.4. Causes of Dysphagia
  - 1.4.1. Causes of Oropharyngeal Dysphagia
  - 1.4.2. Causes of Esophageal Dysphagia
  - 1.4.3. Causes of Psychogenic Dysphagia
  - 1.4.4. Causes Latrogenic
- 1.5. Dysphagia Associated with Other Diseases
  - 1.5.1. Neurological Disorders
  - 1.5.2. Muscular Diseases
  - 1.5.3. Organic Diseases
  - 1.5.4. Infectious Diseases
  - 1.5.5. Functional Diseases
- 1.6. Complications Associated with Dysphagia
  - 1.6.1. Decreased Swallowing Efficiency
    - 1.6.1.1. Undernourishment
    - 1.6.1.2. Dehydration
  - 1.6.2. Decreased Swallowing Safety
  - 1.6.3. Dependency and Increased Care
  - 1.6.4. Complications Arising from the Use of Artificial Nutrition

- 1.7. Interdisciplinarity in the Treatment of Dysphagia
  - 1.7.1. O.R.L
  - 1.7.2. Digestive System
  - 1.7.3. Physiotherapy
  - 1.7.4. Speech Therapy
- 1.8. Dysphagia and Other Verbal and Nonverbal Oral Functions
  - 1.8.1. Breathing
  - 1.8.2. Salivation
  - 1.8.3. Chewing
  - 1.8.4. Breathing
  - 1.8.5. Voice
  - 1.8.6. Speech
- 1.9. Dysphagia and Family Environment
  - 1.9.1. Changes in Eating Habits
  - 1.9.2. Guidelines for the Management of Dysphagia in the Family
  - 1.9.3. Social Impact and Dysphagia
  - 1.9.4. Conclusions
- 1.10. Dysphagia and Neuropsychological Status of the Patient and Environment
  - 1.10.1. Psychological Status of the Patient with Dysphagia
  - 1.10.2. Psychological State of the Family
  - 1.10.3. Neuropsychological Status of the Patient
  - 1.10.4. Executive Functions in the Patient with Dysphagia

## Module 2. Anatomy and physiology of normal swallowing and Dysphagia

- 2.1. Temporal Sequence of Swallowing
  - 2.1.1. Orofacial Structures Involved in Swallowing
  - 2.1.2. Muscles Involved in Swallowing
  - 2.1.3. Head and Neck
  - 2.1.4. Chest and Abdomen
- 2.2. Physiological Phases of Swallowing
  - 2.2.1. Preparatory Oral Phase
  - 2.2.2. Oral Transport Phase
  - 2.2.3. Pharyngeal Phase
  - 2.2.4. Esophageal Phase

- 2.3. Neurobiological Basis and Swallowing
    - 2.3.1. Central Nervous System
    - 2.3.2. Reflexes Involved in Swallowing
    - 2.3.3. Cranial Nerves
    - 2.3.4. Conclusion
  - 2.4. Physiological Mechanisms
    - 2.4.1. Palatoglossal Seal
    - 2.4.2. Swallow Reflex
    - 2.4.3. Upper Esophageal Sphincter
    - 2.4.4. Velopharyngeal Sphincter Closure
    - 2.4.5. Laryngeal Sphincter Occlusion
    - 2.4.6. Lower Esophageal Sphincter Opening
  - 2.5. Voluntary Swallowing
    - 2.5.1. Preparatory Oral Phase
    - 2.5.2. Oral phase of Transportation
    - 2.5.3. Initial Oral Phase
    - 2.5.4. Conclusions
  - 2.6. Involuntary Swallowing
    - 2.6.1. Pharyngeal Phase
    - 2.6.2. Esophageal Phase
    - 2.6.3. Joint Phase
    - 2.6.4. Conclusions
  - 2.7. Pathophysiology of Dysphagia
    - 2.7.1. Physiological Changes
    - 2.7.2. 2 Disorders
    - 2.7.3. Muscle Alteration
    - 2.7.4. Lower Esophageal Sphincter (LES) Dysfunction
  - 2.8. Anatomophysiological Alterations and Dysphagia
    - 2.8.1. Atrophy of the Musculature Involved in Swallowing
    - 2.8.2. Neoplasms in Structures Involved in the Swallowing Process
    - 2.8.3. Surgical Interventions and Dysphagia
    - 2.8.4. Obstruction in Structures Involved in Swallowing
    - 2.8.5. Inflammation of Structures Involved in Swallowing
    - 2.8.6. Radiation on Structures Involved in Swallowing
    - 2.8.7. Metabolic Alterations
    - 2.8.8. Trauma
    - 2.8.9. Tumours
  - 2.9. Anatomy and Physiology of Swallowing in Neonates
    - 2.9.1. Newborn Anatomy
    - 2.9.2. Physiology of the Newborn
    - 2.9.3. Pathophysiology of the Newborn
    - 2.9.4. Embryology and Maturation of the Suction-Deglutition Breathing Process
  - 2.10. Physiological Changes Associated with Aging
    - 2.10.1. Alterations of Orofacial Structures
    - 2.10.2. Atrophy of Masticatory Muscles
    - 2.10.3. Decreased Salivation
    - 2.10.4. Decreased Muscle Tone
    - 2.10.5. Existence of Diverticula
    - 2.10.6. Epiglottis Changes
    - 2.10.7. Increased Apnea Time
    - 2.10.8. Changes in Peristaltic Waves
- Module 3. Evaluation of Dysphagia**
- 3.1. Detection of Dysphagia Symptoms
    - 3.1.1. Coughing During or Immediately after Eating
    - 3.1.2. Voice Changes
    - 3.1.3. Drooling and Difficulty in Controlling Salivation
    - 3.1.4. Difficulty in Forming the Alimentary Bolus
    - 3.1.5. Fractionated Swallowing
    - 3.1.6. Post-Deglutition Waste
    - 3.1.7. Increased Eating Time
    - 3.1.8. Fever
    - 3.1.9. Progressive Weight Loss
    - 3.1.10. Malnutrition and Dehydration

- 3.2. Initial Assessment of Dysphagia and Associated Symptoms
  - 3.2.1. Location of Symptoms
  - 3.2.2. Types of Food that Produce It
  - 3.3.3. Duration of Symptoms and Evolution
  - 3.3.4. Assessment if Progressive or Stable
  - 3.3.5. Assessment whether Continuous or Intermittent
- 3.3. Clinical Assessment of Dysphagia
  - 3.3.1. Complete Physical Examination
  - 3.3.2. Determine Risks and Swallowing Safety
  - 3.3.3. Accompanying Symptoms
  - 3.3.4. Test of Quality of Life
  - 3.3.5. Explorationc
- 3.4. Complementary Tests
  - 3.4.1. Rule Out Neoplasms
  - 3.4.2. Aspiration Study
  - 3.4.3. Endoscopy
  - 3.4.4. Specific Anatomical Studies
  - 3.4.5. Videofluoroscopy
  - 3.4.6. Videoendoscopy
  - 3.4.7. Magnetic Resonance
  - 3.4.8. Gastroduodenal Esophageal Transit
  - 3.4.9. Esofaogram Baryte
  - 3.4.10. Esophageal Manometry/High Resolution
  - 3.4.11. Transnasal Esophagoscopy
  - 3.4.12. PHmetry
  - 3.4.13. Impedanciometry
- 3.5. Speech Therapy Assessment
  - 3.5.1. Myofunctional Logopedic Assessment: Sucking, Salivation, Chewing, etc
  - 3.5.2. Speech-Language Assessment
  - 3.5.3. Speech Therapy Assessment
  - 3.5.4. Logopedic Assessment of Voice and Breathing
  - 3.5.5. Speech Therapy Assessment of Safe Feeding
- 3.6. Assessment of Anatomical Structures Involved in Swallowing
  - 3.6.1. Anatomophysiological Orofacial Evaluation
  - 3.6.2. Anatomophysiological Assessment of the Head and Neck
  - 3.6.3. Anatomophysiological Assessment of Thorax-Abdomen
  - 3.6.4. Conclusions
- 3.7. Assessment of the Oral Cavity of the Patient with Dysphagia
  - 3.7.1. Lip Assessment
  - 3.7.2. Tooth Assessment
  - 3.7.3. Palate Assessment
  - 3.7.4. Language Assessment
- 3.8. Pharyngolaryngeal Assessment
  - 3.8.1. Epiglottis Assessment
  - 3.8.2. Assessment of Motor Coordination in the Act of Swallowing
  - 3.8.3. General Assessment
  - 3.8.4. Conclusions
- 3.9. Sensitive Assessment
  - 3.9.1. Salivation Assessment
  - 3.9.2. Suction Assessment
  - 3.9.3. Assessment of Silent Aspiration
  - 3.9.4. Assessment of Painful Symptoms
- 3.10. Assessment of the Patient's General: Status
  - 3.10.1. Patient Understanding
  - 3.10.2. Swallowing Efficiency
  - 3.10.3. Swallowing Safety
  - 3.10.4. Motility. Sensitivity. Coordination

## Module 4. Dysphagia in Neonatology

- 4.1. Sucking and Swallowing Reflexes
  - 4.1.1. Nourishing Suction
  - 4.1.2. Search Reflex
  - 4.1.3. Primary Swallowing Reflex
  - 4.1.4. Secondary Swallowing Reflex

- 4.2. Development of Oral Skills in the Neonate
  - 4.2.1. Reflexes Involved in Speaking Skills
  - 4.2.2. Gestational Age at Which the Reflexes and Cranial Nerves Involved Appear
  - 4.2.3. How to Stimulate Oral Reflexes
  - 4.2.4. Conclusions
- 4.3. Oral Skills Necessary for Feeding in the Neonate
  - 4.3.1. Suction-Deglutition-Breathing Coordination
  - 4.3.2. Importance of Regional Stability
  - 4.3.3. Non-Nutritive Suction
  - 4.3.4. Nourishing Suction
- 4.4. Underlying Medical Conditions in Neonates
  - 4.4.1. Congenital malformations
  - 4.4.2. Associated Neurological Disorders
  - 4.4.3. Structural Abnormalities in the Mouth or Tongue
  - 4.4.4. Diseases of the Intestinal Tract
- 4.5. Characteristics of a UCIN
  - 4.5.1. What is a Neonatal Unit
  - 4.5.2. Causes of Hospital Admission
  - 4.5.3. Neonatal Unit Evaluation
  - 4.5.4. Neonatal Unit Intervention
- 4.6. Risk Factors that Condition the Development of Feeding Difficulties
  - 4.6.1. Prematurity
  - 4.6.2. Underweight at birth
  - 4.6.3. Immature Organ Systems
  - 4.6.4. Pathologies
- 4.7. Clinical Manifestations
  - 4.7.1. Signs and Symptoms of Dysphagia in Infants
  - 4.7.2. Impact of Stress on Nutrition
  - 4.7.3. Clinical Cases
- 4.8. Tools for Assessing Oral Skills for Feeding
  - 4.8.1. Assessment of Pre-Feeding Status Prior to Feeding
  - 4.8.2. Assessment of Bottle Feeding and Breast Feeding
  - 4.8.3. Assessment of Stress in Oral Skills
  - 4.8.4. Environment and Family Assessment

- 4.9. Tools to Intervene on Oral Skills for Feeding
  - 4.9.1. Direct Intervention
  - 4.9.2. Indirect Intervention
  - 4.9.3. Adaptive Intervention
  - 4.9.4. Compensatory Intervention
- 4.10. Neonatal Dysphagia and Family
  - 4.10.1. Importance of Family Involvement
  - 4.10.2. Feeding Strategies in Breastfeeding
  - 4.10.3. Bottle Feeding Strategies
  - 4.10.4. Conclusions

## Module 5. Pediatric dysphagia

- 5.1. Detection and Assessment of Pediatric Dysphagia
  - 5.1.1. Infant Swallowing Maturation
  - 5.1.2. Warning Signs in Pediatric Dysphagia
  - 5.1.3. Pediatric Dysphagia Assessment Scales
  - 5.1.4. Particularities in the Assessment of Pediatric Dysphagia
- 5.2. Dysphagia Due to Congenital Brain Injury
  - 5.2.1. Pediatric Cerebral Palsy
  - 5.2.2. Hypoxic- Ischemic Encephalopathy
  - 5.2.3. Genetic Syndromes
  - 5.2.4. Conclusions
- 5.3. Dysphagia Due to Acquired Brain Damage
  - 5.3.1. Cranioencephalic Trauma
  - 5.3.2. Central Nervous System Infections
  - 5.3.3. Infant Stroke
  - 5.3.4. Tumours
- 5.4. Dysphagia Due to Craniofacial Anomalies
  - 5.4.1. Craniofacial Development
  - 5.4.2. Craniofacial Developmental Anomalies
  - 5.4.3. Congenital Craniofacial Anomalies
  - 5.4.4. Acquired Craniofacial Anomalies

- 5.5. Dysphagia Due to Respiratory Pathologies
  - 5.5.1. Laryngomalacia
  - 5.5.2. Bronchopulmonary Dysplasia
  - 5.5.3. Tracheomalacia
  - 5.5.4. Subglottic Stenosis
- 5.6. Dysphagia Associated with Neurodegenerative Diseases
  - 5.6.1. Diseases with Metabolic Origin
  - 5.6.2. Neuromuscular Diseases
  - 5.6.3. Rett Syndrome
  - 5.6.4. Conclusions
- 5.7. Dysphagia Associated to Esophageal Causes
  - 5.7.1. Gastroesophageal Reflux
  - 5.7.2. Eosinophilic Esophagitis
  - 5.7.3. Crohn's Disease
  - 5.7.4. Esophageal Foreign Body
- 5.8. Dysphagia Due to Infectious Diseases
  - 5.8.1. Epiglottitis
  - 5.8.2. Retropharyngeal Abscess
  - 5.8.3. Tetanus
  - 5.8.4. Diphtheria
- 5.9. Other Causes Associated with Pediatric Dysphagia
  - 5.1.1. Oral Pathology
  - 5.9.2. Sialorrhea
  - 5.9.3. Aspirative Syndrome
  - 5.9.4. Medication
- 5.10. Complications of Dysphagia
  - 5.10.1. Malnutrition and Dehydration
  - 5.10.2. Respiratory Problems
  - 5.10.3. Psycho-Affective Alteration
  - 5.10.4. Oral Hygiene







## Module 6. Neurological Dysphagia

- 6.1. Dysphagia in Dysarthria and Aphasia
  - 6.1.1. Spastic, Flaccid, Ataxic Dysarthria
  - 6.1.2. Hypokinetic, Hyperkinetic and Mixed Dysarthria
  - 6.1.3. Fluent Aphasias
  - 6.1.4. Non-Fluent Aphasias
- 6.2. Dysphagia in Alzheimer's Disease and Dementias
  - 6.2.1. Mild, Moderate or Severe Dementia
  - 6.2.2. Consequences of Dysphagia in People with Alzheimer's Disease and Dementia
  - 6.2.3. Warning Signs
  - 6.2.4. Strategies to Improve Feeding in Advanced Dementia
- 6.3. Dysphagia in Cerebral Palsy
  - 6.3.1. Neuromotor Impairments in Cerebral Palsy
  - 6.3.2. How Dysphagia Affects People with Cerebral Palsy
  - 6.3.3. Myofunctional Therapy
  - 6.3.4. Food and Nutrition
- 6.4. Dysphagia in ALS (Amyotrophic Lateral Sclerosis)
  - 6.4.1. How Dysphagia Affects People with ALS
  - 6.4.2. Signs and Alerts for Detection
  - 6.4.3. Maneuvers to Improve Swallowing
  - 6.4.4. Food and Nutrition
- 6.5. Dysphagia in Multiple Sclerosis
  - 6.5.1. How Dysphagia Affects Sclerosis
  - 6.5.2. Symptoms
  - 6.5.3. Neuromuscular Electrical Stimulation
  - 6.5.4. Strategies for Swallowing Improvement
- 6.6. Dysphagia in Cerebrovascular Accident (CVA) and Traumatic Brain Injury (TBI)
  - 6.6.1. Dysphagia According to Lesion Location
  - 6.6.2. Effects of CVA and TBI on Swallowing
  - 6.6.3. Frequency of Dysphagia after Stroke or TBI
  - 6.6.4. Swallowing Maneuvers



- 6.7. Dysphagia in Parkinson's Disease
  - 6.7.1. How Parkinson's Affects Swallowing
  - 6.7.2. Warning Signs for Detection
  - 6.7.3. High Prevalence of Dysphagia in People with Parkinson's Disease
  - 6.7.4. Foods that Promote Swallowing in Parkinson's Disease
- 6.8. Dysphagia in Guillain-Barré Syndrome and Myasthenia Gravis
  - 6.8.1. How Dysphagia Affects Guillain-Barré Syndrome
  - 6.8.2. How Dysphagia Affects Myasthenia Gravis
  - 6.8.3. Strategies for Action
  - 6.8.4. Food and Nutrition
- 6.9. Dysphagia in Huntington Disease
  - 6.9.1. How Dysphagia Affects Huntington Disease
  - 6.9.2. Symptoms
  - 6.9.3. Swallowing Maneuvers
  - 6.9.4. Nutritional Status of People with Huntington's Disease
- 6.10. Dysphagia in Epilepsy
  - 6.10.1. Tonic Epilepsy
  - 6.10.2. Atonic Epilepsy
  - 6.10.3. Clonic Epilepsy
  - 6.10.4. Myoclonic Epilepsy

## Module 7. Dysphagia due to organic pathology

- 7.1. Dysphagia Associated with systemic Pathology
  - 7.1.1. Specific and Nonspecific Infectious Pathology
  - 7.1.2. Systemic Diseases and Dysphagia
  - 7.1.3. Swallowing Disorders Associated with Neuromuscular Processes
  - 7.1.4. Conclusions
- 7.2. Dysphagia Associated with Local Processes
  - 7.2.1. Cervical Trauma
  - 7.2.2. Musculoskeletal Degeneration and Dysphagia
  - 7.2.3. Esophageal Alterations and Dysphagia
  - 7.2.4. Extrinsic Dysphagia

- 7.3. Dysphagia Associated with Oncologic Pathology
  - 7.3.1. Oropharyngeal Oncologic Pathology and Dysphagia
  - 7.3.2. Dysphagia Associated with Pathology of the Thyroid Gland
  - 7.3.3. Dysphagia in Esophageal Tumor Pathology
  - 7.3.4. Conclusions
- 7.4. Dysphagia after Cervical Surgery Irradiated Patient
  - 7.4.1. Dysphagia in Total-Partial Laryngectomy
  - 7.4.2. Dysphagia in the Tracheostomized Patient
  - 7.4.3. Post-Radiotherapy Dysphagia
  - 7.4.4. Conclusions
- 7.5. Lower Esophageal Sphincter Disorder
  - 7.5.1. Sphincter Anatomy
  - 7.5.2. Sphincter Physiology
  - 7.5.3. Sphincter Alterations
  - 7.5.4. GERD
- 7.6. Upper Airway Injuries and Dysphagia
  - 7.6.1. Upper Airway Anatomy
  - 7.6.2. Clinical Assessment
  - 7.6.3. Neuromuscular Disorders
  - 7.6.4. Head and Neck Cancer
- 7.7. Dysphagia and Tracheostomates
  - 7.7.1. Impact of Tracheostomy on Swallowing
  - 7.7.2. Respiratory Complications
  - 7.7.3. Diet Management
  - 7.7.4. Techniques and Strategies
- 7.8. Dysphagia in Respiratory Diseases
  - 7.8.1. Chronic Respiratory Diseases
  - 7.8.2. COPD
  - 7.8.3. Pulmonary Fibralgia
  - 7.8.4. Muscular dystrophy

- 7.9. Dysphagia in Infections or Other Organic Diseases
  - 7.9.1. Upper Respiratory Tract
  - 7.9.2. Lower Respiratory Tract
  - 7.9.3. Gastrointestinal Tract
  - 7.9.4. Esophageal Diseases
- 7.10. Dysphagia Related to Muscular Diseases
  - 7.10.1. Duchenne Muscular Dystrophy
  - 7.10.2. Duchenne Muscular Dystrophy
  - 7.10.3. Waist Muscular Dystrophy
  - 7.10.4. Myotonic Muscular Dystrophy Type 1

## Module 8. Psychogenic dysphagia

- 8.1. Neuropsychological Factors and Swallowing
  - 8.1.1. Neurology and Dysphagia
  - 8.1.2. Psychology and Dysphagia
  - 8.1.3. Neuropsychological Factors and Dysphagia
  - 8.1.4. Conclusions
- 8.2. Nervous Dysphagia
  - 8.2.1. Definition
  - 8.2.2. Cause of Nervous Dysphagia
  - 8.2.3. Phagophobia
  - 8.2.4. Fear of Choking
- 8.3. Differential Diagnosis of Psychogenic Dysphagia
  - 8.3.1. Psychological Dysphagia/Neurological Dysphagia
  - 8.3.2. Psychological Dysphagia/ Organic Dysphagia
  - 8.3.3. Psychological Dysphagia/ Functional Dysphagia
  - 8.3.4. Conclusions
- 8.4. Symptoms in Psychogenic Dysphagia
  - 8.4.1. Subjective Symptoms/Objective Symptoms
  - 8.4.2. Fear of Swallowing
  - 8.4.3. Anxiety, Hypochondria, Depression. Panic Attack
  - 8.4.4. Weight Loss
  - 8.4.5. Loss of Security and Self-Esteem
- 8.5. Recommendations for Families with Psychogenic Dysphagia
  - 8.5.1. Guidelines for Family Members of Patients with Dysphagia
  - 8.5.2. Environmental Conditions
  - 8.5.3. Oral Hygiene Guidelines
  - 8.5.4. Conclusions
- 8.6. Recommendations for Children with Psychogenic Dysphagia
  - 8.6.1. Guidelines for Family Members of Patients with Dysphagia
  - 8.6.2. Environmental Conditions
  - 8.6.3. Oral Hygiene Guidelines
  - 8.6.4. Conclusions
- 8.7. Psychology, Speech Therapy and Psychogenic Dysphagia
  - 8.7.1. Interdisciplinary Relationship between Psychology and Speech-Language Pathology
  - 8.7.2. Psychological Treatment
  - 8.7.3. Speech Therapy Treatment
  - 8.7.4. Conclusions
- 8.8. Emotional State and Psychogenic Dysphagia
  - 8.8.1. Assessment of the Emotional State of the Patient with Dysphagia
  - 8.8.2. Diagnosis of the Emotional State of the Patient with Dysphagia
  - 8.8.3. Intervention in the Emotional State the Patient with Dysphagia
  - 8.8.4. Psychological Guidelines for Family and Environment of the Patient with Dysphagia
- 8.9. Logopedic Treatment of Psychogenic Dysphagia
  - 8.9.1. Myofunctional Intervention
  - 8.9.2. Body Movement Intervention
  - 8.9.3. Sensory Stimulation Intervention
  - 8.9.4. Breathing-Relaxation Intervention
- 8.10. Clinical Cases
  - 8.10.1. Clinical Case Adult with Psychogenic Dysphagia
  - 8.10.2. Clinical Case Children with Psychogenic Dysphagia
  - 8.10.3. Clinical Case Adult Support
  - 8.10.4. Clinical Case Child Support

## Module 9. Treatment of Dysphagia

- 9.1. Intervention in Dysphagia: Speech Therapists and Other Professionals
  - 9.1.1. Multidisciplinary Treatment in Dysphagia
  - 9.1.2. Importance of Multidisciplinary Treatment
  - 9.1.3. Speech Therapy Treatment Guidelines for other Professionals Involved in the Treatment of Dysphagia
  - 9.1.4. Importance of Evidence-Based Logopedic Therapy
- 9.2. Intervention in Organic Dysphagia
  - 9.2.1. Patients with Head and Neck Cancer
  - 9.2.2. Patients with Spinal Injury
  - 9.2.3. Laryngectomized Patients
  - 9.2.4. Patients with Respiratory Disorders
  - 9.2.5. Patients with Thyroid and Recurrent Nerve Involvement
  - 9.2.6. Clinical Cases
- 9.3. Intervention in Neonatal Dysphagia
  - 9.3.1. Procedure
  - 9.3.2. Materials. How Do I Use It?
  - 9.3.3. Guidelines for Parents
  - 9.3.4. Clinical Cases
- 9.4. Intervention in Pediatric Dysphagia
  - 9.4.1. Procedure
  - 9.4.2. Materials. How Do I Use It?
  - 9.4.3. Guidelines for Parents
  - 9.4.4. Clinical Cases
- 9.5. Intervention in Neurological Dysphagia
  - 9.5.1. Stroke and TBI Patients
  - 9.5.2. Patients with Parkinson's Disease
  - 9.5.3. Patients with Alzheimer's or Motor Neuron Disease
  - 9.5.4. Multiple Sclerosis Patients
  - 9.5.5. Cerebral Palsy Patients
  - 9.5.6. Patients with Myasthenia Gravis or Guillen-Barré Syndrome
  - 9.5.7. Clinical Cases

- 9.6. Dysphagia Intervention by COVID
  - 9.6.1. Procedure
  - 9.6.2. Materials
  - 9.6.3. Guidelines for Caregivers
  - 9.6.4. Clinical Cases
- 9.7. Intervention in Adult Patients
  - 9.7.1. Procedure
  - 9.7.2. Materials
  - 9.7.3. Guidelines for Caregivers
  - 9.7.4. Clinical Cases
- 9.8. Intervention in Autoimmune Dysphagia
  - 9.8.1. Procedure
  - 9.8.2. Materials
  - 9.8.3. Guidelines for Caregivers
  - 9.8.4. Clinical Cases
- 9.9. Intervention in Psychogenic Dysphagia
  - 9.9.1. Procedure
  - 9.9.2. Materials
  - 9.9.3. Guidelines for Caregivers
  - 9.9.4. Clinical Cases
- 9.10. New Treatments
  - 9.10.1. Electrostimulation
  - 9.10.2. Magnetic Stimulation
  - 9.10.3. Medical Treatment
  - 9.10.4. Conclusions

## Module 10. Dysphagia and feeding

- 10.1. Safety, Efficacy and Interdisciplinary Decisions on Feeding in Patients with Dysphagia
  - 10.1.1. How Dysphagia Affects Feeding
  - 10.1.2. Dietary Classification
  - 10.1.3. Classification of Food Administration Routes
  - 10.1.4. Steps to Choose the Right Type of Diet

- 10.2. General Intake Guidelines
  - 10.2.1. Environmental Measurements
  - 10.2.2. Guidelines Before Eating
  - 10.2.3. Mealtime Guidelines
  - 10.2.4. Post-Meal Guidelines
- 10.3. Oral Habits and Oral Hygiene
  - 10.3.1. Importance of Maintaining Good Oral Hygiene
  - 10.3.2. Oral Brushing Procedure
  - 10.3.3. Oral Care Guidelines
  - 10.3.4. Oral Hygiene Materials
- 10.4. Food Properties
  - 10.4.1. Textural Qualities of Food
  - 10.4.2. Fluid Properties
  - 10.4.3. Solids Properties
  - 10.4.4. Organoleptic Properties of Foods
- 10.5. Volume Adaptation
  - 10.5.1. Volume Definition
  - 10.5.2. Volume Classification
  - 10.5.3. Relationship between Physiology and Volume During Swallowing
  - 10.5.4. Changes in Volume for the Treatment of Dysphagia
- 10.6. Modification of Viscosity of Liquids and Texture of Solids
  - 10.6.1. Liquid Viscosity Levels
  - 10.6.2. Methods for Assessing the Viscosity of Liquids
  - 10.6.3. Solid Viscosity Levels
  - 10.6.4. Methods for Assessing the Viscosity of Solids
- 10.7. Hydration of the Patient with Dysphagia
  - 10.7.1. Definition, Classification and Characteristics of Thickening Agents
  - 10.7.2. Rheological Characteristics of the Thickened Liquid
  - 10.7.3. Sensory Characteristics of Thickened Liquids
  - 10.7.4. Factors Altering the Action of Thickeners
  - 10.7.5. Gelled Waters
- 10.8. Feeding of the Patient with Dysphagia
  - 10.8.1. Food to Avoid
  - 10.8.2. Thickeners
  - 10.8.3. Commercial Preparations
  - 10.8.4. Oral Supplements
- 10.9. Medication Adaptation
  - 10.9.1. Non-Adaptable Drugs
  - 10.9.2. Drugs for Liquid Dysphagia
  - 10.9.3. Drugs for Solid Dysphagia
  - 10.9.4. Drugs for Dysphagia to Solids and Liquids
- 10.10. Dysphagia Feeding Support Products
  - 10.10.1. Dishes
  - 10.10.2. Covered
  - 10.10.3. Vessels
  - 10.10.4. Others



*Do you want to keep abreast of progress in neonatal Dysphagia intervention? Do it in just 12 months and with the best specialists"*

06

# Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.



“

*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. Gervas, 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 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 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.





07

# Certificate

This Professional Master's Degree in Dysphagia guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree diploma issued by TECH Technological University.





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

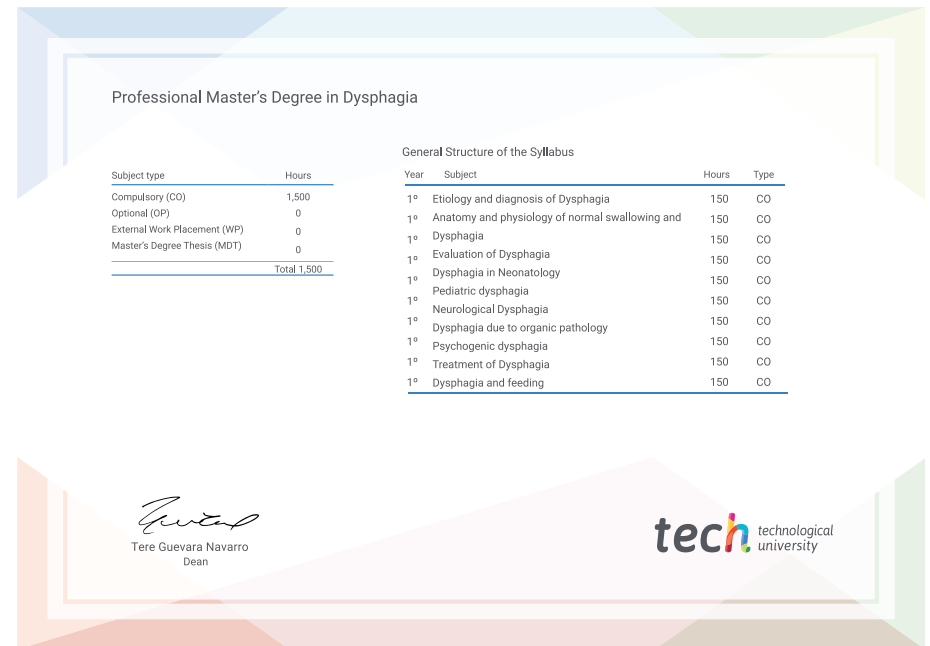
This **Professional Master's Degree in Dysphagia** contains the most complete and up-to-date scientific on the market.

After the student has passed the assessments, they will receive their corresponding **Professional Master's Degree** issued by **TECH Technological University** via tracked delivery\*.

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

Title: **Professional Master's Degree in Dysphagia**

Official N° of Hours: **1,500 h.**



\*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.



## Professional Master's Degree Dysphagia

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online



# Professional Master's Degree

## Dysphagia

