



THE EUROPEAN
SOCIETY FOR
CLINICAL
NUTRITION AND
METABOLISM

ESPEN LLL PROGRAMME IN CLINICAL NUTRITION AND METABOLISM



List of Topics and Modules January, 2018

Code	Title	Credits for Live course	Credits for on-line course	Credits for Grading Quiz	Authors
Topic 0 Introduction in Nutrition			1		
EDU T0 M0.1	Introduction to Clinical Nutrition		1		Pichard Claude Meier Rémy Regina Komsa
Topic 1 Metabolism of Metabolism of Macronutrients, Pro – Pre biotics and Fibre		4	5		
EDU T1 M1.1	Metabolism of Carbohydrates			1	H.P. Sauerwein
EDU T1 M1.2	Metabolism of Amino Acids and Proteins			1	Luc Cynober
EDU T1 M1.3	Metabolism of Lipids: New Insight			1	Regina Komsa-Penkova, Lubos Sobotka
EDU T1 M1.4	Pre-Probiotics in Nutrition			1	
EDU T1 M1.5	Fibre in Nutrition			1	
Topic 2 Water, Electrolytes and Micronutrients		4	5		
EDU T2 M2.1	Water and Electrolytes in Health and Disease			1	
EDU T2 M2.2	Metabolism of Vitamins			1	Alan Shenkin
EDU T2 M2.3	Metabolism of Minerals and Trace Elements			1	Alan Shenkin
EDU T2 M2.4	Antioxidants			1	Paola M Hunter Johane P Allard
EDU T2 M2.5	Phytochemicals			1	Hans Biesalski
EDU T2 M2.6	Fluid balance and metabolism in surgery				Dileep N Lobo
Topic 3 Nutritional Assessment and Techniques		4	3		
EDU T3 M3.1	Nutritional Screening and Assessment			1	Yitshal Berner Rémy Meier Lubos Sobotka

EDU T3 M3.2	Body Composition			1	Kristina Norman Yitshal Berner Rémy Meier Lubos Sobotka Nachum Vaisman
EDU T3 M3.3	Energy Balance			1	Lubos Sobotka
Topic 4 Nutrition in Paediatric Patients (1)		4	4		
EDU T4 M4.1	Role of Diet in Prevention and Treatment of Hyperlipidaemia in Children			1	Corina Hartman
EDU T4 M4.2	Food allergy: prevention and treatment - Cow's milk allergy				Hania SZAJEWSKA
EDU T4 M4.3	Nutrition treatment in children with intestinal failure with the special emphasis on short bowel syndrome			1	Sanja Kolaček
EDU T4 M4.4	Principles of feeding the preterm infant			1	Koen Joosten
EDU T4 M4.5	Nutritional Evaluation of Hospitalized Children (Children)			1	Olivier Goulet
Topic 5 Nutritional Requirements during Lifespan			2		
EDU T5 M5.1	Dynamic of Nutritional Requirements during Lifespan			1	
EDU T5 M5.2	Nutritional Requirements in Pregnancy and Lactation			1	
Topic 6 Malnutrition			4		
EDU T6 M6.1	Undernutrition – Simple and Stress Starvation			1	Yitshal Berner Remy Meier Lubos Sobotka Nachum Vaisman
EDU T6 M6.2	Severe undernutrition: prevalence, mechanisms, consequences			1	Malgorzata Misiak Irena Kruczyk Kinga Szczepanek Stanislaw Klek
EDU T6 M6.3	Refeeding Syndrome and Methods for Safe Nutritional Intervention			1	Stanislaw Klek Kinga Szczepanek Malgorzata Misiak
EDU T6 M6.4	Epidemiology of Overnutrition			1	
Topic 7 Enteral/Parenteral Nutrition - Substrates			3		
EDU T7 M7.1	Substrates used for enteral nutrition: tube feeding			1	Aleksandra Kapala Ryszard Choruz Stanislaw Klek

EDU T7 M7.2	Substrates for Parenteral Nutrition			1	Stanislaw Klek
EDU T7 M7.3	Immunonutrition Substrates for Enteral and Parenteral Nutrition			1	Stanislaw Klek Tomasz Kowalczyk
Topic 8 Approach to Oral and Enteral Nutrition (EN)		4	4		
EDU T8 M8.1	Indications, Contraindications, Complications and Monitoring of EN			1	Matthias Pirlich
EDU T8 M8.2	Hospital Diet and Oral Nutritional Supplements (Sip Feeds)			1	Kalliopi-Anna Poulia Marian de van der Schueren
EDU T8 M8.3	Techniques of Enteral Nutrition			1	Zeljko Krznaric
EDU T8 M8.4	Formulae for Enteral Nutrition			1	Alastair Forbes Luzia Valentini
Topic 9 Approach to Parenteral Nutrition		4	4		
EDU T9 M9.1	Indications and Contraindications for Parenteral Nutrition			1	Zeljko Krznaric Federico Bozzetti
EDU T9 M9.2	Techniques of PN			1	André Van Gossum Asuncion Ballarin Viviane Lievin
EDU T9 M9.3	Compounding and ready-to-use preparation of PN: pharmaceutical aspects. Compatibility and stability consideration; drug admixing			1	Stefan Mühlebach
EDU T9 M9.4	Monitoring and Complications of PN			1	Alessandro Laviano Alessia Mari Serena Rianda
Topic 10 Nutritional Support in Pediatric Patients (2)		4	4		
EDU T10 M10.1	Nutrition in infancy and childhood and prevention of diseases			1	Hania SZAJEWSKA
EDU T10 M10.2	Enteral Nutrition in Pediatric Patients			1	Raanan Shamir
EDU T10 M10.3	Parenteral Nutrition in Pediatric Patients			1	Sanja Kolaček
EDU T10 M10.4	Principles of feeding in pediatric ICU			1	Koen Joosten
Topic 11 Organization of Nutritional Care. Ethic and Legal Aspects			2		

EDU T11 M11.1	Organisation of a Nutritional Support Team			1	S.M. ten Dam A. Droop W. Arjaans S.D.W. de Groot Marian van Bokhorst - de van der Schuere
EDU T11 M11.2	Ethical and Legal Aspects			1	
Topic 12 Nutritional Support in Gastrointestinal Diseases		4	6		
EDU T12 M12.1	Compromised Gut			1	Stanislaw Klek Peter B. Soeters
EDU T12 M12.2	Challenges in treating short bowel syndrome			1	Jon Shaffer Alastair Forbes
EDU T12 M12.3	Nutrition and Gastrointestinal Fistulas			1	Ruben Visschers Wim van Gemert Peter B Soeters Steven WM Olde Damink
EDU T12 M12.4	Nutrition in inflammatory bowel disease			1	Rémy Meier
Topic 13 Nutritional Support in Liver Disease		2*	2		
EDU T13 M13.1	Nutritional support in acute liver failure			1	William Bernal
EDU T13 M13.2	Nutritional support in chronic liver disease			1	Mathias Plauth
Topic 14 Nutritional Support in Pancreatic Disease		2*	2		
EDU T14 M14.1	Nutrition in Acute Pancreatitis			1	Rémy Meier Stephen A. McClave
EDU T14 M14.2	Chronic Pancreatitis			1	Johann Ockenga
Topic 15 Nutritional Support in Renal Diseases		4	4		
EDU T15 M15.1	Acute Kidney Injury			1	Enrico Fiaccadori
EDU T15 M15.2	Nutritional Support in Chronic Kidney Disease			1	Denis Fouque
EDU T15 M15.3	Nutrition Support in Maintenance Haemodialysis (MHD) Patients			1	Cano Noël

EDU T15 M 15.4	Nutrition support in peritoneal dialysis patients			1	Daniel Teta
Topic 16 Nutritional Support in Specific diseases			2		
EDU T16 M16.1	Nutritional Support in Burns			1	Metter M. Berger Rene L. Chiolero
EDU T16 M16.2	Nutrition in Gravity and Bed Rest			1	
Topic 17 Nutritional Support in the Perioperative Period		4	4		
EDU T17 M17.1	Metabolic Responses to Surgical Stress			1	Olle Ljungqvist
EDU T17 M17.2	Nutritional Goals in the Perioperative Period			1	A. Weimann, MA
EDU T17 M17.3	Managing Surgical Stress: Principles of Enhanced Recovery and Effect on Outcomes			1	Kenneth C H Fearon
EDU T17 M17.4	Making the Gut work			1	Damian Bragg Simon P Allison Dileep N Lobo
Topic 18 ICU Nutrition: Treatment and Problem Solving		4	4		
EDU T18 M18.1	How to Maintain Homeostasis by Nutrition Care in the ICU			1	Michael. J. Hiesmayr
EDU T18 M18.2	More than Choosing the Route: Enteral and Parenteral Nutrition			1	Pierre Singer
EDU T18 M18.3	Repletion, Supplementation and Pharmaco-nutrition			1	Mette M. Berger Pierre Singer
EDU T18 M18.4	Clinical Priorities for Solving Complex ICU Patient Problems			1	Thomas W. Felbinger
Topic 19 Nutritional Support outside the Hospital: Home Parenteral Nutrition(HPN) in Adult Patients		3	4		
EDU T19 M19.1	Indications and Outcome			1	André Van Gossum
EDU T19 M19.2	Training and Monitoring Patients on HPN			1	Francisca Joly Michael Staun Loris Pironi Bernard Messing
EDU T19 M19.3	Venous Access and Line Complications			1	Michael Staun Francisca Joly

					André Van Gossum Loris Pironi
EDU T19 M19.4	Metabolic Complications of Home Parenteral Nutrition and Indications for Intestinal Transplantation in Chronic Intestinal Failure			1	Loris Pironi Francisca Joly Bernard Messing
Topic 20 Nutrition and Prevention of Diseases		3	5		
EDU T20 M20.1	The Place of Nutrition in the Prevention of Cardio-Vascular Diseases (CVDs)			1	Y. A. Carpentier R. S. Komsa-Penkova
EDU T20 M20.2	Nutrition in Prevention of Osteoporosis			1	Maurizio Muscaritoli
EDU T20 M20.3	Nutrition in the Prevention of Cancer			1	Maurizio Muscaritoli
EDU T20 M20.4	Nutrition in the Prevention of Neurological Diseases			1	Rosa Burgos Peláez
EDU T20 M20.5	Nutrition in the prevention and management of irritable bowel syndrome, constipation and diverticulosis			1	Eduard Cabré
EDU T20 M20.6	Moderate Alcohol and Cardiometabolic Risk in Type 2 Diabetes (T2D)				Iris Shai
Topic 21 Consequences of Diabetes Mellitus on the Nutritional Status		3*	4		
EDU T21 M21.1	Medical Nutrition in Diabetes Mellitus			1	Michela Zanetti
EDU T21 M21.2	Nutritional Support in Diabetes Type I and Type II			1	Lubos Sobotka
Topic 22 Nutrition in Lipidemias		3*	2		
EDU T22 M22.1	Dyslipidemia: Targeting the Management of Cardiovascular Risk Factors			1	Miguel Leon Sanz María D. Ballesteros-Pomar
EDU T22 M22.2	Prescription of Artificial Nutrition in Patients with Dislipidemia			1	María D. Ballesteros-Pomar Miguel León Sanz
Topic 23 Nutrition in Obesity		3	4+1		
EDU T23 M23.1	Nutrition in the Prevention of Obesity			1	Michael Chourdakis
EDU T23 M23.2	Non-surgical Interventions in Severely Obese Patients		1		Alon Lang
EDU T23 M23.3	Pre-operative Medical Assessment, Post-operative Follow-up and Clinical Outcome in Bariatric Surgical Patients			1	Anders Thorell

EDU T23 M23.4	The Obesity Paradox - BMI and Beyond			1	Irit Chermesh
Topic 24 Nutritional Support in Metabolic Syndrome		3	4		
EDU T24 M24.1	Diagnostic Criteria for Metabolic Syndrome			1	María Cristina Cuerda Compés
EDU T24 M24.2	Insulin Resistance: from Pathophysiology to Clinical Assessment			1	Rocco Barazzoni
EDU T24 M24.3	Lifestyle Interventions in Metabolic Syndrome			1	Miguel León-Sanz
EDU T24 M24.4	Drug Therapy beyond Lifestyle is it Cost Effective for Metabolic syndrome?			1	Joelle Singer María D. Ballesteros Pomar
Topic 25 Nutritional Support in Neurological Diseases		3	4		
EDU T25 M25.1	Nutritional and Metabolic Consequences of Neurological Diseases			1	Irene Bretón
EDU T25 M25.2	Nutritional Support In Acute Neurological Diseases (traumatic brain & spinal cord injuries)			1	Carole Ichai
EDU T25 M25.3	Nutritional Support in Strok			1	Stéphane M. Schneide
EDU T25 M25.4	Nutritional Support in Chronic Neurological Diseases			1	Rosa Burgos Peláez
Topic 26 Nutritional Support in Cancer		3	4		
EDU T26 M26.1	Mechanisms and Clinical Features of Cancer Cachexia			1	Paula Ravasco
EDU T26 M26.2	Nutritional Effects of Cancer Therapy and Potential Modulation of Tumour Growth			1	Alessandro Laviano
EDU T26 M26.3	Multimodal Therapy for Cancer Cachexia			1	Kenneth Fearon
EDU T26 M26.4	Pharmacologic Therapy			1	Jann Arends
Topic 27 Nutritional Support in AIDS			1		
EDU T27 M27.1	Principles of Nutritional Therapy in HIV/AIDS			1	J. Faintuch
Topic 28 Nutrition in Allergic Diseases			1		

EDU T28 M28.1	Nutrition and Food Allergy			1	
Topic 29 Nutrition in Hereditary Diseases			4		
EDU T29 M29.1	Nutrition in Phenylketonuria			1	
EDU T29 M29.2	Nutrition in Lactose Intolerance			1	
EDU T29 M29.3	Nutrition in Celiac Disease			1	
EDU T29 M29.4	Nutrition in the Cystic Fibrosis patients - impact and intervention			1	Gizel Diab Lea Bentur Drora Berkowitz Geila S. Rozen
Topic 30 Nutrition in Rheumatological Diseases		3*	2		
EDU T30 M30.1	Rheumatological Diseases			1	
Topic 31 Nutrition in Behavioral Disorders			3		
EDU T31 M31.1	Nutrition in Anorexia Nervosa			1	Alberto Miján-de-la-Torre Beatriz Mateo-de-Silleras Elvira Martin-de-la-Torre M Paz Redondo-del-Río, Ana Pérez-García
EDU T31 M31.2	Nutrition in Bulemia			1	Núria Español-Armengol Alberto Miján-de-la-Torre
EDU T31 M31.3	Nutrition in Alcohol Abuse			1	
EDU T31 M31.4	Nutrition in Drug Abuse			1	
Topic 32 Food Safety			1		
EDU T32 M32.1	Food Safety. Exposure to Toxic Environment			1	Maya Stavreva Ed van Klink Iliana Buteva Nedka Trifonova
Topic 33 Nutrition and Public Health			1		
EDU T33 M33.1	Nutrition and Public Health			1	

Topic 34 Nutrigenomics			2		
EDU T34 M34.1	Nutrigenomics – New Research Approaches			1	Varban Ganev
EDU T34 M34.2	From Nutrients To Genes: Response to Nutrients			1	Varban Ganev
Topic 35 Economics of Nutrition			1		
EDU T35 M35.1	Cost Benefit in Clinical Nutrition			1	Dan Waitzberg Yara Carnevalli
Topic 36 Nutrition in Older Adults		3	4		
EDU T36 M36.1	Epidemiology, Aetiology and Consequences of Malnutrition in Older Adults			1	Tommy Cederholm
EDU T36 M36.2	Nutritional Screening, Assessment and Diagnosis Dietary Advice and Oral Nutritional Supplements in Older Adults			1	Marian A.E. de van der Schueren
EDU T36 M36.3	Artificial Nutrition in Older Adults			1	Stéphane M. Schneider
EDU T36 M36.4	Age-Related sarcopenia			1	Juergen Bauer
Topic 37 Nutrition and Sports		3	4		
EDU T37 M37.1	Energy Balance Regulation: Effects of Exercise on ad libitum Food Intake			1	Katarina Melzer
EDU T37 M37.2	Nutrition for Endurance Sports			1	Anja Carlsohn
EDU T37 M37.3	Nutrition for Strength and Power Sports			1	Nada Rotovnik Kozjek Peter Soeters
EDU T37 M37.4	Physical Activity in Chronic Diseases			1	Laurence Genton
Topic 38 Nutritional Support in Pulmonary Diseases		3	4		
EDU T38 M38.1	Mechanisms of Wasting in Chronic Respiratory Diseases and the Impact of Disease Exacerbations			1	Annemie Schols
EDU T38 M38.2	Issues Related to Obesity in COPD			1	Frits Franssen
EDU T38 M38.3	Nutritional modulation of metabolism in COPD; similarities with top sports?			1	Luc van Loon

EDU T38 M 38.4	Evidence Based Management of Pulmonary Cachexia Current Evidence for Nutritional support, Multimodal Approaches and Future Directions				Peter Collins
Topic 39 Let's talk about Nutrition: Communication Skills for Health Care Professionals		2	3		
EDU T39 M 39.1	Evidence-based facts in nutrition: how to produce and extract the evidence				Željko Krznarić Tajana Pavić
EDU T39 M 39.2	Nutrition Facts: Cost-effectiveness of Nutrition Support			1	Maurizio Muscaritoli Maria Ida Amabile
EDU T39 M 39.3	From Theory to Practice: Communication Skills for Health Care Professionals (HCPs)			1	Joelle Singer
EDU T39 M 39.4	Discover Your Personality to Improve Your Communication Skills			1	Alain Golay