

12<sup>th</sup> Cyprus Dietetic & Nutrition Association Conference and Expowith International Participation

**EXCELLENCE IN NUTRITION & DIETETIC RESEARCH AND PRACTICE** 

01 - 03.12.2023 | Hilton Nicosia | Cyprus

# PROCEEDINGS & BOOK OF ABSTRACTS















# TABLE OF CONTENTS

Message from the Conference Chair, CyDNA President	<u>3</u>
Committees	<u>5</u>
Programme	<u>6</u>
Speakers Details in alphabetical order	<u>16</u>
Abstracts	<u>19</u>
Biographies	<u>102</u>
Oral Presentations	<u>156</u>
Poster Presentations	<u>170</u>
Speakers email addresses	<u>182</u>
Sponsors	<u>184</u>



### Message from the Conference Chair, CyDNA President

Dear dietitian, nutritionist and other health professional! Dear colleagues, exhibitors, associates, students!

Thank you for Joining us at the most nutrition/dietetic event in Cyprus!

Welcome to the Cyprus Dietetic and Nutrition Association conference.

The 12<sup>th</sup> Cyprus Dietetic and Nutrition Association (CyDNA) Conference with the theme: "Excellence in Nutrition and Dietetics Research and Practice".

As a valued professional in the field of dietetics, your expertise and contribution are invaluable to our conference. We have curated a dynamic program that encompasses the latest advancements, trends, and research in nutrition and its impact on health.

This conference will provide a unique platform for industry professionals, researchers, educators, and practitioners to connect, exchange ideas, and collaborate towards creating a healthier world. Through a series of insightful keynote presentations, engaging panel discussions, interactive workshops, and poster sessions, we aim to foster an environment of knowledge-sharing and innovation.

What I am most proud and thankful of this year is the organizations, sponsors, conference partner and the Cyprus Registration Board for Food Scientists, Technologists and Dietitians that worked with our Association to develop funds and provide support to our strategic priorities in the areas of inclusivity, diversity, equity, and accessibility.

Our Association continues to be the catalyst for our profession to come together to address the greatest food and nutrition challenges now and in the future. This conference has become an established activity of CyDNA and the participation of dietitians and nutritionists, other health professionals and students from the field of dietetics and other sciences is extremely fundamental. It is indeed a great educational, scientific and varied meeting with an unlimited opportunity of interchange professional experiences and networking among dietitians from Cyprus and abroad.

The conference and scientific committees are delighted to provide a program and resources that enable you as a professional and assist you as a leader in dietetic/nutrition profession for superior patient/client outcomes. Furthermore, this is a unique opportunity to join and link with colleagues, including the most prestigious speakers from a lot of places in the world. Our mission is to develop and extend knowledge of Nutrition and Dietetics for the health professionals through fundamental, multidisciplinary, and clinical research; facilitate contact among investigators in nutrition, dietetics, and related fields of interest; support the dissemination and application of nutrition science to improve public health and clinical practice worldwide; promote graduate education and training in dietetics and nutrition; provide reliable nutrition information, and advocate for nutrition research and its application to development and implementation of policies and practices related to nutrition.



The CyDNA supports its members and fulfills its goal by promoting and strengthening research in human nutrition; providing opportunities for allocating, disseminating, and documenting peer-reviewed nutrition research results; nurturing quality education and training in nutrition; upholding standards for ethical behavior in practice and research.

The CyDNA as a great supporter of the continuing education managed for this to offer 30 CPE hours. This 3 day conference including the open for the public event, the LLL's from CySPEN and product exhibition covers subjects by an international and local faculty of professionals.

On behalf of the organizing and scientific committee, I would like to acknowledge our appreciation to all of our sponsors, conference partner and supporters for making this conference possible and the concurrent food & products exhibition. Thanks to each of them for their diligence, enthusiasm, and generosity.

We sincerely hope you will join us at this prestigious event and contribute to the success of the 12th Cyprus Dietetic and Nutrition Association (CyDNA) Conference with International participation. Together, let us make a positive impact on the lives of individuals and communities by harnessing the power of nutrition.

Thank you for your attention, and we look forward to welcoming you to the Dietetic and Nutrition Conference – "Excellence in Nutrition and Dietetics Research and Practice".

Prof Eleni P. Andreou, RDN, CPD, DPRof, FHEA Chair of the Organizing Committee President of the Cyprus Dietetic & Nutrition Association

# EXCELLENCE IN NUTRITION & DIETETIC RESEARCH AND PRACTICE

## COMMITTEES

Chair of Organizing/

Scientific Committee

Andreou Eleni

Organizing Committee/

Chairs

Andreou Eleni (Chair)

Angastinioti Elina

Angelidou Angela (Social Media)

Efthymiou Olga

Kalli Procopis (Treasurer) Loukaides George

Michael Anna

Ntaflos Nikolaos

Ntorzi Nicoletta (Secretary)

Pahita Anna

Papamichael Dimitris Philippou Christiana Savva Andreas

Tsokkou Yiota

Zisimou Constantinos

**Invited Chairs** 

Felekki Kyriakos Petrou Christos

Theodorou Anastasios

Karis Ioannis

Scientific Committee

Andreou Eleni (Chair)

Angastinioti Elina

Angelidou Angela

Kalli Procopis

Loukaides George

Michael Anna

**Ntaflos Nikolaos** 

Ntorzi Nicoletta

Pahita Anna

Papamichael Dimitris Philippou Christiana

Savva Andreas Tsokkou Yiota

Financial Committee

Philippou Christiana (Chair)

Kalli Procopis (Treasurer)

Andreou Eleni Ntorzi Nikoletta

CyDNA Board

Dr Andreou Eleni - President

Dr Philippou Christiana - Vice President

Pahita Anna - Secretary Kalli Procopis - Treasurer

Ntorzi Nicoletta - Assistant Secretary

Ntaflos Nikolaos - Member Papamichael Dimitris - Member



# PROGRAMME

## PROGRAMME

#### FRIDAY, 1 DECEMBER 2023 **ROOM: AMATHUSIA** 10:30 - 11:00 Registrations for LLL Course Participants (LEDRA FOYER) 11:00 - 13:00 **LLL Course: Nutritional Support in Pancreatic Disease** LLL Modules: • Module 14.1: Nutrition in Acute Pancreatitis Chrystalla Kountouri • Module 14.2: Chronic Pancreatitis Dr Haris Constantinou 12:15 - 13:00 · Case and Test Course Director: Chrystalla Kountouri CYPRUS SOCIETY FOR CLINICAL NUTRITION AND METABOLISM Presenters: Chrystalla Kountouri, Dr Haris Constantinou With Cooperation of CySPEN CPE level: II CPE credit:2

12:30 - 13:00	Registrations - Welcome coffee and cookies (LEDRA FOYER)				
ROOM: LEDRA	ROOM: LEDRA A				
13:00 - 14:00	Panel: Microbiomes, Microbiota and Nutrition				
	Maternal microbiome and brain development     Prof Edna Yamasaki Patrikiou				
	Can our epigenome store metabolites?     Dr Evelina Charidemou				
	Eating for Two: How Our Diet's microRNAs Influence Our Microbiome     Dr Myrtani Pieri				
	Chairs: Eleni Andreou, Nicoletta Ntorzi, Kyriakos Felekkis				
	CPE level: I CPE credit: 1				



#### 14:00 - 15:00 **Panel: Sports Performance - Discussion** Practical Training - Testimonial Nectarios Alexandrou • Sports Performance from Nutrition Perspective Nicoletta Michaelidou Marathon training needs and performance Dr George Loucaides Sports Performance from Sports Medicine Perspective Dr Michalis Michaelides Chairs: Nikolaos Ntaflos, Constantinos Zisimou In Collaboration with National Center of Sports Medicine Research in Cyprus CPE level: II CPE credit:1 15:00 - 16:00 Panel: Nutrition Behaviour and Dietetic Practice for Life Cycle Nutrition · Results of Army Study in Cyprus for Weight and Eating Behaviour of soldiers Nicoletta Ntorzi • Entrepreneurship in Dietetics Alini Calmon - Spanou Guiding New Parents to Prevent Food Allergies in Infancy Dr Emilia Vassilopoulou Nutritional Policies from Ministry of Health Eliza Markidou Chairs: Eleni Andreou, Yiota Tsokkou CPE level: II CPE credit: 1 16:00 - 16:30 16:30 - 17:30 **Panel: Atherosclerosis Matters** Adherence to the Mediterranean diet and atherosclerotic cardiovascular events: Follow-up data from a Cypriot cohort Dr Andrie Panayiotou • Folic acid deficiency, homocysteine blood levels and atherosclerotic cardiovascular events: a 19-year follow-up study in an initially asymptomatic Cypriot cohort Prof Andrew Nicolaides, MD · Factors Influencing the Production of Nitric Oxide Prof Dan Benardot Chairs: Christiana Philippou, Olga Efthymiou

In Collaboration with Cyprus Atherosclerosis Society

CPE credit: 1

CPE level: I



# EXCELLENCE IN NUTRITION & DIETETIC RESEARCH AND PRACTICE

17:30 - 18:30	Panel: All about Weight Management
	Chrononutrition: Is eating according to circadian rhythm the right choice?     Prof Dimitrios Papandreou
	Mindset and weight management     Dr Anastasios Papalazarou
	Patient- centered communication in obesity management setting     Prof Marwan El Ghoch
	Chairs: Elina Angastinioti, Angela Angelidou, Christos Petrou
	CPElevel: II CPEcredit: 1
18:30 - 19:30	Opening Ceremony
18:30 - 19:00	<ul> <li>Keynote Presentation: 'One Health': The challenges are ahead Prof Antonis Zampelas, President of Hellenic Food Authority (EFET)</li> </ul>
19:00 - 19:30	Addresses by:
	Prof Eleni P. Andreou     President of Cyprus Dietetic and Nutrition Association
	<ul> <li>Mrs Panayiota Theophilou</li> <li>V. President of Cyprus Registration Board for Food Scientists,</li> <li>Technologists and Dietitians</li> </ul>
	Mrs Fani Preventi     President of the Helenic Dietetic and Nutrition Association
	Ministry of Education, Sports and Youth Representative
	Dr Christina Yiannaki     Director General, Ministry of Health
	Honor of Dr Iosif Kasios, MD Past President of the National Committee of Diabetes
	Performance by Tenor Ioannis Livanos
	Chairs: <b>Nicoletta Ntorzi, Anna Pahita</b>
	CPE level: III CPE credit: 1
19:30	Official Opening of Exhibition and Cocktail



### **SATURDAY, 2 DECEMBER 2023**

ROOM: AMATHU	JSIA
08:00 - 12:00	LLL Course: Nutritional Support in Paediatric Patients
	LLL Modules:
08:00 - 08:45	<ul> <li>Module 4.1: Food Allergy: Prevention and Treatment of Cow's Milk Allergy Dr Giagkos Lavranos, MD</li> </ul>
08:45 - 09:30	<ul> <li>Module 4.2: Nutrition and Dietary Therapy in Paediatric Inflammatory Bowel Disease</li> <li>Dr Giagkos Lavranos, MD</li> </ul>
09:30 – 10:15	<ul> <li>Module 4.3: Nutrition Treatment in Children with Intestinal Failure with a Special Emphasis on Short Bowel Syndrome Prof Dimitris Papandreou</li> </ul>
10:15 – 10:30	Coffee Break (Exhibition Area)
10:30 - 11:15	Module 4.4: Principles of Feeding the Preterm Infant     Prof Dimitris Papandreou
11:15 – 12:00	Case and Test
	Course Director: Chrystalla Kountouri, Dr Giagkos Lavranos Presenters: Dr Giagkos Lavranos, Prof Dimitrios Papandreou
	With Cooperation of CySPEN  CLINICAL NUTRITION AND METABOLISM
	CPE level: II CPE credit: 4
ROOM: LEDRA	4
08:30 - 09:30	Panel: Nutrition Care Plan - Workshop
	<ul> <li>Nutrition Assessment and Process of Nutrition and Dietetic Practice,</li> <li>Case Study/ Discussion</li> <li>Prof Eleni Andreou &amp; Anna Pahita</li> </ul>
	<ul> <li>What you told us! (for introduction of solid food – research based)</li> <li>Dr Dona Hileti</li> </ul>
	Chairs: George Loukaides, Yiota Tsokkou
	CPE level: II CPE credit: 1
09:30 - 10:30	Workshop: Contemporary and Motivating Issues in Dietetics
	Managing the fear of uncertainty     Dr Elie Wakil
	Chairs: Eleni Andreou, Constantinos Zisimou
	CPE level: II CPE credit: 1



# EXCELLENCE IN NUTRITION & DIETETIC RESEARCH AND PRACTICE

10:30 - 11:00	Coffee Break (Exhibition Area) Poster Session (LEDRA A)
11:00 - 12:00	Panel: Neurodegenerative Disorders, Cognition and Nutrition
	MIND DIET- Excellence in Nutrition Practice for Dementia, Alzheimer's, Parkinson, Aging Elina Angastinioti
	<ul> <li>Modifiable and unmodifiable risk factors affecting cognitive health and quality of life in adulthood: Evidence from the Neurocognitive Study on Aging (NEUROAGE)</li> <li>Prof Fofi Constantinidou</li> </ul>
	<ul> <li>Pomegranate seed oil (Granagard), a natural antioxidant to target neurodegeneration in Multiple Sclerosis</li> <li>Dr Panagiota Petrou, MD</li> </ul>
	Chairs: George Loukaides, Eleni Andreou
	CPElevel: I CPE credit: 1
12:00 - 13:00	Panel: Workshop-Practical Tools for Eating Disorders
	The role of a dietitian in the treatment of anorexia nervosa     Bethany Francois
	<ul> <li>MINDFUL EATING- when a psychologist and dietitian work together to implement MINDFUL EATING</li> <li>Persa Korfiati</li> </ul>
	<ul> <li>Train the Trainer: Educate the dietitians/nutritionist show to guide their consultees with disordered eating (Testimonial)</li> <li>Poly Gregora</li> </ul>
	• 5' presentation by $Z @P\Pi A\Sigma$
	Chairs: Eleni Andreou, Olga Efthimiou
	In Collaboration with MAZI  MAPIAE & ANAPER ZOPTIAE EPYMA (SOPTIAL ANTONISM)  MAPIAE & ANAPER ZOPTIAE EPYMA (SOPTIAL ANTONISM)  MAZI  MAPIAE & ANAPER ZOPTIAE (SOPTIAL ANTONISM)
	CPElevel: I CPEcredit: 1.5
13:00 – 14:00	Lunch Break (Exhibition Area)
14:00 - 15:00	Food Demonstration: Culinary Nutrition SPA for Health/Institute – Preparing Food for the Hospital
	By Chef George Erotokritou
	Chairs: Andreas Savva, Angela Angelidou
	In Collaboration with Charalambides Christis
	OPElevel: III OPEcredit: 1



Nutrition Policies, Procedures and Programmes in the Cyprus Ministry of Education, Sports and Youth Dr Christiana Philippou  GeSY: A Challenging Era Chrystalla Kountouri  Medical Nutrition Therapy Guidelines for the Treatment of Obesity: A Paneuropean Approach Dr Antonis Vlassopoulos  Policy priorities and advocacy for the profession of Dietitians - Nutritionists in Europe by EFAD Dr Grigoris Risvas  Chairs: Eleni Andreou, Nikolaos Ntaflos, Ioannis Karis  OPElevel: OPEcredit: 1  16:00 – 17:00  Panel: New practices with Diabetes and Metabolic Syndrome  Gene-diet interactions and their potential role in type 2 diabetes prevention Dr Alexandros Heraclides
Chrystalla Kountouri  Medical Nutrition Therapy Guidelines for the Treatment of Obesity: A Paneuropean Approach Dr Antonis Vlassopoulos  Policy priorities and advocacy for the profession of Dietitians - Nutritionists in Europe by EFAD Dr Grigoris Risvas  Chairs: Eleni Andreou, Nikolaos Ntaflos, Ioannis Karis  CPE level: CPE credit: 1  Panel: New practices with Diabetes and Metabolic Syndrome  Gene-diet interactions and their potential role in type 2 diabetes prevention
of Obesity: A Paneuropean Approach Dr Antonis Vlassopoulos  • Policy priorities and advocacy for the profession of Dietitians - Nutritionists in Europe by EFAD Dr Grigoris Risvas  Chairs: Eleni Andreou, Nikolaos Ntaflos, Ioannis Karis  CPE level: CPE credit: 1  16:00 – 17:00  Panel: New practices with Diabetes and Metabolic Syndrome  • Gene-diet interactions and their potential role in type 2 diabetes prevention
of Dietitians - Nutritionists in Europe by EFAD Dr Grigoris Risvas  Chairs: Eleni Andreou, Nikolaos Ntaflos, Ioannis Karis  CPElevel: I CPEcredit: 1  16:00 - 17:00  Panel: New practices with Diabetes and Metabolic Syndrome  • Gene-diet interactions and their potential role in type 2 diabetes prevention
CPElevel:   CPEcredit: 1  16:00 – 17:00  Panel: New practices with Diabetes and Metabolic Syndrome  • Gene-diet interactions and their potential role in type 2 diabetes prevention
16:00 – 17:00  Panel: New practices with Diabetes and Metabolic Syndrome  Gene-diet interactions and their potential role in type 2 diabetes prevention
Gene-diet interactions and their potential role in type 2 diabetes prevention
CGMs pumps and the role of the clinical dietitians as a diabetes educator     Dr Charilaos Dimosthenopoulos
<ul> <li>Developments in the diagnosis and management of metabolic syndrome from a pharmacist perspective</li> <li>Dr Eleftheria Galatou</li> </ul>
Chairs: Dimitris Papamichael, Elina Angastinioti
CPElevel: I CPE credit: 1
17:00 - 17:30 Coffee Break (Exhibition Area)
17:30 – 18:30 Satellite Symposium by M.S. Jacovides & Co Ltd
The phytotherapy and its uses for a healthy liver     Dr Marco Gianfrancesco (Ortis Scientific Affairs Lead)
5' Presentation by MSJ Group
Chairs: Christiana Philippou, Procopis Kalli
CPE level: I CPE credit: 1

18:30 - 19:30	Panel: Kidney Diseases
	Testimony from the Cyprus Patients Kidney Association     Emily Groutidou
	Nutritional Guidelines from stage1 to ESKD     Dr Kalliopi Anna Poulia
	Exercise in chronic kidney disease     Dr Christoforos Giannaki
	<ul> <li>The role of the Nurse in the care of people with Kidney failure</li> <li>Dr Evangelos Latzourakis</li> </ul>
	Chairs: Anna Michael, Eleni Andreou, Anastasios Theodorou
	OPElevel: I OPEcredit: 1.5
21:30	Gala Dinner

#### **SUNDAY, 3 DECEMBER 2023 ROOM: LEDRA A** 09:00 - 10:00 **Oral/Poster Presentations** Chairs: George Loukaides, Procopis Kalli CPE level:111 CPE credit:1 10:00 - 11:00 **Panel: Dietetic Science and Practice** • Intermittent Fasting: A Novel Approach or Just Another FAD Diet? Fani Preventi • GLP1 agonists – Are they the solution for weight loss? Dr Yiannis Sarigiannis • Nutritional Pathways to Sleep Optimization: Bridging Dietetics and Sleep Science Dr Angelos Vlahoyiannis Chair: Anna Michael, Anna Pahita CPE level: II CPE credit: 1 11:00 - 11:15



11:15 - 12:15	Panel: Critical Care in Nutrition
	Functional Food and Prevention of Chronic Diseases     Dr Aimilia Papakonstantinou
	The New Guidelines for Enteral Nutrition     Dr Dimitrios Karagiannis
	<ul> <li>The Diagnosis of Malnutrition According to the GLIM for Cancer patients Sophia Brown</li> </ul>
	Chairs: Nicoletta Ntorzi, Eleni Andreou
	CPE level: II CPE credit: 1
12:15 - 13:00	Satellite Symposium  by Fagron Hellas  Fagron  personalizing medicine
	<ul> <li>Nutrigenetics tool for health professionals.</li> <li>How to implement Fagron NutriGen™ into your clinical practice</li> <li>Mrs Niki Androulaki</li> </ul>
	Chairs: Christiana Philippou, Nikolaos Ntaflos
	CPE level: I CPE credit: 1
13:00 – 14:00	Debate: The role of artificial sweeteners and light products in the promotion of weight loss and diabetes management
	<ul> <li>Dr Anastasios Papalazarou (Con)</li> <li>Dr Charilaos Dimosthenopoulos (Pro)</li> </ul>
	Chair: Dimitris Papamichael, Yiota Tsokkou
	CPE level: III CPE credit: 1
14:00 – 14:30	Closing Ceremony and Awards for
	<ul> <li>Best Rated Oral/Poster Presentation for Student Dietitians</li> <li>Announcement of Children's Book Contest Winner</li> </ul>
	Supported by: Ministry of Health, Ministry of Education, Sport and Youth
	Prof Eleni Andreou Chairs: Christiana Philippou, Nicoletta Ntorzi
	CPE level: III CPE credit: 1

The Scientific Programme applied for approval for 30 CPE (22 Conference, 1 Poster/Oral, 1 Exhibition, 6 LLL)

Conference Room: Ledra A | Exhibition Room: Ledra B LLL- 4 Room: Dionysos | LLL- 14 Room: Ledra A

Available Translation for Conference: Greek - English LLL's will be in English (Greek explanations by Greek speaking speakers)



# EXCELLENCE IN NUTRITION & DIETETIC RESEARCH AND PRACTICE

	(	DRAL PRESENTATIONS
OP 001	Eleftheria Panagiotou University of Nicosia, Cyprus	Evaluating the Influence of the Mediterranean Diet Adherence on allergic Diseases: A Systematic Review
OP 002	Theodoros Pavlidis University of Nicosia, Cyprus	Supplement Consumption according to sport among Cypriot Sportsmen/women: A cross-sectional & Longitudinal Study
OP 003	Maria Eleni Makreli University of Nicosia, Cyprus	Adherence to Mediterranean diet by patients with Idiopathic Inflammatory Bowel Disease (IBD) in Cyprus, Ascertainment of their Nutritional Habits and Association between Medscore and Body Mass Index (BMI)
OP 004	Christiana Mouski University of Nicosia, Cyprus	Investigation of the implementation of mindful eating by Cypriot and Greek adults using the mindful eating questionnaire (MEQ) and correlation of results with Body Mass Index and Serum Vitamin D
OP 005	Sotiria Kotopoulou University of Athens, Greece	Frequency of Fried Fish Consumption increases Dyslipidemia risk: Results from the Hellenic National and Health Survey (HNNHS)
OP 006	Theodoros Smiliotopoulos University of Athens, Greece	Fermented Food Consumption Cartograohy in the 4 Main European Regions using an online specifically derived fermented food Frequency Questionnaire (FFFQ) - A Pimento Cost Action
OP 007	Anastasia Pateli University of Nicosia, Cyprus	Eating Habits of People with Cancer diagnosis and Examination for adherence to the Mediterranean Diet: An Observational Pilot Study
OP 008	Dimitirs Papamichael University of Nicosia, Cyprus	Adherence to the Mediterranean Diet, cancer recurrence risk and disease-related fatigue levels in colorectal cancer survivors: A randomized prospective intervention study
OP 009	Farah Kadhem University of Nicosia, Cyprus	Exploring Eating Habits and Associated Factors in Cypriot Adults: A Comprehensive Investigation Using the EAT-26 Questionnaire (2023)
OP 010	Chrystalla Myriantheos University of Nicosia, Cyprus	Exploring dietary patterns and their Association with Nutrition and label use among Cypriot Adults: A Cross-sectional study
	F	POSTER PRESENTATIONS
PP 001	Pavlina Theodorou	Adherence to the Mediterranean diet by adults worldwide and its correlation

	Р	OSTER PRESENTATIONS
PP 001	Pavlina Theodorou University of Nicosia, Cyprus	Adherence to the Mediterranean diet by adults worldwide and its correlation with obesity. Systematic Review.
PP 002	Tamara Al Abdi University of Nicosia, Cyprus	The effect of Personality on Chrononutrition
PP 003	Dionysia Argyropoulou University of Athens, Greece	Analysis of Nutritional Habits in Elderly with Type II Diabetes Mellitu
PP 004	Dionysia Voutou University of Nicosia, Cyprus	Presentation and Nutritional Approach of Celiac Disease: A Literature
PP 005	Panagiotis Siekkeris University of Nicosia, Cyprus	A systematic Review of the Usability Methods and other factors in the Evaluation of online Health Applications for Type 1 Diabetes
PP 006	Christina Kritikou Nicoletta Charalambous Cyprus Ministry of Education, Sports and Youth	Nutrition Guidelines and Initiatives at the Cyprus Ministry of Education, Sports, and Youth
PP 007	Anna C. Michail University of Nicosia, Cyprus	What we already know for PLADO regimens in CKD patients: Review
PP 008	Nayia Andreou University of Nicosia, Cyprus	Evaluation of the risk of eating disorders among Cypriot adults, associated with gender, BMI and body satisfaction. Pilot Study
PP 009	Savoulla Ghlobrial University of Nicosia, Cyprus	The meaning of Professional Autonomy in a Multi-professional Health Setting



## SPEAKERS DETAILS in alphabetical order

A/A	Speaker	Specialization	Country
1.	Alexandrou Nectarios	Founder & Director G.D.A Sports LTD, Sport Events & Mental Education, GROWTH.Daily.Always.	Cyprus
2.	Andreou Eleni	RDN and Licensed Dietitian, Professor of Clinical Dietetics and Nutrition at University of Nicosia, BSc/ CPD Food and Nutrition and Dietetics with Specialization in Clinical Dietetics, Youngstown State University, USA, Doctorate Studies in Nutrition and Behavior in Education and Clinical Dietetics, Middlesex University, UK, Certified Clinical Dietitian as Renal Dietitian and Specialized in Eating Disorders, Nutrition Dimension/CDR, USA, President of Cyprus Dietetic and Nutrition Association (CyDNA), President of the Cyprus Registration Board of Food Scientists, Technologists and Dietitians (CyRBFSTD), School of Life and Health Sciences, University of Nicosia, HoD of Life Sciences School	Cyprus
3.	Androulaki Niki	Higher Technological Educational Institution of Thessaloniki Dietitian-Nutritionist, KOL Fagron Hellas	Greece
4.	Angastinioti Elina	MS, RDN, Clinical Dietitian/Nutritionist	Cyprus
5.	Benardot Dan	PhD, DHC, RDN, FACSM Teaching Professor (Emory University), and Professor of Nutrition, Emeritus (Georgia State University), Emory University and Georgia State University	USA
6.	Brown Sophia	RD, Registered Dietitian, Master's in Nutrition and Dietetics, University of Nottingham, United Kingdom, Senior Specialist Dietitian, Portsmuth University Hospitals, NHS	UK
7.	Calmon-Spanou Alini	MSc Clinical Dietetics (Cyprus) 2022, BS Human Nutrition (UK) 2018 BS Human Resources Management (UK) 2009, BS Business and Marketing(Brazil) 2004 Clinical Dietitian - Head Dietitian, Cyprus Dietetic & Nutrition Association	Greece
8.	Charidemou Evelina	PhD, Nutritional Biochemist, Lecturer, University of Nicosia	Cyprus
9.	Constantinidou Fofi	Ph.D., CCC-SLP & CBIS, Professor of Language Disorders & Clinical Neuropsychology Director, Center for Applied Neuroscience, University of Cyprus	Cyprus
10.	Constantinou Haris	MD, BSc Nutritional Sciences and Dietetics, Consultant Physician at Internal Medicine Department and the Director of the Obesity Medicine Clinic at Larnaca General Hospital	Cyprus
11.	Dimosthenopoulos Charilaos	PhD from the Medical School, Kapodistriakon University, Athens, Greece Bachelor degree on Biology, School of Biology of the Aristotle University of Thessaloniki, Greece, Postgraduate Diploma (PostDip in Dietetics) in Dietetics, Leeds Metropolitan University, UK, Master of Medicine and Science in Human Nutrition (MMedSci), Sheffield University, UK, Chief Dietitian, General Hospital of Athens "Laiko", Department of Nutrition and Dietetics, Laiko General Hospital, Athens, Greece, First Department of Propaedeutic Internal Medicine, Medical School National and Kapodistrian University of Athens, Laiko General Hospital	Greece
12.	El Ghoch Marwan	MD, Associate Professor, Department of Biomedical, Metabolic and Neural Sciences, University of Modena and Reggio Emilia, Italy, Professor in Clinical Nutrition	Italy
13.	Erotokritou George	Chef	Cyprus
14.	Francois Bethany	BSc Biomedical Sciences, MSc Eating Disorders and Clinical Nutrition, PG Diploma Dietetics, Orri Eating Disorder Service, London	UK
15.	Galatou Eleftheria	Pharmacist- Biologist, MSc, PhD, Assistant Professor, Pharmacy Program, Department of Health Sciences, School of Life and Health Sciences, University of Nicosia	Cyprus



## EXCELLENCE IN NUTRITION & DIETETIC RESEARCH AND PRACTICE

A/A	Speaker	Specialization	Country
16.	Gianfrancesco Marco	PhD in Pharmaceutical and Biomedical Sciences, Scientific Affairs Lead, Les Laboratoires Ortis	Belgium
17.	Giannaki Christoforos	BSc, MSc, PhD, Associate Professor, Department of Life Sciences, School of Life and Health Sciences, University of Nicosia	Cyprus
18.	Gregora Poly	Mental Health First Aider, Coach, Expert by Experience, Mental Health Empowerment Advocate	Cyprus
19.	Groutidou Emily	Vice-President of the European Kidney Patients' Federation (EKPF), President of the Pancyprian Organization of People with Kidney Disorders, Board Member of the Cyprus Transplantation Council	Cyprus
20.	Heraclides Alexandros	PhD, Associate Professor Epidemiology and Public Health Department of Health Sciences, School of Sciences, European University Cyprus	Cyprus
21.	Hileti Dona	PhD, MSc, BSc (hons), RD, Lecturer in Nutrition at the University of Nicosia and Clinical Paediatric Dietitian, University of Nicosia	Cyprus
22.	Karagiannis Dimitrios	BSc, MSc, PhD, Director, Clinical Nutrition Unit, Evaggelismos General Hospital, Athens	Greece
23.	Korfiati Persa	BSC Psychology - Lyon II Lumiere, Master Degree Psychology - Lyon II Lumiere, PhD Candidate - University of Nicosia, Registered Specialized Psychologist in Cyprus, Panhellenic Psychological Association - Greece / Association of MAZI-Eating Disorders Cyprus	Cyprus
24.	Kountouri Chrystalla	RD Clinical Dietitian, GHS	Cyprus
25.	Latzourakis Evangelos	PhD, MSc, Renal Pg Cert, BSc, RN, Lecturer, University of Nicosia	Cyprus
26.	Lavranos Giagkos	MD, PHD, MA, Professor in Internal Medicine and Public Health	Cyprus
27.	Loucaides George	BSc, Master Med Sci, PhD, Exercise Physiologist Cyprus Sports Organization, Cyprus Sports Research Center	Cyprus
28.	Markidou Eliza	Clinical Dietitian, Ministry of Health, Cyprus	Cyprus
29.	Michaelides Michalis	PhD of Medical & Exercise Physiology, Scientific Director of the Cyprus Sports Medicine & Research Centre - Incoming President of the Cyprus Sports Medicine Association, Cyprus Sport Organization, Cyprus Association of Sports Medicine	Cyprus
30.	Michaelidou Nikoleta	MSC, RD, IOC Sports Nutrition Diploma Certified, Clinical Dietitian/Sports Nutritionist, Cyprus Sports Research Center	Cyprus
31.	Nicolaides Andrew	DSc, MS, PhD, FRCS, FRCSE, Honorary Professor of Surgery, University of Nicosia Medical School	Cyprus
32.	Ntorzi Nicoletta	PhD can., RDN, CDN, MS, Clinical Dietitian, CyDNA	Cyprus
3.	Pahita Anna	BSc/RD, Clinical Dietitian, Secretary of CyDNA	Cyprus
34.	Panayiotou Andrie	PhD, Associate Professor in Public Health, School of Health Sciences, Cyprus University of Technology	Cyprus
35.	Papakonstantinou Aimilia	PhD, Assistant Professor in Nutrition and Metabolism Laboratory of Dietetics and Quality of Life, Department of Food Science and Human Nutrition, Agricultural University of Athens	Greece
36.	Papalazarou Anastasios	PhD on Human Nutrition and Dietetics, Department of Dietetics-Nutrition Science of Harokopio University in Athens, Greece, Dietitian, Scientific Associate of Harokopio University of Athens, Nutrition and Dietetic Department	Greece



A/A	Speaker	Specialization	Country
37.	Papandreou Dimitrios	Dr (Med), M.Ed, M.Sc, RDN, FHEA, Professor of Nutrition, College of Health Sciences, University of Sharjah	UAE
38.	Petrou Panayiota	MD, Senior Neurologist and Head of Day Care Clinic, Multiple Sclerosis and Neuroimmunology Center, Senior Lecturer Hadassah University Hospital, Hebrew University of Jerusalem	Israel
39.	Philippou Christiana	PhD in Nutrition and Dietetics - Specialized on Nutrition Education - University of Nicosia, Doctorate Studies in Clinical Dietetics, Nutrition Science and Health Education - Specialized in Health Education - Middlesex University, UK MSc/AP4 Food and Nutrition - Specialization in Sports Nutrition - Southern Illinois University at Carbondale, USA, RDN (Registered Dietitian/Nutritionist, USA, Europe) and Licensed Dietitian in Cyprus, BSc Food and Nutrition - Specialized in Clinical Dietetics - Southern Illinois University at Carbondale, USA, Minor in Chemistry - Southern Illinois University at Carbondale, USA, Current Position: Health Education (HomeEconomics), Inspector in Secondary Education in the Ministry of Education, Sports & Youth, Inspector of Health Education (Home Economics) in Secondary Education, Ministry of Education, Sports & Youth, Vice President of Cyprus Dietetic and Nutrition Association (CyDNA)	Cyprus
40.	Pieri Myrtani	PhD in Human Physiology, Associate Professor, Department of Life Sciences, University of Nicosia	Cyprus
41.	Poulia Kalliopi Anna	MMedSci, PhD, Assistant Professor of Clinical Dietetics, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens	Greece
42.	Preventi Fani	Dietitian - Nutritionist, MSc, President of the Hellenic Dietetic Association, Hellenic Dietetic Association	Greece
43.	Risvas Grigoris	PhD in Applied Dietetics - Nutrition, MMedSci in Public Health Nutrition, MSc in Health Services Management, BSc in Dietetics, Vice President of EFAD, Academic Director - Aegean College	Greece
44.	Sarigiannis Yiannis	PhD in Medicinal Chemistry, Associate Professor in Chemistry, Department of Health Sciences, School of Life & Health Sciences, University of Nicosia	Cyprus
45.	Vassilopoulou Emilia	PhD, Clinical Research Fellow (Milan) / Asst Professor of Diet and Nutrition (Thessaloniki), Pediatric Unit, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico / International Hellenic University	Greece
46.	Vlahoyiannis Angelos	MSc, PhD, Part-Time Lecturer, Department of Life Sciences, University of Nicosia	Cyprus
47.	Vlassopoulos Antonis	PhD, MSc(MedSci), BSc, RD, Senior Research Fellow in Food & Nutrition Agricultural University of Athens, University of Glasgow, ESDN Obesity EFAD	Greece
48.	Wakil Elie	Pharm D., Director; Human Relations Consultant, E.W. Human Development Ltd	Cyprus
49.	Yamasaki Patrikiou Edna	MSc, MD, PhD, Professor, Department of Life Science, University of Nicosia	Cyprus
50.	Zampelas Antonis	BSc, Food Science and Technology, Agricultural University of Athens MSc, Food Science, University of Reading, UK, PhD, Human Nutrition, University of Surrey, UK, Professor, President of the Management Board, Hellenic Food Authority (EFET), Member of the Management Board, European Food Safety Authority (EFSA), Professor of Human Nutrition, Department of Food Science and Human Nutrition, Agricultural University of Athens, Greece, Honorary Professor, Division of Medicine, University College London (UCL), Visiting Professor, Department of Life and Health, University of Nicosia, Cyprus	Greece

# ABSTRACTS



#### **Alexandrou Nectarios**

Primary School Teacher UCY - Ex Football Player - UEFA YOUTH ELITE DIPLOMA GDA Sports Founder, Liverpool FC HEAD Coach, TV Pundit on Football Games, Cyprus

#### **Title of Presentation**

#### **Nutrition. An Athlete and Coach Approach**

#### **CPE** Level

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to

Understand some details on how an athlete or a person in General can take some decisions that can elevate or downgrade his/her performance mentally and physically.

The importance of parents being the example of healthy nutritious habits instead of telling them what and how to do it. How a different approach rarely or never works out.

#### **Description (Focus Statement)**

After suffering from low performance and early fatigue during games, even though having great results on Ergometric tests, blood analysis and mental preps, i tried consulting Team's Nutritionist what could be a possible problem causing fatigue. On a specific hydration test i found loosing 2 kgs of water during a high intensity practice and after that i took a hydration supplement for the rest of my career, solving a serious problem that could damage my whole career. The story of 2009.

The importance of a small intake straight after workout and how that helped me overcoming stomach aches after games. The Story of 2004.

Taking care of healthy Nutrition habits like weighing in regularly, before and after training meals and keeping a balanced diet, mostly on portions size could elevate or downgrade you rapidly. The story of 2008

Kids in Academies have no or limited idea on how and when they need to be Fed and why. Even if they listened and learned, if parents don't follow kids will never do it.

#### Learning Outcomes Assessment

Qualitatively mostly.

Assessing the importance of hydration before, during, after exercise and games from 1-5.

Assessing the importance of meals before during and after trainings from 1-5.

Assessing their nutritional behavior compared to their kids needs.

#### **Abstract**

The target of my storytelling is to give a practical approach and some challenges faced on nutrition and hydration, to highlight the importance of some details that need to be taken care of, from nutritionist or from professional athletes. How to elevate performance, recover from injuries and what is doable or challenged throughout the career of an athlete. Myths, perceptions and the truth in between.



My experience passed through many faces that need to be considered. As an athlete grows, the needs, understanding and routines play an important part on how to maintain and elevate performance. At younger ages things are more or less easier, but the hard drive, routines and discipline is build.

As a coach on development face of youth and even grassroots "athletes" I find the importance of educating parents more important than trying to implement change through kids. Kids will follow a good or bad parenting example in everything. Nutrition is not an exception. Nutritionist should consider to educate parents, coaches and teams, more than the kids or youth players.

What about youth or adults who are not athletes? What is the importance of having a balanced lifestyle, therefore a nutritional plan, or at least to take care of what goes in, in order to have a better outcome on work or personal life performance. How i moved from athlete to retirement and how things can get out of control when a balanced lifestyle is not maintained as fast as possible after career, or after a difficult period.

People can get in and out of nutrition plans and this is part of covering their basic needs. But in order to perform, improve energy, details need to be taken care of. Whether you are an athlete or not. Parents play a huge role on building the hard drives of their kids by example and not by guidance.



#### **Prof Andreou Eleni**

RDN, LD, DProf., FHEA, Clinical Dietitian, Nutritionist, Professor of Clinical Dietetics and Nutrition, University of Nicosia, President of CyDNA, Cyprus

#### Pahita Anna

BSc/RD, Clinical Dietitian, Secretary of CyDNA

#### Title of Presentation

# Nutrition Assessment and Process of Nutrition and Dietetic Practice, Case Study/ Discussion

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### **Objectives**:

- 1. Highlight the Significance of Nutrition Assessment: The first objective is to emphasize the critical importance of nutrition assessment in healthcare. This involves explaining the value of obtaining a comprehensive dietary history, conducting relevant biochemical assessments, collecting anthropometric data, and performing clinical evaluations. By doing so, the abstract aims to underscore the foundational role of nutrition assessment as a tool for understanding and addressing patients' dietary needs.
- 2. Illustrate the Role of Nutrition and Dietetic Practice: The second objective is to illustrate the practical application of nutrition and dietetic practice within healthcare settings. This includes discussing how dietary recommendations are customized to meet the specific needs and health objectives of individuals. By highlighting examples of effective dietetic practice, the abstract seeks to demonstrate the practical impact of personalized nutrition interventions on patient health and well-being.
- 3. Emphasize the Outcomes and Benefits of Nutrition Intervention: The third objective is to underline the positive outcomes and benefits of effective nutrition assessment and dietetic practice. This involves discussing how successful nutrition interventions lead to improved dietary choices, enhanced management of chronic conditions, and an overall better quality of life. Additionally, the abstract aims to stress the importance of ongoing monitoring and patient education in achieving sustainable health outcomes.

#### After this presentation, the attendee will be able to:

By achieving these objectives, the abstract provides a comprehensive overview of the central role that nutrition assessment and dietetic practice play in healthcare, emphasizing their significance, practical application, and positive impact on patient health and well-being.

#### **Description (Focus Statement)**

During this session, attendees will explore the essential components of nutrition assessment and the process of nutrition and dietetic practice in healthcare. We will delve into the significance of comprehensive nutrition assessment, discussing its role in understanding and addressing patients' dietary needs. Moreover, we will illustrate the practical application of nutrition and dietetic practice, sharing real-world examples of how dietary recommendations are tailored to meet individual health goals. By joining this session, attendees will gain valuable insights into the pivotal role of nutrition professionals in promoting patient well-being and making informed decisions about their health.

#### **Learning Outcomes Assessment**

#### 1. Objective: Highlight the Significance of Nutrition Assessment:

Assessment Method: Participants' understanding of the significance of nutrition assessment can be assessed through a pre-session survey or quiz, gauging their knowledge and awareness regarding the importance of nutrition assessment in healthcare. This can serve as a baseline measurement of their understanding before the session.

#### 2. Objective: Illustrate the Role of Nutrition and Dietetic Practice:

Assessment Method: The practical application of nutrition and dietetic practice can be assessed through case studies or scenarios presented during the session. Attendees can be encouraged to discuss and propose dietary recommendations for hypothetical patients, allowing for real-time application and assessment of their grasp of the concepts presented.

#### 3. Objective: Emphasize the Outcomes and Benefits of Nutrition Intervention:

Assessment Method: The outcomes and benefits of nutrition intervention can be assessed through post-session feedback or surveys. Participants can be asked to reflect on how the session influenced their understanding and to share specific takeaways or insights gained. This qualitative assessment will provide valuable feedback on the perceived impact of the session.

#### Abstract

#### Introduction:

Nutrition assessment and dietetic practice are fundamental components of healthcare, contributing to the overall well-being and management of individuals with various health conditions. This abstract highlights the significance of comprehensive nutrition assessment and the essential role of nutrition and dietetic practice in promoting health and addressing specific dietary needs across different populations. Nutrition assessment and dietetic practice are critical components of patient care, particularly in managing individuals with chronic conditions like renal disease. This case study and discussion aim to provide insights into the nutrition assessment process and the role of nutrition and dietetic practices in the comprehensive care of a renal patient.

#### Methods:

This abstract presents an overview of the nutrition assessment process, emphasizing the importance of obtaining a detailed dietary history, conducting biochemical assessments, measuring anthropometric data, and performing clinical evaluations. It further explores the application of nutrition and dietetic practices within healthcare settings, illustrating how dietary recommendations are tailored to meet individual needs and health goals. This case study will focus on a patient with chronic kidney disease (CKD) who is at various stages of renal impairment. The study will provide a detailed overview of the nutrition assessment process, including dietary history, biochemical assessments, anthropometric measurements, and clinical evaluation.

Nutritional interventions, such as dietary modifications and nutritional counseling, will be discussed within the context of this case study. The study will also emphasize the importance of interdisciplinary collaboration with healthcare professionals, including nephrologists and nurses, to ensure a holistic approach to patient care.

The case study will present the challenges and complexities of managing a renal patient's nutritional needs, especially concerning protein, potassium, phosphorus, and fluid intake. The discussion will focus on tailoring dietary plans to the patient's specific renal function and comorbidities. It will highlight the importance of ongoing monitoring and patient education to manage the nutritional aspects of CKD effectively.



#### Results:

The abstract discusses the outcomes of effective nutrition assessment and dietetic practice, highlighting the positive impact on patient health and well-being. Successful nutrition interventions often lead to improved dietary choices, better management of chronic conditions, and enhanced overall quality of life. The abstract also underlines the importance of ongoing monitoring and patient education in achieving sustainable health outcomes.

#### Conclusion:

Nutrition assessment and dietetic practice are indispensable tools in healthcare, offering personalized dietary solutions to individuals across the lifespan. This abstract underscores the critical role of registered dietitians and nutrition professionals in providing evidence-based, individualized care to address dietary needs, manage health conditions, and promote optimal well-being. Effective nutrition and dietetic practice contribute to the holistic care of patients and empower them to make informed decisions about their health. Nutrition assessment and dietetic practice play a pivotal role in improving the quality of life and overall health outcomes of renal patients. This case study and discussion underscore the significance of a patient-centered approach that considers individualized dietary plans, regular monitoring, and interdisciplinary collaboration. It is essential to acknowledge that effective nutrition and dietetic practice can significantly contribute to the comprehensive care and well-being of renal patients, offering them the best possible quality of life.

- 1. Mahan, L. K., & Raymond, J. L. (2016). Krause's Food & the Nutrition Care Process. Saunders.
- 2. White, J. V. (2018). Nutrition Assessment: A Comprehensive Guide for Planning Intervention. Pearson.
- 3. Davidson, S., Wills, J., & Payne, A. (2021). Nutrition and Dietetics (4th ed.). Elsevier.



#### Androulaki Niki

Dietitian-Nutritionist, Higher Technological Educational Institution of Thessaloniki, KOL Fagron Hellas, Greece

#### **Title of Presentation**

## Nutrigenetics tool for health professionals. How to implement Fagron NutriGen™ into your clinical practice

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to:

- To learn how nutrigenomics works.
- What are the macrocategories analyzed and how do genetic variations relate to weight loss and health.
- How is the sample taken?
- How we apply the information we receive from the report to create a personalized diet plan and examples.

#### Description (Focus Statement)

Fagron NutriGen is an innovative nutrigenomic algorithm combines genetic data with relevant patient's anamnesis to personalize patient's optimal diet and/or weight loss. NutriGen provides genetic insight into the patient, advising on health habits that will be most beneficial for weight loss or lifestyle improvement analyzing 109 genetic variations associated with 15 macrocategories. From the combination of the genetic results and patient health and current habits information, the test determines the diet that better respond to the patient genetic profile, elaborating a nutritional plan that includes more than 1000 foods, classified into 17 general categories for easy interpretation and everyday use. The results are downloaded directly from Fagron Genomics secure online platform, accessible through your secure and private health professional account.

#### **Learning Outcomes Assessment**

Fagron NutriGen is an innovative nutrigenomic algorithm combines genetic data with relevant patient's anamnesis to personalize patient's optimal diet and/or weight loss. NutriGen provides genetic insight into the patient, advising on health habits that will be most beneficial for weight loss or lifestyle improvement analyzing 109 genetic variations associated with 15 macrocategories. From the combination of the genetic results and patient health and current habits information, the test determines the diet that better respond to the patient genetic profile, elaborating a nutritional plan that includes more than 1000 foods, classified into 17 general categories for easy interpretation and everyday use. The results are downloaded directly from Fagron Genomics secure online platform, accessible through your secure and private health professional account.

#### Abstract

Nutrigenomics is the science of analyzing and understanding how an individual's genetic makeup responds to dietary intake. Its application is of great interest, considering that inherited risk factors determine 40-70% of individual BMI (Body mass index). (1-2)



Fagron NutriGen is an innovative nutrigenomic algorithm for personalizing nutrition, supplementation, and weight loss planning, which also offers professional nutrigenomic counselling. It is intended to assist health professionals in making specific care decisions to prevent hereditary health risks. It analyses genetic predispositions with a significant impact on health and nutrition-related parameters and combines this data with the analysis of patient's anamnesis to recommend the most appropriate health and nutritional advice.

Fagron NutriGen is the most complete nutrigenetic analysis in the market:

- It analyzes analyzes 3 polymorphisms within 128 DNA mutations (SNPs) resulting in 384 genetic variations on the most relevant genes related to different metabolic pathways involved in weight loss and nutritional needs. Specifically, all SNPs used in Fagron NutriGenhave been scientifically validated from population studies, presenting a significative global incidence.
- Epigenetic factors are integrated through a complete lifestyle questionnaire.
- It offers personalized diet recommendations with a list of +900 food products.
- It offers personalized supplementation recommendations based on genetics and epigenetics.
- It is only available via healthcare professionals.

Fagron NutriGen combines the analysis of 109 health and nutrition-related genetic predispositions (obesity, diabetes, triglycerides, celiac diseases, responses to exercise and interventional diets, vitamin & mineral deficiencies, among others) with relevant patient's anamnesis (intolerances, diseases, medication, blood pressure, physical activity, and habits, among others). The suggested diet plan considers the following predispositions:

- Morphological genetics in overweight predisposition
- Behavioural genetics in food intake
- · Efficacy of physical exercise
- Fat metabolism
- Carbohydrates metabolism
- Lipid metabolism
- Glucose metabolism
- Detox imbalances
- Flavour sensitivities
- Intolerance
- · Matching type diet
- Inflammation
- Vitamin deficiency risk
- Hormones

Health professionals can recommend a personalized diet plan based on the type of diet indicated in the analysis, since Fagron NutriGen performs an intensive study of genetic biomarkers related to the effectiveness of the diet type to determine the percentage of specific.



#### Moreover, it is worth noting that:

- Our panel of 109 genetic tests is exclusively based on peer reviewed replicated studies.
- Genotyping assay is based on the DNA microarray technology guaranteeing more than 99% of reproducibility and sensibility.
- A multidisciplinary team of medical doctors, nutritionists, pharmacists, geneticists, and programmers, following highest quality standards, was involved in the development and validation of the Fagron NutriGen algorithm.
- Nutritional values were selected from the European Food Information Resource, authoritative source of food composition data for nutrients, and bioactive compounds with potential health benefits.
- Active ingredients and dosages from the TRC Natural Medicines Database, the most authoritative resource on dietary supplements, herbal medicines, and complementary and integrative therapies, were also included.
- Fagron Genomics has been granted a manufacturing license for the development of In Vitro Diagnostics (IVD) Medical Device Software.

In conclusion, health professionals by offering a personalized nutrition plan can significantly increase the motivation of the individuals, as studies has shown that personalized DNA-based dietary counselling can increase motivation and enhance diet compliance compared to general guidelines.<sup>2,3</sup>

- 1. Goordazi MO. Lancet Diabetes Endocrinol. 2018;6(3):223-236.
- 2. Maes HH, et al. Behav Genet. 1997;27: 325-51.
- 3. Ordovas JM, et al. BMJ. 2018;13;361:bmj.k2173.



#### **Angastinioti Elina**

MS, RDN, Clinical Dietitian/ Nutritionist, Cyprus

#### **Title of Presentation**

# MIND DIET- Excellence in Nutrition Practice for Dementia, Alzheimer's, Parkinson, Aging

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to:

- 1. Summarize the body of literature that demonstrates an association between MIND diet and neurodegenerating diseases
- 2. Describe foods and nutrients associated with delay in cognitive decline and foods associated with progression of cognitive decline
- 3. Identify strategies to motivate clients to adhere to the MIND diet

#### **Description (Focus Statement)**

This session summarizes the literature on how MIND diet can play a major role and be used as a tool to help prevent aging and neurodegenerative diseases such as AD, PD and Dementia. In addition, it provides a foundation for nutrition-health care professionals to counsel clients on brain-healthy nutrition strategies.

#### Learning Outcomes Assessment

After this session attendees will be able to apply the MIND diet and counsel clients about the benefits of it. They will be able to answer the postattendance questions correctly.

#### Abstract

Nutrition is an important tool that can be utilized to help prevent or delay conditions associated with aging, and neurodegenerative diseases. Since a lot of individuals are looking for preventative dietary strategies rather than waiting until health problems arise to change dietary patterns, the Mediterranean-DASH Intervention for Neurodegenerative Delay (MIND) diet can be used to encourage healthful eating for the brain. Studies suggest that the MIND diet impacts cognitive functioning in aging adults and has the ability to protect against neurodegenerative diseases such as Alzheimer's, Dementia and Parkinson's.

- 1. Morris MC, Tangey CC, Wang Y, et al. MIND diet slows cognitive decline with aging. Alzheimer's Demetn. 2015; 11 (9):1015-1022
- 2. Moriis MC. Diet for the MIND: The Latest Science on What to Eat to Prevent Alzheimer's and Cognitive Decline. New York, NY: Little, Brown and Company; 2017
- 3. Miller MG, Hamilton DA, Joseph JA, Shukitt-Hale B. Dietary blueberry improves cognition among older adults in randomized, double-blind, placebo-controlled trial. Eur J Nutr. 2018;57 (3):1169-1180

#### **Prof Benardot Dan**

PhD, DHC, RDN, FACSM, Teaching Professor (Emory University), and Professor of Nutrition, Emeritus (Georgia State University), Emory University and Georgia State University, Atlanta, Georgia, USA

#### **Title of Presentation**

#### **Factors Influencing the Production of Nitric Oxide**

#### **CPE Level**

Level I assumes that the participant has little or no prior knowledge of the areas covered. The focus of the activity is to increase the core knowledge of the participant.

#### After this presentation, the attendee will be able to:

- 1. Understand the pathways involved in nitric oxide production.
- 2. Know the multiple health and exercise benefits of nitric oxide.
- 3. Incorporate the knowledge of dietary, lifestyle, and medicinal factors that influence nitric oxide production in client care to enhance desired outcomes.

#### **Description (Focus Statement**

Nitric oxide functions as a vasodilator that has important roles in cardiovascular, gastrointestinal, and endothelial systems, including decreased blood pressure, lower oxygen cost of exercise, enhanced fatigue resistance, improved gastric mucosal defenses, and improved glucose tolerance. Multiple factors can diminish nitric oxide formation, including use of antibiotic mouthwash, chronic consumption of nitrate salts, high intake of fructose, and co-ingestion of glucosinolate-rich vegetables (eg., cabbage family). By contrast, regular consumption of inorganic nitrate containing vegetables (eg., beetroot, spinach, etc.), co-ingestion of flavanol containing foods (eg. citrus fruits, cocoa, tea, olive oil, etc.), and regular tongue brushing to sustain a healthy oral microbiome is associated with elevated nitric oxide formation.

#### Learning Outcomes Assessment

Understanding the multiple factors that can either elevate or diminish nitric oxide formation is important to help improve general health, diminish obesity and associated cardiometabolic disorders, lower blood pressure, and create an improved sense of well-being. Knowing these factors will enable improved client care with improved health outcomes. These factors can be assessed by multiple choice questions and/or descriptive statements that state the specific factors that can positively or negatively impact nitric oxide formation.

#### Abstract

Nitric oxide (NO) functions as a vasodilator, playing key roles in cardiovascular, gastrointestinal, and endothelial systems. Elevated NO has multiple health and exercise benefits that include decreased blood pressure, reduced oxygen cost of exercise, increased fatigue resistance, enhanced gastric mucosal defenses, and improved glucose tolerance via diminishing insulin resistance and dyslipidemia observed in obesity and diabetes. It is of high interest, therefore, to better understand how consumption of specific foods and lifestyle factors may influence NO production. It is rare to observe high blood pressure in children because of the robust activity of the L-arginine to NO pathway during growth and development. However, as the L-arginine pathway is diminished in adulthood, elevated blood pressure becomes increasingly prevalent. Elevated high blood pressure can be mediated, however, via the enterosalivary nitrate-to-NO pathway that is initiated in the oral cavity. There are multiple dietary and lifestyle factors that can interact with the enterosalivary pathway, resulting in enhanced or diminished NO production. For instance, regular consumption of inorganic nitrate from dietary



sources or nitrate salts enhances NO production, while chronic consumption of organic nitrate, as obtained from drugs such as nitroglycerin, is likely to diminish NO production. Additionally, nitrate-reducing oral bacteria are necessary for the conversion of nitrate to nitrite, but regular use of antibiotic mouthwash and/or antibiotic therapy have been found to decrease the activity of these bacteria, resulting in the reduced production of NO. Dietary factors, including high intake of high-fructose-corn-syrup and co-ingestion of glucosinolate-rich vegetables (i.e., cabbage family) may also impair NO production. Certain lifestyle factors, including smoking and chronic use of specific medications, such as proton-pump inhibitors, have also been found to negatively influence NO production. While it is important to consume a diet that is naturally high in inorganic nitrate to enhance NO production, it is also important to be aware of these other factors that may either positively or negatively influence the nitrate-to-NO pathway and, ultimately, impact health.

- 1. Abou-agag, L. H., Khoo, N. K., Binsack, R., White, C. R., Darley-Usmar, V., Grenett, H. E., Booyse, F. M., Digerness, S. B., Zhou, F., & Parks, D. A. (2005). Evidence of cardiovascular protection by moderate alcohol: Role of nitric oxide. Free Radical Biology and Medicine, 39(4), 540-548. https://doi.org/10.1016/j.freeradbiomed.2005.04.007
- 2. Ahmed, K. A., Nichols, A. L., Honavar, J., Dransfield, M. T., Matalon, S., & Patel, R. P. (2017). Measuring nitrate reductase activity from human and rodent tongues. Nitric Oxide, 66, 62-70. https://doi.org/10.1016/j.niox.2017.04.001
- 3. Bailey, S. J., Blackwell, J. R., Wylie, L. J., Holland, T., Winyard, P. G., & Jones, A. M. (2016). Improvement in blood pres sure after short-term inorganic nitrate supplementation is attenuated in cigarette smokers compared to non-smoking controls. Nitric Oxide, 61, 29-37. https://doi.org/10.1016/j.niox.2016.10.002
- Bailey, S. J., Winyard, P., Vanhatalo, A., Blackwell, J. R., DiMenna, F. J., Wilkerson, D. P., Tarr, J., Benjamin, N., & Jones, A. M. (2009). Dietary nitrate supplementation reduces the O2 cost of low-intensity exercise and enhances tolerance to high-intensity exercise in humans. Journal of Applied Physiology, 107(4), 1144-1155. https://doi.org/10.1152/japplphysiol.00722.2009
- 5. Basaqr, R., Skleres, M., Jayswal, R., & Thomas, D. T. (2021). The effect of dietary nitrate and vitamin C on endothelial function, oxidative stress and blood lipids in untreated hypercholesterolemic subjects: A randomized double-blind cross over study. Clinical Nutrition, 40(4), 1851-1860. https://doi.org/10.1016/j.clnu.2020.10.012
- Batista, R. I. M., Nogueira, R. C., Ferreira, G. C., Oliveira-Paula, G. H., Damacena-Angelis, C., Pinheiro,
   L. C., & Tanus-Santos, J. E. (2021). Antiseptic mouthwash inhibits antihypertensive and vascular protective effects of L-arginine. European Journal of Pharmacology, 907, 174314. https://doi.org/10.1016/j.ejphar.2021.174314
- 7. Berenyiova, A., Drobna, M., Cebova, M., Kristek, F., & Cacanyiova, S. (2018). Changes in the vasoactive effects of nitric oxide, hydrogen sulfide and the structure of the rat thoracic aorta: The role of age and essential hypertension. Journal of Physiology and Pharmacology: An Official Journal of the Polish Physiological Society, 69(4). https://doi.org/10.26402/jpp.2018.4.05
- 8. Bescos, R., Ashworth, A., Cutler, C., Brookes, Z. L., Belfield, L., Rodiles, A., Casas-Agustench, P., Farnham, G., Liddle, L., Burleigh, M., White, D., Easton, C., & Hickson, M. (2020). Effects of Chlorhexidine mouthwash on the oral microbiome. Scientific Reports, 10, 5254. https://doi.org/10.1038/s41598-020-61912-4
- 9. Blot, S. (2021). Antiseptic mouthwash, the nitrate-nitrite-nitric oxide pathway, and hospital mortality: A hypothesis generating review. Intensive Care Medicine, 47(1), 28-38. https://doi.org/10.1007/s00134-020-06276-z
- 10. Caliceti, C., Calabria, D., Roda, A., & Cicero, A. F. G. (2017). Fructose Intake, Serum Uric Acid, and Cardio metabolic Disorders: A Critical Review. Nutrients, 9(4), 395. https://doi.org/10.3390/nu9040395
- Cutler, C., Kieman, M., Willis, J. R., Gallardo-Alfaro, L., Casas-Agustench, P., White, D., Hickson, M., Gabaldon, T., & Bescos, R. (2019). Post-exercise hypotension and skeletal muscle oxygenation is regulated by nitrate-reducing activity of oral bacteria. Free Radical Biology and Medicine, 143, 252-259. https://doi.org/10.1016/j.freeradbiomed.2019.07.035
- 12. Duarte, J., Francisco, V., & Perez-Vizcaino, F. (2014). Modulation of nitric oxide by flavonoids. Food & Function, 5(8), 1653-1668. https://doi.org/10.1039/C4F000144C
- 13. Fisher, N. D., Hughes, M., Gerhard-Herman, M., & Hollenberg, N. K. (2003). Flavanol-rich cocoa induces nitric-oxide-dependent vasodilation in healthy humans. Journal of Hypertension, 21(12), 2281.



#### **EXCELLENCE IN NUTRITION & DIETETIC RESEARCH AND PRACTICE**

- 14. Goh, C. E., Trinh, P., Colombo, P. C., Genkinger, J. M., Mathema, B., Uhlemann, A., LeDuc, C., Leibel, R., Rosenbaum, M., Paster, B. J., Desvarieux, M., Papapanou, P. N., Jacobs, D. R., & Demmer, R. T. (2019). Association Between Nitrate? Reducing Oral Bacteria and Cardiometabolic Outcomes: Results From ORIGINS. Journal of the American Heart Association, 8(23), e013324. https://doi.org/10.1161/JAHA.119.013324
- 15. Husmann, F., Bruhn, S., Mittlmeier, T., Zschorlich, V., & Behrens, M. (2019). Dietary Nitrate Supplementation Improves Exercise Tolerance by Reducing Muscle Fatigue and Perceptual Responses. Frontiers in Physiology, 10, 404. https://doi.org/10.3389/fphys.2019.00404
- Kapil, V., Milsom, A. B., Okorie, M., Maleki-Toyserkani, S., Akram, F., Rehman, F., Arghandawi, S., Pearl, V., Benjamin, N., Loukogeorgakis, S., MacAllister, R., Hobbs, A. J., Webb, A. J., & Ahluwalia, A. (2010). Inorganic Nitrate Supplementation Lowers Blood Pressure in Humans. Hypertension, 56(2), 274-281. https://doi.org/10.1161/HYPERTENSIONAHA.110.153536
- 17. Medina-Remón, A., Tresserra-Rimbau, A., Pons, A., Tur, J. A., Martorell, M., Ros, E., Buil-Cosiales, P., Sacanella, E., Covas, M. I., Corella, D., Salas-Salvadó, J., Gómez-Gracia, E., Ruiz-Gutiérrez, V., Ortega-Calvo, M., García-Valdueza, M., Arós, F., Saez, G. T., Serra-Majem, L., Pinto, X., Lamuela-Raventos, R. M. (2015). Effects of total dietary polyphenols on plasma nitric oxide and blood pressure in a high cardiovascular risk cohort. The PREDIMED randomized trial. Nutrition, Metabolism and Cardiovascular Diseases, 25(1), 60-67. https://doi.org/10.1016/j.numecd.2014.09.001
- 18. Oliveira-Paula, G. H., Pinheiro, L. C., & Tanus-Santos, J. E. (2019). Mechanisms impairing blood pressure responses to nitrite and nitrate. Nitric Oxide, 85, 35-43. https://doi.org/10.1016/j.niox.2019.01.015
- 19. Omar, S. A., Artime, E., & Webb, A. J. (2012). A comparison of organic and inorganic nitrates/nitrites. Nitric Oxide, 26(4), 229-240. https://doi.org/10.1016/j.niox.2012.03.008
- 20. Petersson, J., Carlström, M., Schreiber, O., Phillipson, M., Christoffersson, G., Jägare, A., Roos, S., Jansson, E. Å., Persson, A. E. G., Lundberg, J. O., & Holm, L. (2009). Gastroprotective and blood pressure lowering effects of dietary nitrate are abolished by an antiseptic mouthwash. Free Radical Biology and Medicine, 46(8), 1068-1075. https://doi.org/10.1016/j.freeradbiomed.2009.01.011
- 21. Pinheiro, L. C., Ferreira, G. C., Vilalva, K. H., Toledo, J. C., & Tanus-Santos, J. E. (2018). Contrasting effects of low versus high ascorbate doses on blood pressure responses to oral nitrite in L-NAME-induced hypertension. Nitric Oxide, 74, 65-73. https://doi.org/10.1016/j.niox.2018.01.006
- 22. Rizza, S., Muniyappa, R., lantorno, M., Kim, J., Chen, H., Pullikotil, P., Senese, N., Tesauro, M., Lauro, D., Cardillo, C., & Quon, M. J. (2011). Citrus polyphenol hesperidin stimulates production of nitric oxide in endothelial cells while improving endothelial function and reducing inflammatory markers in patients with metabolic syndrome. The Journal of Clinical Endocrinology and Metabolism, 96(5), E782-792. https://doi.org/10.1210/jc.2010-2879
- 23. Siervo, M., Lara, J., Ogbonmwan, I., & Mathers, J. C. (2013). Inorganic Nitrate and Beetroot Juice Supplementation Reduces Blood Pressure in Adults: A Systematic Review and Meta-Analysis. The Journal of Nutrition, 143(6), 818-826. https://doi.org/10.3945/jn.112.170233
- 24. Tribble, G. D., Angelov, N., Weltman, R., Wang, B.-Y., Eswaran, S. V., Gay, I. C., Parthasarathy, K., Dao, D.-H. V., Richardson, K. N., Ismail, N. M., Sharina, I. G., Hyde, E. R., Ajami, N. J., Petrosino, J. F., & Bryan, N. S. (2019). Frequency of Tongue Cleaning Impacts the Human Tongue Microbiome Composition and Enterosalivary Circulation of Nitrate. Frontiers in Cellular and Infection Microbiology, 9, 39. https://doi.org/10.3389/fcimb.2019.00039
- 25. Watanabe, H., Kakihana, M., Ohtsuka, S., & Sugishita, Y. (1998). Randomized, Double-Blind, Placebo-Controlled Study of Ascorbate on the Preventive Effect of Nitrate Tolerance in Patients With Congestive Heart Failure. Circulation, 97(9), 886-891. https://doi.org/10.1161/01.CIR.97.9.886
- 26. Zhang, F.-X., Miao, Y., Ruan, J.-G., Meng, S.-P., Dong, J.-D., Yin, H., Huang, Y., Chen, F.-R., Wang, Z.-C., & Lai, Y.-F. (2019). Association Between Nitrite and Nitrate Intake and Risk of Gastric Cancer: A Systematic Review and Meta-Analysis. Medical Science Monitor?: International Medical Journal of Experimental and Clinical Research, 25, 1788-1799. https://doi.org/10.12659/MSM.914621



#### **Brown Sophia**

RD, Registered Dietitian, Master's in Nutrition and Dietetics, University of Nottingham, United Kingdom, Senior Specialist Dietitian, Portsmuth University Hospitals, NHS, UK

#### **Title of Presentation**

# The Diagnosis of Malnutrition According to the GLIM for Cancer patients

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to:

Use the GLIM criteria, a practical, evidence based guidance focusing exclusively on the practical aspects of daily oncology, to better identify patients who are manurished or at risk of malnutrtion, which will in turn improve cancer patient care.

#### Description (Focus Statement)

Despite recent advances in cancer care, there is still a lack of focus on nutrition among physicians and healthcare professionals because of underestimation of its importance and insufficient training.

However, it is a well know fact, that malnutrition and resulting weight loss is an independent predictive factor for shorter overall survival in oncology patients; in fact, about 10%-20% of all cancer mortality is directly related to malnutrition, rather than to the underlying. Prevention, early identification of cancer patients at risk, accurate diagnosis, personalized intervention, and follow-up are cornerstones of the management of malnutrition and its consequences sarcopenia and cachexia.

This presentation aims to present a new tool, the GLIM criteria, an is an easy, practical guide that be used during daily routines, to improve malnutrition diagnosis and clinical outcomes of cancer patients in Cyprus.

#### Learning Outcomes Assessment

Improved rates of diagnosis of malnutrition, improved clinical outcomes.

#### Abstract

Malignant disorders are one of the leading causes of morbidity and mortality worldwide. Incidence of cancer is expected to rise in the future as the population ages.

Treatment outcomes depend on many factors, one of the most important ones is nutrition. This is regardless weather the care is curative or palliative. Nutritional counselling should be an integral part of the treatment of all cancer patients.

However, in practice there is a gap: treating physicians are often not focusing enough on nutrition.

Furthermore, several studies have shown that the prevalence of malnutrition among hospitalized patients with cancer is as high as 50%.

One of the problems contribution to the confusion around the subject of malnutrition, is that methods available for diagnosing as well as nutrition treatment targets differ among countries and institutions.



The Global Leadership Initiative on Malnutrition (GLIM) was formed in 2016 by several major global clinical nutrition societies including ESPEN and ASPEN as a global consensus on the criteria for diagnosing malnutrition.

Several guidelines have been used but this presentation will focus on cancer. The authors of the GLIM cancer tool have summarized the most important challenges, evidence-based recommendations, and common clinical scenarios, to bridge the gap between comprehensive guidelines and clinical practice, where brief concrete advice is preferred to systematic reviews. The tool will hopefully help healthcare professionals to identify malnutrition earlier and better, which will improve clinical outcomes and result in better patient care.

- 1. Nutrition in Cancer Care: A Brief, Practical Guide With a Focus on Clinical Practice Gabor Liposits, Ylva Orrevall, Stein Kaasa, Pia Österlund, and Tommy Cederholm, JCO Oncology Practice 2021 17:7, p992-998.
- 2. Cederholm T, Jensen GL, Correia MITD, et al: GLIM criteria for the diagnosis of malnutrition A consensus report from the global clinical nutrition community. Clin Nutr 38:1-9, 2019
- 3. Mohile SG, Dale W, Somerfield MR, et al: Practical assessment and management of vulnerabilities in older patients receiving chemotherapy: ASCO Guideline for Geriatric Oncology. J Clin Oncol 36:2326-2347, 2018
- 4. Arends J, Baracos V, Bertz H, et al: ESPEN expert group recommendations for action against cancer-related malnutrition. Clin Nutr 36:1187-1196, 2017
- 5. Roeland EJ, Bohlke K, Baracos VE, et al: Management of cancer cachexia: ASCO Guideline. J Clin Oncol 38:2438-2453, 2020
- 6. Dunne RF, Roussel B, Culakova E, et al: Characterizing cancer cachexia in the geriatric oncology population. J Geriatr Oncol 10:415-419, 2019
- 7. Mohile SG, Dale W, Somerfield MR, et al: Practical assessment and management of vulnerabilities in older patients receiving chemotherapy: ASCO Guideline for Geriatric Oncology. J Clin Oncol 36:2326-2347, 2018
- 8. Muscaritoli M, Arends J, Aapro M: From guidelines to clinical practice: A roadmap for oncologists for nutrition therapy for cancer patients. Ther Adv Med Oncol 11:1758835919880084, 2019
- 9. Arends J, Bachmann P, Baracos V, et al: ESPEN guidelines on nutrition in cancer patients. Clin Nutr 36:11-48, 2017



#### Calmon - Spanou Alini

MSc Clinical Dietetics (Cyprus) 2022, BS Human Nutrition (UK) 2018, BS Human Resources Management (UK) 2009, BS Business and Marketing(Brazil) 2004, Clinical Dietitian - Head Dietitian, Cyprus Dietetic & Nutrition Association, Greece

#### Title of Presentation

#### **Entrepreneurship in Dietetics**

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to:

Will be an entrepreneur in dietetics in a world with artificial intelligence; Understand strengths and weakness of starting a dietetics office; The importance of specialisation and knowledge to succeed in the market.

#### **Description (Focus Statement)**

Attendees will be able to understand the process of starting, building, and running a dietetics business focusing in creating value and making a profit.

They will learn how to identify opportunities, taking risks, and organising resources to survive at the beginning of their career also to adapt to new ways of communicating with their target public.

Attendees will also understand the importance of positioning themselves adding value to their services.

#### Learning Outcomes Assessment

Slides with:

- Theoretical material
- Real life examples
- Business case studies
- Al

#### **Abstract**

Entrepreneurship in Dietetics - Nutrition has never been so in fashion as in the last 5 years. Scientists and the world population are interacting more to reach well being through nutrition in a holistic approach which entangles other basic pillars of health.

When obesity gives rise to a list of non-communicable diseases in a world with artificial intelligence (AI) available for free, nutritionists should position themselves and be part of an integrative family follow up program to improve family overall health and to decrease financial burden to public health.

The concern starts when young dietitians struggle to thrive for lack of financial prospect and business managerial tools. The approach to solve such issues would be to create a personal way of communication and establish a proper image as a healthcare provider with scientific background and knowledge to achieve live interaction with patients and clients being B2B or B2C. The expectation of this approach would be the decrease of fixed costs and to add value to the services of dietitians.



Results with this approach consists in increasing interaction among young nutrition healthcare providers as well creating a fair income to nutritionists and dietitians. In conclusion, business tools and health providers interactions need to be taken in consideration when dietitians and nutritionists are needed as well as vulnerable.

- 1. Marketing Management: European Edition, Author Philip Kotler
- 2. Principles of Marketing, Global Edtion, Author: Philip T. Kotler
- 3. Modern Health Care Marketing, Author: Gamini Gunawardane



#### Dr Charidemou Evelina

PhD, Nutritional Biochemist, Lecturer, University of Nicosia, Cyprus

#### Title of Presentation

#### Can our epigenome store metabolites?

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to:

- 1. Understand the interplay of metabolism and epigenetics
- 2. Characterise hyperacetylated histones as metabolite reservoirs
- 3. Know the contribution of hyperacetylated histone in fat accumulation in the liver

#### **Description (Focus Statement)**

- 1. Our key aim is to rigorously characterize hyperacetylated histones as dynamic reservoirs for metabolites within the cell, with a focus on uncovering the regulatory roles they play in cellular physiology and their potential implications in disease states.
- 2. Our central objective is to elucidate the specific contributions of hyperacetylated histones to the accumulation of fat in the liver, providing insights into the molecular underpinnings of fatty liver disease and potential avenues for intervention

#### **Learning Outcomes Assessment**

- 1. Encourage active participation by soliciting questions
- 2. Facilitate discussions during the Q&A session

#### **Abstract**

Histone modifications commonly integrate environmental cues to cellular metabolic outputs by affecting gene expression. However, many of these modifications, including histone acetylation, do not always correlate to gene transcription pointing towards an alternative role of histone modifications in cellular metabolism. Using an approach that integrates mass spectrometry-based histone epigenetic mapping and metabolomics with stable isotope tracer studies, we demonstrate that elevated lipids in histone acetyltransferase (HAT)-depleted hepatocytes result from carbon atoms flowing from the deacetylation of hyperacetylated histone H4 to fatty acids. Consistently, enhanced lipid synthesis in acetyltransferase-depleted hepatocytes is dependent on the activity of histone deacetylases (HDACs) and acetyl-CoA synthetase ACSS2 and not on their substrate specificity. Furthermore, we show that during diet-induced lipid synthesis hyperacetylated histone H4 decreases in hepatocytes and in mouse liver. In addition, overexpression of acetyltransferases can reverse diet-induced lipogenesis by blocking lipid droplet accumulation and maintaining the levels of hyperacetylated histone H4. Overall, this study highlights hyperacetylated histone acetylation as a metabolite reservoir that can directly contribute carbon to lipid synthesis, thereby unveiling a novel function for chromatin in cellular metabolism.

- 1. Ye C & Tu BP (2018) Sink into the Epigenome: Histones as Repositories That Influence Cellular Metabolism. Trends in Endocrinology and Metabolism 29: 626-637 doi:10.1016/j.tem.2018.06.002
- 2. Katada S, Imhof A & Sassone-Corsi P (2012) Connecting threads: Epigenetics and metabolism. Cell 148: 24-28 doi:10.1016/j.cell.2012.01.001
- 3. Wong CC, Qian Y & Yu J (2017) Interplay between epigenetics and metabolism in oncogenesis: mechanisms and therapeutic approaches. Oncogene 36: 3359-3374

## **Prof Constantinidou Fofi**

Ph.D., CCC-SLP & CBIS, Professor of Language Disorders & Clinical Neuropsychology, Director, Center for Applied Neuroscience, University of Cyprus, Cyprus

#### Title of Presentation

Modifiable and unmodifiable risk factors affecting cognitive health and quality of life in adulthood: Evidence from the Neurocognitive Study on Aging (NEUROAGE)

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to:

- 1. Describe modifiable and unmodifiable factors that affect cognitive health
- 2. Discuss multimodal screening methods to identify individuals at risk for pathological cognitive decline
- 3. Propose lifestyle modifications that promote a healthy brain in adulthood

#### Description (Focus Statement)

Cognitive health in adulthood is a dynamic process. The accumulation of risk factors affects the outcomes of aging. We will discuss modifiable and unmodifiable factors that influence cognitive performance based on findings form the Longitudinal Study on Aging and other contemporary sources.

#### Learning Outcomes Assessment

Through content evaluation questions if this is what the organizers wish. Also, could be incorporated in the professional audience's clinical/research practice.

#### Abstract

Aging is a dynamic process that begins early in adulthood. Cognitive aging is not unrelated to biological aging, but the two are not the same. Important efforts have been made to understand the process of cognitive aging, factors that influence (the process) and methods that can lead to early identification of individuals at risk to apply effective management strategies. The Neurocognitive Study on Aging (clinicaltrials.gov ID: NCT01481246) was established in 2009 and it is the premier longitudinal study on aging in Cyprus. Participants receive an extensive neurocognitive evaluation which assesses key cognitive domains such as memory, executive functioning, language, and attention. The assessment also includes indices of quality of life and psychosocial functioning. In addition to the above core battery, anthropomorphic measures, lab results, and neuroimaging and genetic tests are conducted for large subgroups of the cohort. With over 1000 participants who are tested every two years, the project has made important contributions in characterizing cognitive aging and in developing screening, identification, and treatment methodologies. Our treatment modalities include individualized cognitive rehabilitation with the Categorization Program and group interventions focusing on psychosocial and cognitive-communication training. In this presentation we will provide evidence on key constructs such as Cognitive and Brain Reserve, genetic factors, sensory, and lifestyle factors that influence health and quality of life in the Cypriot cohort.



- Chadjikyprianou, A., & Constantinidou, F. (2023). A new multidimensional group intervention for cognitive and psychosocial functioning for older adults: Background, content, and process evaluation.
   Genetic Medicine, Volume 10. https://doi.org/10.3389/fmed.2023.1161060.
- Pettemeridou, E., Kallousia, E., & Constantinidou, F. (2021). Regional Brain Volume, Brain Reserve and MMSE Performance in Healthy Aging From the NEUROAGE Cohort: Contributions of Sex, Education, and Depression Symptoms. Frontiers in Aging Neuroscience, 13, 711301-711301. https://dx.doi.org/10.3389%2Ffnagi.2021.711301.
- 3. Chadjikyprianou, A., Hadjivassiliou, M., Papacostas, S., & Constantinidou, F. (2021). The Neurocognitive Study for the Aging (NEUROAGE): Longitudinal Analysis on the Contribution of Sex, Age, Education and APOE-4 on cognitive Performance. Frontiers in Genetics, 12, 1179. https://doi.org/10.3389/fgene.2021.680531.
- 4. Constantinidou, F. (2019). Effects of Systematic Categorization Training on Cognitive Performance in Healthy Older Adults and in Adults with Traumatic Brain Injury. Behavioural Neurology, https://doi.org/10.1155/2019/9785319.
- 5. Philippou, E., Michaelides, M. P., & Constantinidou, F. (2018). The role of metabolic syndrome factors on cognition using latent variable modeling: The neurocognitive study on aging. Journal of clinical and experimental neuropsychology, 1-14. https://doi.org/10.1080/13803395.2018.1483487
- 6. Giogkaraki, E., Michaelides, M., Constantinidou, F. (2013). The Role of Cognitive Reserve in Cognitive Aging: Results from the Neurocognitive Study on Aging. Journal of Clinical and Experimental Neuropsychology, 35 (10), 1024-1035.



## **Dr Dimosthenopoulos Charilaos**

PhD from the Medical School, Kapodistriakon University, Athens, Greece, Bachelor degree on Biology, School of Biology of the Aristotle University of Thessaloniki, Greece, Postgraduate Diploma (PostDip in Dietetics) in Dietetics, Leeds Metropolitan University, UK, Master of Medicine and Science in Human Nutrition (MMedSci), Sheffield University, UK, Chief Dietitian, General Hospital of Athens "Laiko", Department of Nutrition and Dietetics, Laiko General Hospital, Athens, Greece, First Department of Propaedeutic Internal Medicine, Medical School National and Kapodistrian University of Athens, Laiko General Hospital, Greece

#### Title of Presentation

## CGMs pumps and the role of the clinical dietitian as a diabetes educator

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to:

Learn more on the role of a specialized clinical dietitian on the dietary education based on the data taken from CGMs and also create a more specialized dietary plan and learn how to read and "translate" this information.

#### **Description (Focus Statement)**

Clinical dietitians have the responsibility to educate patients on how to interpret the data and make appropriate dietary decisions. The information provided by CGMs also facilitates analysis of PPG responses to foods that may influence dietary guidelines for people with diabetes and lead to a more personalized dietary plan.

#### Learning Outcomes Assessment

The dietitians who will attend this session will learn more about the graphs and the new variables provided by CGMs and they will learn more on how to take useful information from the CGM records.

#### Abstract

In the era of technological revolution and digitization, the way of approaching and dealing with diabetes has changed and the interventions mainly due to continuous glucose monitoring (CGM) systems, as well as the use of new pumps, the "smart pen" insulin and other applications, are increasingly finding their way into more effective nutritional therapy. Continuous glucose monitoring (CGM) technology has now revolutionized overall diabetes care and will change it even more in the near future due to the wealth of new and immediate information it provides in real-time about therapeutic interventions and modifications of lifestyle and dietary intake. In particular, the AGP glucose profile is a new and well structured collection of data obtained from CGM and can also be used as a support for dietary adaptation. CGM systems have an important role in assessing the effectiveness and safety in the treatment of diabetes type 1 & 2 and improve alongside better glycemic and hypoglycemia management and better dietary therapy since they capture the impact of nutrition on postprandial sugar levels.

There is no "one-size-fits-all" diabetes nutrition plan. CGM devices can play a crucial role in supporting individualized dietary adaptation, daily lifestyle interventions, and dietary behavior. Thus, different people can have very different glycemic responses to the exact same foods, and the metabolic impact of lifestyle choices and other individual factors is difficult to measure with traditional tools. CGMs have opened up a new world in the field of clinical nutrition and diabetes mellitus. Both doctors and other health professionals e.g. clinical dietitians and patients



alike now have the opportunity to more effectively and easily assess their glycemic response to various types of foods and meals. This information primarily allows patients to make more adjustments to their initial insulin and lifestyle based on food choices. Along with the additional information available, healthcare professionals have a responsibility to educate patients on how to interpret the data and make appropriate decisions. The information also facilitates analysis of PPG responses to foods that may influence dietary guidelines for people with diabetes.

- Bellido V, Aguilera E, Cardona-Hernandez R, Diaz-Soto G, González Pérez de Villar N, Picón-César MJ, Ampudia-Blasco FJ. Expert Recommendations for Using Time-in-Range and Other Continuous Glucose Monitoring Metrics to Achieve Patient-Centered Glycemic Control in People With Diabetes. J Diabetes Sci Technol. 2022 Apr 26:19322968221088601.
- 2. Dimosthenopoulos C, Liatis S, Kourpas E, Athanasopoulou E, Driva S, Makrilakis K, Kokkinos A. The beneficial short-term effects of a high-protein/low-carbohydrate diet on glycaemic control assessed by continuous glucose monitoring in patients with type 1 diabetes. Diabetes Obes Metab. 2021 Aug;23(8):1765-1774.
- 3. Merino J, Linenberg I, Bermingham KM, Ganesh S, Bakker E, Delahanty LM, Chan AT, Capdevila Pujol J, Wolf J, Al Khatib H, Franks PW, Spector TD, Ordovas JM, Berry SE, Valdes AM. Validity of continuous glucose monitoring for categorizing glycemic responses to diet: implications for use in personalized nutrition. Am J Clin Nutr. 2022 Jun 7;115(6):1569-1576.
- 4. Vetrani C, Calabrese I, Cavagnuolo L, Pacella D, Napolano E, Di Rienzo S, Riccardi G, Rivellese AA, Annuzzi G, Bozzetto L. Dietary determinants of postprandial blood glucose control in adults with type 1 diabetes on a hybrid closed-loop system. Diabetologia. 2022 Jan;65(1):79-87.
- 5. Ehrhardt N, Al Zaghal E. Continuous Glucose Monitoring As a Behavior Modification Tool. Clin Diabetes. 2020 Apr;38(2):126-131. doi: 10.2337/cd19-0037. PMID: 32327884; PMCID: PMC7164990.



## Title of Presentation 2

# Debate: The role of artificial sweeteners and light products in the promotion of weight loss and diabetes management. (PRO)

#### **Abstract**

The prevention and management of obesity and diabetes remain a health challenge. Diabetes and obesity are associated with increased energy intake and imbalance between energy intake and energy expenditure and increased insulin resistance. They are also associated with the development of cardiovascular and other complications. The epidemic increase of "diabesity" leads to an urgent need for novel dietary and therapeutic approaches and for treating obesity and diabetes. For this reason food industry is trying to provide us with dietary solutions and "light" dietary products.

As the incidence and prevalence of type 2 diabetes (T2DM) continue to rise, the identification of components that contribute to or are associated with this disease has become a priority. One of the main factors that has been linked to T2DM is excessive weight gain, and reduction in weight has been recommended for both diabetes prevention and management.

"Light" products and low-calorie sweeteners (LCS) provide an alternative to original foods and drinks and may facilitate better glucose control, weight loss and maintenance of a decreased caloric intake. Considerable attention has been given to the role of light products and LCS and their relationship to obesity and T2DM. Research suggests they can serve an important role in diabetes prevention and management by substituting sugars and fats and by providing less total calories.

Most of the people believe that a "light" product is free of calories or a 100% healthy product. Of course this is not always true. If the food gets 50% or more of its calories from fat, then the product must have half the fat of the regular version in order to use "light." The term "light" can also be used when the sodium (salt) content of a low-calorie, low-fat food has been reduced by 50%. According to the EUs' Nutrition claim report "a claim stating that a product is 'light' or 'lite', and any claim likely to have the same meaning for the consumer, shall follow the same conditions as those set for the term 'reduced'; the claim shall also be accompanied by an indication of the characteristic(s) which make(s) the food 'light' or 'lite".

Low-calorie sweeteners (LCS) are food ingredients with a sweet taste and no or almost no calories that are used in foods and beverages as well as in tabletop sweeteners, instead of sugar, to provide the desired sweetness with fewer or no calories. These substances are hundreds of times sweeter than table sugar, so only very small amounts are needed to impart the desired level of sweetness to foods and beverages, contributing very few or no calories to the final food or beverage. Therefore, they are now a useful tool for reducing the overall calorie intake of individuals but also for meeting the need for a sweet taste by people with T1DM and T2DM or people who wish to reduce their sugar intake and take care of their weight.

Light products and LCS offer a practical method for promoting a reduction in caloric intake. They also offer a preventative measure to combat excessive weight gain in at-risk individuals. Foods and beverages, when consumed carefully, provide a better alternative for individuals trying to both prevent diabetes and lose excessive weight by making relatively simple dietary changes. The replacement of added sugars with LCS is consistent with this approach.



Engaging in a healthy lifestyle is central to the prevention and management of T2DM. Steps to improve one's diet, maintain a healthy weight and increase levels of physical activity are consistent with these efforts. Low-calorie and "light" products which are usually high in protein and low in sugars and simple carbohydrates, are commonly recommended for patients with pre-diabetes and T1DM/T2DM. The use of light products and LCS can assist individuals in reducing caloric intake and thereby promote a healthier weight but their ultimate effects depend on the amount of their calories, the frequency of their consumption and their incorporation in a healthy diet and general lifestyle.

## **Prof El Ghoch Marwan**

MD, Associate Professor, Department of Biomedical, Metabolic and Neural Sciences, University of Modena and Reggio Emilia, Professor in Clinical Nutrition, Italy

#### **Title of Presentation**

## Patient- centered communication in obesity management

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to:

Introducing a personalized approach for obesity management based on a patient-centered communication.

#### Description (Focus Statement)

- 1. Patient-Centered Communication
- 2. Addressing discrimination and stigmatization toward patients with obesity

#### **Learning Outcomes Assessment**

Improvement in weight management outcomes expressed in:

- 1. Attrition
- 2. Weight loss
- 3. Weight-loss maintenance

#### Abstract

Several studies reported that discrimination of patients with obesity occurs in different settings, at workplaces, in public, in the media, among family and friends. Not only, but surprisingly in places where it is least expected, in fact it is common in health care settings (i.e. GPs, obesity specialists, psychiatrists, psychologists, obstetricians, dieticians and nurses). A number of obesity specialists think that patients with obesity are lazy, non-compliant, weak-willed, unintelligent, lacking willpower and even dishonest. On the other hand, many patients feel their obesity specialists are dismissive of them, and so avoid further consultation and treatment.

Therefore, it is particularly important and vital to improve the attitude of obesity experts toward patients through communication by reducing discriminating and stigmatizing in weight management clinical settings environments as well as in therapist attitude toward their patients, through centred-patient communication which is a fundamental aspect of obesity treatment and has a central role before and during weight management programmes.

- 1. Durrer Schutz D, Busetto L, Dicker D, Farpour-Lambert N, Pryke R, Toplak H, Widmer D, Yumuk V, Schutz European Practical and Patient-Centred Guidelines for Adult Obesity Management in Primary Care. Obesity Facts 2019;12 (1): 40-66.
- 2. Dalle Grave R, Sartirana M, El Ghoch M, Calugi S. Treating Obesity with Personalized Cognitive Behavioral Therapy. 2018 Springer Book.
- 3. Kreidieh D, Fakhoury R, El Ghoch M. 2021 Exploring the effectiveness of a 1.5-Year weight management intervention for adults with obesity. Clin Nutr ESPEN 2021: 42: 215-220.



## **Erotokritou George**

Chef, Cyprus

#### **Title of Presentation**

## Culinary Nutrition SPA for Health/Institute – Preparing Food for the Hospital

#### **Abstract**

The integration of a Culinary Medical Spa within hospital menus presents a groundbreaking approach to elevate the nutritional status and medical outcomes of patients. This presentation explores the significance of Culinary Medical Spa in the context of hospital nutrition, emphasizing its potential to revolutionize the patient dining experience. By combining the principles of culinary excellence with medical nutrition therapy, this innovative concept aims to optimize patient well-being and contribute to enhanced recovery and overall health outcomes.

#### Objectives:

- 1. Introduce the Concept of Culinary Medical Spa:
  - Provide an overview of the Culinary Medical Spa concept and its potential impact on hospital menus.
  - Explore the integration of culinary arts and medical nutrition therapy for a holistic approach to patient care.

#### 2. Examine the Nutritional Significance:

- Evaluate the nutritional benefits of a Culinary Medical Spa within hospital settings.
- Analyze how customized and well-balanced menus contribute to the improvement of patients' nutritional status.

#### 3. Assess the Impact on Medical Outcomes:

- Investigate the potential positive effects of Culinary Medical Spa on medical outcomes and patient recovery.
- Discuss case studies and real-world examples showcasing improved health outcomes through the implementation of this innovative culinary approach.

#### Learning Outcomes:

- 1. Understanding Culinary Medical Spa Principles:
  - Participants will gain an understanding of the principles and components that define the Culinary Medical Spa concept.
  - Participants will be able to identify ways in which culinary arts can be seamlessly integrated into hospital nutrition practices.

#### 2. Appreciating Nutritional Benefits:

- Participants will appreciate the nutritional significance of a Culinary Medical Spa in the context of hospital menus.
- Participants will be able to articulate the impact of well-crafted, personalized menus on patients' nutritional well-being.

#### 3. Recognizing Positive Medical Outcomes:

- Participants will be able to assess the potential impact of Culinary Medical Spa on medical outcomes and patient recovery.
- Participants will gain insights into the role of customized nutrition in improving overall health outcomes for hospitalized individuals.

This presentation aims to inspire dietetic professionals, healthcare practitioners, and culinary experts to explore and embrace the transformative potential of Culinary Medical Spa in hospital settings, fostering a new era of patient-centered nutritional care.



"Culinary Medical Spa" is a concept that combines the principles of culinary arts with medical nutrition therapy to enhance the dining experience and nutritional outcomes for individuals, particularly those in hospital settings. It emphasizes the integration of delicious and aesthetically pleasing food with therapeutic nutrition to address the specific dietary needs of patients. Here's how dietitians or nutritionists can utilize this innovative approach:

#### Key Components of Culinary Medical Spa:

#### 1. Personalized Menus:

- Customization: Dietitians can work with culinary experts to design personalized menus tailored to each patient's nutritional requirements, dietary restrictions, and medical conditions.
- Variety: Offering a diverse range of nutritious and flavorful options ensures that patients have choices that align with their preferences and dietary needs.

#### 2. Culinary Expertise:

- Chef Collaboration: Dietitians can collaborate with professional chefs to marry nutritional science with culinary creativity, ensuring that meals are both nourishing and enjoyable.
- Innovative Cooking Techniques: Incorporating innovative and health-conscious cooking methods can enhance the nutritional value of meals without compromising on taste.

#### 3. Therapeutic Nutrition:

- Condition-Specific Menus: Dietitians can create menus addressing specific medical conditions, such as heart disease, diabetes, or gastrointestinal issues, incorporating ingredients known for their therapeutic properties.
- Nutrient-Dense Options: Emphasizing nutrient-dense foods that support healing and recovery becomes a central aspect of the Culinary Medical Spa approach.

#### 4. Dining Experience:

- Ambiance: Dietitians can collaborate with hospital staff to create a dining environment that promotes relaxation and enjoyment, contributing positively to the overall experience.
- Education: Utilize the dining experience to educate patients about the nutritional benefits of their meals and how dietary choices can impact their health.

#### How Dietitians or Nutritionists Can Implement Culinary Medical Spa:

#### 1. Collaborative Approach:

• Work closely with culinary professionals, chefs, and hospital kitchen staff to develop menus that align with both nutritional guidelines and culinary expertise.

#### 2. Assessment and Customization:

• Conduct thorough nutritional assessments to understand each patient's unique dietary needs and then customize menus accordingly.

#### 3. Education and Communication:

• Educate patients about the nutritional value of their meals, fostering a sense of empowerment and understanding regarding the connection between diet and health.

#### 4. Continuous Monitoring and Adjustment:

• Regularly monitor patients' responses to the Culinary Medical Spa approach and make adjustments to the menus based on individual progress and feedback.

#### 5. Integration with Medical Plans:

• Ensure that the Culinary Medical Spa approach aligns seamlessly with the overall medical treatment plan, providing complementary support for patients' health and recovery.

By integrating the principles of Culinary Medical Spa into their practice, dietitians and nutritionists can elevate the standard of hospital nutrition, positively impacting patients' well-being, compliance with dietary recommendations, and overall satisfaction with their culinary and nutritional experiences during their stay.



## **Francois Bethany**

BSc Biomedical Sciences, MSc Eating Disorders and Clinical Nutrition, PG Diploma Dietetics, Specialist Eating Disorder Dietitian, Orri Eating Disorder Service, London, UK

#### **Title of Presentation**

## The Role of a Dietitian in the Treatment of Anorexia Nervosa

#### **CPE Level**

Level I assumes that the participant has little or no prior knowledge of the areas covered. The focus of the activity is to increase the core knowledge of the participant.

#### After this presentation, the attendee will be able to:

- 1. Understand the role of a dietitian within a multidisciplinary team approach to treating anorexia nervosa.
- 2. Understand key aspects of undertaking an initial dietetic assessment for anorexia nervosa.
- 3. Recognise common eating behaviours seen in anorexia nervosa and start to understand approaches to treating these.

#### Description (Focus Statement)

This session will be split into two sections. The first providing content focusing on the presentation of anorexia nervosa, including commonly seen eating behaviours and approaches to treating these, as well as, the overall role of a dietitian within a multidisciplinary team. The second part of the session will involve a case study analysis, giving attendees the opportunity to put into practice what they have learnt and to ask questions surrounding a specific case.

#### Learning Outcomes Assessment

Objectives will be assessed via an interactive case study at the end of the session giving attendees the opportunity to use a real life example to implement knowledge.

#### **Abstract**

Anorexia nervosa is a complex and life-threatening eating disorder that affects millions of individuals worldwide. The treatment of anorexia nervosa demands a comprehensive, multidisciplinary approach, with dietitians playing a pivotal role in supporting recovery. This conference session aims to shed light on the critical and multifaceted responsibilities dietitians hold in the treatment of anorexia nervosa.

The session will provide insights into the nutritional challenges that individuals with anorexia nervosa face, emphasising the importance of reestablishing a healthy relationship with food. It will explore the tailored nutritional interventions designed to address malnutrition, manage refeeding syndrome, and encourage sustainable weight restoration. Additionally, the session will delve into the delicate balance of respecting patient autonomy while ensuring their physical and emotional well-being.

Furthermore, we will discuss the collaborative nature of anorexia nervosa treatment, emphasising the need for close coordination between dietitians, therapists, and medical professionals. The session will touch on the importance of addressing the psychological aspects of eating disorders and how dietitians can integrate nutritional counselling into the broader therapeutic framework.



A real-life case study will be shared to illustrate the practical application of dietitians' expertise in anorexia nervosa treatment. Attendees will gain a deeper understanding of the compassionate and evidence-based approaches employed by dietitians to facilitate lasting recovery.

In conclusion, this conference session will highlight the indispensable role of dietitians in the comprehensive treatment of anorexia nervosa, emphasising their contribution to physical rehabilitation, nutritional education, and the restoration of a positive relationship with food. The session encourages a holistic and empathetic perspective on the recovery process, underlining the potential for long-lasting transformation when dietitians are integral members of the treatment team.

- 1. Heruc, G. et al. (2020) 'ANZAED practice and training standards for Dietitians providing eating disorder treatment', Journal of Eating Disorders, 8(1). doi:10.1186/s40337-020-00334-z.
- 2. Academy for Eating Disorders Nutrition Working Group (2020) Guidebook for Nutrition Treatment of Eating Disorders
- 3. Royal College of Psychiatrists (2022) Medical Emergencies in Eating Disorders: Guidance on Recognition and Management



### Dr Galatou Eleftheria

Pharmacist- Biologist, MSc, PhD, Assistant Professor, Pharmacy Program, Department of Health Sciences, School of Life and Health Sciences, University of Nicosia, Cyprus

#### Title of Presentation

## Developments in the diagnosis and management of metabolic syndrome from a pharmacist perspective

#### **CPE Level**

Level I assumes that the participant has little or no prior knowledge of the areas covered. The focus of the activity is to increase the core knowledge of the participant.

#### After this presentation, the attendee will be able to:

- 1. Understand and explain the pathophysiology of metabolic syndrome
- 2. Recognize and understand the categories of new biomarkers that can be used for diagnosis of metabolic syndrome
- 3. Identify and define the drugs and novel therapeutic targets for the management of metabolic syndrome

#### Description (Focus Statement)

Metabolic syndrome (MetS) is a cluster of metabolic abnormalities, including insulin resistance, central obesity, dyslipidemia, and high blood pressure. MetS is associated with an increased risk of developing diabetes and cardiovascular diseases, that constitute by far the leading cause of morbidity and mortality worldwide. Due to the complex interplay of genetic/epigenetic factors, metabolic and environmental factors, multifaceted practices and strategies are required for early diagnosis and effective intervention of MetS.

#### Learning Outcomes Assessment

Summary Question for the attendees

#### Abstract

Metabolic syndrome (MetS) is a cluster of metabolic abnormalities, including insulin resistance, central obesity, dyslipidemia, and high blood pressure. The pathogenesis of MetS encompasses the dysregulation of various metabolic pathways involved in fatty acid metabolism, mitochondrial function, and glucose utilization that fall under the umbrella of insulin resistance and chronic low-grade inflammation. MetS is associated with an increased risk of developing diabetes and cardiovascular diseases (CVDs), that constitute by far the leading cause of morbidity and mortality worldwide. The management of metabolic syndrome begins with lifestyle modification and weight reduction followed by pharmacotherapy with insulin sensitizers, hypolipidemic and antihypertensive drugs. The complex interplay of environmental factors, lifestyle, and genetic/epigenetic factors in the pathophysiology of MetS has led to the development of new biomarkers for the early diagnosis and to the discovery of potential new targets for therapeutic interventions.

- 1. Clemente-Suárez, V.J.; Martín-Rodríguez, A.; Redondo-Flórez, L.; López-Mora, C.; Yáñez-Sepúlveda, R.; Tornero-Aguilera, J.F. New Insights and Potential Therapeutic Interventions in Metabolic Diseases. Int. J. Mol. Sci. 2023, 24, 10672. https://doi.org/10.3390/ijms241310672
- 2. McCracken, E.; Monaghan, M.; Sreenivasan, S. Pathophysiology of the metabolic syndrome. Clin. Dermatol. 2018, 36, 14-20.
- 3. Wang HH, Lee DK, Liu M, Portincasa P, Wang DQ. Novel Insights into the Pathogenesis and Management of the Metabolic Syndrome. Pediatr Gastroenterol Hepatol Nutr. 2020 May;23(3):189-230. doi: 10.5223/pghn.2020.23.3.189. Epub 2020 May 8. PMID: 32483543; PMCID: PMC7231748.

#### **Dr Gianfrancesco Marco**

PhD in Pharmaceutical and Biomedical Sciences, Scientific Affairs Lead, Les Laboratoires Ortis, Belgium

#### Title of Presentation

## The phytotherapy and its uses for a healthy liver

#### **CPE Level**

Level I assumes that the participant has little or no prior knowledge of the areas covered. The focus of the activity is to increase the core knowledge of the participant.

#### After this presentation, the attendee will be able to:

- 1. Understand the power of action of herbal medicine in the context of liver diseases.
- 2. Name three plants beneficial for the liver.
- 3. Understand hepatoprotective molecular mechanisms generated by plants.

#### Description (Focus Statement)

A brief phytotherapy history and its advantages will be presented followed by the effectiveness of plant based medicine in the context of liver health and diseases. Plants that helps the normal liver function will be deepened and their hepatopretoective mechanisms will be explained.

#### **Learning Outcomes Assessment**

The above stated objectives are assessed by multiple choice question followed by a discussion.

#### Abstract

In recent years researchers have examined the effects of plants used traditionally by indigenous healers to support liver function and treat diseases of the liver. In many cases, research has confirmed traditional know-how and wisdom. This was made by discovering the mechanisms and modes of action of these plants as well as reaffirming the therapeutic effectiveness of certain plants or plant extracts in clinical studies. Compounds with different structure but with the same therapeutic activity isolated from different plant species and plant parts act as active moieties for the management of various diseases. Several phytomolecules obtained from various plant sources have been reported as potent hepatoprotective agents.

As Hippocrates said: "Let Food be your Medicine and Medicine be your Food".

- 1. Wang, J. et al. Mutual interaction between endoplasmic reticulum and mitochondria in nonalcoholic fatty liver disease. Lipids in Health and Disease 19, 72 (2020).
- 2. Ore, A.; Akinloye, O.A. Phytotherapy as Multi-Hit Therapy to Confront the Multiple Pathophysiology in Non-Alcoholic Fatty Liver Disease: A Systematic Review of Experimental Interventions. Medicina 2021, 57, 822. https://doi.org/10.3390/ medicina57080822
- 3. Xu Y, Guo W, Zhang C, Chen F, Tan HY, Li S, Wang N and Feng Y (2020) Herbal Medicine in the Treatment of Non-Alcoholic Fatty Liver Diseases-Efficacy, Action Mechanism, and Clinical Application. Front. Pharmacol. 11:601. doi: 10.3389/fphar.2020.00601
- 4. Abenavoli L, Izzo AA, Mili? N, Cicala C, Santini A, Capasso R. Milk thistle (Silybum marianum): A concise overview on its chemistry, pharmacological, and nutraceutical uses in liver diseases. Phytotherapy Research. 2018;1-12. https://doi.org/10.1002/ptr.6171
- 5. Mahboubi, Mohaddese; Mahboubi, Mona. Hepatoprotection by dandelion (Taraxacum officinale) and mechanisms. Asian Pacific Journal of Tropical Biomedicine 10(1):p 1-10, January 2020. | DOI: 10.4103/2221-1691.273081
- 6. Santos HO, Bueno AA, Mota JF. The effect of artichoke on lipid profile: A review of possible mechanisms of action. Pharmacol Res. 2018 Nov;137:170-178. doi: 10.1016/j.phrs.2018.10.007. Epub 2018 Oct 9. PMID: 30308247.



## **Dr Giannaki Christoforos**

BSc, MSc, PhD, Associate Professor, Department of Life Sciences, School of Life and Health Sciences, University of Nicosia, Cyprus

#### **Title of Presentation**

## **Exercise in Chronic Kidney Disease**

#### **CPE Level**

Level I assumes that the participant has little or no prior knowledge of the areas covered. The focus of the activity is to increase the core knowledge of the participant.

#### After this presentation, the attendee will be able to:

Understand the important role of exercise in chronic kidney disease.

#### Description (Focus Statement)

Exercise could be an effective and safe non-pharmacological approach in terms of improving overall health and quality of life in chronic kidney disease patients.

#### Learning Outcomes Assessment

This presentation focuses on the role of exercise in the management of chronic kidney disease and how exercise can improve the quality of life in this specific group of patients.

#### **Abstract**

Chronic kidney disease (CKD) patients suffer from poor physical capacity, muscle atrophy, and extreme fatigue, often associated with increased morbidity and mortality and impaired quality of life. Exercise can confer many beneficial physiological adaptations affecting the patient's quality of life and overall health. The current presentation will discuss the role of various forms of exercise training in patients with CKD, especially the new forms of exercise. The discussion will focus on the effects of exercise in both physiological and psychological/mental related parameters and how it can improve quality of life-related parameters in this specific group of patients.

- 1. Giannaki CD, Grigoriou SS, George K, Karatzaferi C, Zigoulis P, Lavdas E, Chaniotis D, Stefanidis I, Sakkas GK. Nine months of hybrid intradialytic exercise training improve ejection fraction and cardiac autonomic nervous system activity in hemodialysis patients. Sports, 2023, 11(4), 79
- 2. Krase AA, Terzis G, Giannaki CD, Stasinaki I, Wilkinson TJ, Smith AC, Karatzaferi C, Stefanidis I, Sakkas GK. Seven months of aerobic intradialytic exercise training can prevent muscle loss in haemodialysis patients: an ultrasonography study. International Urology and Nephrology, 2022, 54(2):447-456
- 3. Rosa CSC, Giannaki CD, Mplekou M, Krase A, Grigoriou SS, Stefanidis I, Lavdas E, Pappas A, Bloxham S, Karatzaferi C,. Sakkas GK. Effects of 12 months of detraining on health-related quality of life in patients receiving hemodialysis therapy. International Urology and Nephrology. 2020, 52(9): 1771-1778



## **Gregora Poly**

Mental Health First Aider, Coach, Expert by Experience, Mental Health Empowerment Advocate, Cyprus

#### **Title of Presentation**

## Train the Trainer: Educate the dietitians/nutritionist show to guide their consultees with disordered eating (Testimonial)

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to:

- 1. Have a better understanding of the emotional aspect of someone with disordered eating.
- 2. Show more Empathy.

#### Description (Focus Statement)

During my presentation I will try to make the attendees see life through the eyes of someone with disordered eating and try to help them find new ways to approach the challenges of working with people with such problems. The other key element and goal of my presentation will be to have the attendees learn the magic of the word Empathy.

#### Learning Outcomes Assessment

The Assessment will be made through q & a after the initial presentation will be finished. The goal will be to have interaction between the speaker and the attendees as to receive the given results.

#### Abstract

Listen to ME.....

Baggy Clothing and closed lights while having s......

It's not that I don't want to, I just can"t.....

Empathy.....

#### References

All references used are real life situations as I am an Expert by Experience.



## **Dr Heraclides Alexandros**

PhD, Associate Professor, Epidemiology and Public Health Department of Health Sciences, School of Sciences, European University Cyprus, Cyprus

#### Title of Presentation

## Gene-diet interactions and their potential role in type 2 diabetes prevention

#### **CPE Level**

Level I assumes that the participant has little or no prior knowledge of the areas covered. The focus of the activity is to increase the core knowledge of the participant.

#### After this presentation, the attendee will be able to:

- 1. Outline the basics of genetic predisposition and gene-environment interactions in chronic disease
- 2. Describe how dietary intake and genes interact to influence the risk of chronic disease
- 3. Provide some examples of gene-diet interactions from the literature and their potential role in type 2 diabetes prevention

#### Description (Focus Statement)

The specific talk will initially provide an overview of genetic predisposition and gene-environment interactions as regards the aetiology of chronic diseases, analyzing in particular how dietary intake and genes interact to influence the risk of chronic disease. The talk will conclude by presenting examples of gene-diet interactions in relation to the risk of type 2 diabetes from the literature. The talk will conclude by discussing the potential role in type 2 diabetes prevention.

#### Learning Outcomes Assessment

Questions to participants at the end of the talk.

#### Abstract

The notion that chronic diseases are caused by a combination (or interaction) between environmental and genetic factors have been proposed several decades ago, however the decoding of the human genome in early 2000s, has sparked an unprecedented interest in the investigation of the role of specific genetic polymorphisms in chronic disease aetiology. In fact, the last 20 years have seen rapidly accumulating evidence on the involvement of specific single nucleotides polymorphisms (SNPs) in different chronic diseases, including type 2 diabetes. Particularly for type 2 diabetes, the epidemic proportions of the global rise in prevalence have been highlighted as proving a primarily environmental (e.g. lifestyle-related) aetiology. Not all people exposed to lifestyle-related risk factors (e.g. sedentary lifestyle, unhealthy diet, obesity, etc.) develop type 2 diabetes, pointing to a genetic component also playing a role. This is addressed by the field of gene-environment interactions, which aim to investigate whether the effects of a diabetogenic environment depend on genetic predisposition to type 2 diabetes or any other genetic factors (Franks et al, 2013; Franks & Paré, 2016). In fact, several gene-diet interactions in the aetiology o type 2 diabetes have been identified in the literature. For example, specific genetic loci (SNPs) have been found to interact with the consumption of carbohydrate-rich foods, meat, fruits and vegetables, and dairy milk in a large genome-wide gene-diet interaction analysis from the UK Biobank (Westerman et al, 2021). Other studies have also identified such gene-diet interactions on risk of type 2 diabetes, involving wholegrain cereal intake (Dietrich et al, 2019), coffee consumption (Heraclides et al, 2016). However, interventional lifestyle modification studies indicate that behavioural modifications, including dietary change, appear equally effective in reducing type 2 diabetes risk in those with and without known underlying genetic predisposition (Sørensen et al, 2022). Given these findings, further work needs to be done research-wise in order to identify more specific gene-



diet interactions with relatively large effects on type 2 diabetes incidence, which could potentially be effectively translated into practice. Without such gene - diet modification data and subsequent confirmation by large scale randomised controlled trials, the application of specific gene-diet interactions for individualised type 2 diabetes prevention based on genetic profiling is not warranted (Sørensen et al, 2022).

- 1. Franks PW, Pearson E, Florez JC. Gene-environment and gene-treatment interactions in type 2 diabetes: progress, pitfalls, and prospects. Diabetes Care. 2013 May;36(5):1413-21.
- 2. Franks PW, Paré G. Putting the Genome in Context: Gene-Environment Interactions in Type 2 Diabetes. Curr Diab Rep. 2016 Jul;16(7):57.
- 3. Westerman KE, Miao J, Chasman DI, Florez JC, Chen H, Manning AK, Cole JB. Genome-wide gene-diet interaction analysis in the UK Biobank identifies novel effects on hemoglobin A1c. Hum Mol Genet. 2021 Aug 28;30(18):1773-1783.
- 4. Dietrich S, Jacobs S, Zheng JS, Meidtner K, Schwingshackl L, Schulze MB. Gene-lifestyle interaction on risk of type 2 diabetes: A systematic review. Obes Rev. 2019 Nov;20(11):1557-1571.
- 5. Heraclides A on behalf of the InterAct Consortium. Investigation of gene-diet interactions in the incretin system and risk of type 2 diabetes: the EPIC-InterAct study. Diabetologia. 2016 Dec;59(12):2613-2621.
- 6. Sørensen TIA, Metz S, Kilpeläinen TO. Do gene-environment interactions have implications for the precision prevention of type 2 diabetes? Diabetologia. 2022 Nov;65(11):1804-1813.



### **Dr Hileti Dona**

PhD, MSc, BSc (hons), RD, Lecturer in Nutrition at the University of Nicosia and Clinical Paediatric Dietitian, University of Nicosia, Cyprus

#### **Title of Presentation**

## What you told us! (for introduction of solid food - research based)

#### **CPE** Level

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to:

- 1. Be updated with the opinions of Paediatricians regarding the guidelines for the introduction of complementary foods during the 1st year of life
- 2. Identify the effect of whether the main criterion of starting complementary feeding is the nutritional needs or the behaviour/developmental readiness of the infant
- 3. Learn about the factors influencing the opinions and recommendations of Paediatricians in Cyprus regarding complementary feeding advice

#### **Description (Focus Statement)**

Complementary feeding has long-term effects on health but there is heterogeneity in recommendations across Europe. Recommendations include responsive feeding practices and nutritional needs but there is a debate in primary paediatricians as to which one should be the main criterion for complementary feeding. This pilot study investigated (1) the factors affecting the recommendations of paediatricians in Cyprus for starting complementary feeding, (2) whether their main criterion is the developmental readiness or the nutritional needs of the infant and (3) how this priority influences recommendations.

#### Learning Outcomes Assessment

Learning outcomes will be assessed by answering the multiple choice question

#### Abstract

#### Background:

Complementary feeding has long-term effects on health but there is heterogeneity in recommendations across Europe. Recommendations include responsive feeding practices and nutritional needs but there is a debate in primary paediatricians as to which one should be the main criterion for complementary feeding. This pilot study investigated (1) the factors affecting the recommendations of paediatricians in Cyprus for starting complementary feeding, (2) whether their main criterion is the developmental readiness or the nutritional needs of the infant and (3) how this priority influences recommendations.

#### Methods and Results:

The 11-item questionnaire was completed by 73 Cypriot paediatricians. Approximately 66% of paediatricians recommend starting complementary feeding between 5-6 months, 29% between 4-5 and 3% between 6-7 months. Predefined schemes are recommended by approximately 25% of paediatricians, baby-led weaning by 14% and 58% of paediatricians recommend either modality depending on the family circumstances whilst



4% involve the mother in the decision process. Approximately 64% of paediatricians recommend the introduction of parent's diet after the first year of life. Approximately 55% of paediatricians chose developmental readiness and 45% nutritional needs of the infant as their primary criterion for starting complementary feeding. Paediatricians who prioritized developmental readiness were more likely to be younger, less likely to advice on meat quantity and less likely to follow good nutritional practice.

#### Conclusion:

The younger the paediatrician the more likely they are to prioritise developmental readiness over nutritional needs of the infant for complementary feeding. Paediatricians who prioritised developmental readiness are also less likely to provide nutritional advice.

- 1. Theurich MA, Fewtrell M, Baumgartner J, et al. Moving Complementary Feeding Forward: Report on a Workshop of the Federation of International Societies for Pediatric Gastroenterology, Hepatology and Nutrition (FISPGHAN) and the World Health Organization Regional Office for Europe. J Pediatr Gastroenterol Nutr 2022;75:411-17.
- 2. Fewtrell M, Bronsky J, Campoy C, et al. Complementary Feeding: A Position Paper by the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) Committee on Nutrition. J Pediatr Gastroenterol Nutr 2017;64. doi:10.1097/MPG.0000000000001454.
- 4. Cameron SL, Heath A-LM, Taylor RW. Healthcare professionals' and mothers' knowledge of, attitudes to and experiences with, Baby-Led Weaning: a content analysis study. BMJ Open 2012;2:e001542.



## **Dr Karagiannis Dimitrios**

BSc, MSc, PhD, Director, Clinical Nutrition Unit, Evaggelismos General Hospital, Athens, Greece

#### **Title of Presentation**

## The New Guidelines for Enteral Nutrition

#### **CPE Level**

Level III assumes that the participant has thorough knowledge of the literature and professional practice within the areas covered. The focus of the activity is synthesis of recent advances and future direction.

#### After this presentation, the attendee will be able to:

- 1. Describe current progress in ICU nutrition and highlight where research is needed
- 2. Optimal timing to start enteral nutrition
- 3. Benefit of early full feeding

#### **Description (Focus Statement**

Recommendations from worldwide guidelines and practice suggest that low-dose enteral nutrition (EN) or parenteral nutrition (PN) can be started within 48 h of ICU admission. While EN is preferred route of delivery, new data highlight PN can be given safely without increased risk; thus, when early EN is not feasible, provision of isocaloric PN is effective and results in similar outcomes.

#### Learning Outcomes Assessment

By Knowledge Sharing.

#### Abstract

ICU patients often face complex medical conditions and severe stress, which can lead to a hypermetabolic state characterized by an increased energy expenditure. These patients may also experience prolonged periods of mechanical ventilation, sedation, and immobilization, all of which can impact their nutritional needs and gastrointestinal function. Thus, providing appropriate nutrition is a critical challenge in this setting.

#### Advantages of Enteral Nutrition:

Enteral nutrition, which involves administering nutrients through a feeding tube into the gastrointestinal tract, offers several advantages in the ICU:

- Preservation of Gut Function: Enteral nutrition helps to maintain the structural and functional integrity of the gastrointestinal tract. It stimulates the production of mucous, promotes blood flow to the gut, and prevents bacterial translocation, reducing the risk of infections.
- Immune Support: The gut is often called the "second brain" and plays a crucial role in immune function. Enteral nutrition can help modulate the immune response and reduce the risk of infections, which are common in critically ill patients.
- Reduced Complications: Compared to parenteral nutrition (administered intravenously), enteral nutrition is associated with fewer complications. It reduces the risk of central line-associated bloodstream infections and liver dysfunction, which can be associated with parenteral nutrition.
- Gut Hormone Release: Enteral nutrition can stimulate the release of gut hormones, such as cholecystokinin and glucagon-like peptide-1, which have positive effects on insulin sensitivity and satiety.
- Psychological Benefits: Eating via the gastrointestinal tract can help maintain the patient's sense of normalcy and psychological well-being.

#### Indications and Considerations:

Enteral nutrition is typically indicated when a patient cannot meet their nutritional requirements orally due to medical conditions or interventions.

Common indications include:

- Mechanical Ventilation: Patients on ventilators may not be able to eat or swallow, making enteral nutrition essential.
- Impaired Consciousness: Patients with altered mental status or sedation may be unable to eat safely.
- Severe Sepsis or Burns: Conditions like sepsis or extensive burns increase metabolic demands, making enteral nutrition a valuable support.
- Gastrointestinal Dysfunction: In some cases, patients may have gastrointestinal conditions that make absorption of oral nutrients difficult.

When implementing enteral nutrition in the ICU, several factors need to be considered, including the patient's medical condition, gastrointestinal function, and the type of feeding tube required. Careful monitoring and adjustment of the feeding regimen are crucial to ensure that the patient's nutritional needs are met while avoiding overfeeding or underfeeding.

- 1. Wischmeyer PE, Bear DE, Berger MM, De Waele E, Gunst J, McClave SA, Prado CM, Puthucheary Z, Ridley EJ, Van den Berghe G, van Zanten ARH. Personalized nutrition therapy in critical care: 10 expert recommendations Crit Care. 2023 Jul 4;27(1):26
- 2. Nutrition practices in hospitalized adults receiving noninvasive forms of respiratory support: A scoping review. Page K, Viner Smith E, Chapple LS. Nutr Clin Pract. 2023
- 3. The Effectiveness of Early Enteral Nutrition on Clinical Outcomes in Critically III Sepsis Patients: A Systematic Review. Moon SJ, Ko RE, Park CM, Suh GY, Hwang J, Chung CR. Nutrients. 2023 Jul 19;15(14):3201.



### Korfiati Persa

BSC Psychology - Lyon II Lumiere, Master Degree Psychology - Lyon II Lumiere, PhD Candidate - University of Nicosia, Registered Specialized Psychologist in Cyprus, Panhellenic Psychological Association - Greece / Association of MAZI-Eating Disorders Cyprus, Cyprus

#### **Title of Presentation**

## MINDFUL EATING - When a psychologist and a dietitian work together to implement MINDFUL EATING

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

### Learning Objectives

This conference presentation aims to provide attendees with a comprehensive understanding of mindful eating and equip them with practical skills and knowledge to implement this approach effectively, especially when working in collaboration with both psychologists and dietitians

#### After this presentation, the attendee will be able to:

- 1. Understand the fundamental principles of mindful eating, including the importance of being present during meals and developing a non-judgmental relationship with food.
- 2. Explore the psychological aspects of mindful eating, such as the role of emotional intelligence, self-awareness, and stress management in improving eating behaviors.
- 3. Discover the dietary components of mindful eating, including portion control, balanced nutrition, and food choices that promote well-being.
- 4. Learn about the collaborative approach between psychologists and dietitians, and how they can work together to support individuals in adopting and maintaining mindful eating habits.

#### Description (Focus Statement)

Mindful eating is a holistic approach to nutrition that focuses on the awareness and consciousness of our eating habits, encouraging a healthier relationship with food. In this conference presentation, we explore the collaborative efforts of a psychologist and a dietitian in implementing mindful eating strategies. Through a multidisciplinary approach, participants will gain insights into the psychological and dietary aspects of mindful eating, leading to improved well-being and long-term sustainable health outcomes. This presentation delves into the essential components of mindful eating, the psychological underpinnings, practical implementation, and the role of the psychologist and dietitian in facilitating this transformative process.

#### Learning Outcomes Assessment

- 1. Gain practical tools and strategies for implementing mindful eating in clinical and everyday settings, with a focus on helping clients or patients develop healthier eating habits and a positive relationship with food.
- 2. Recognize the potential benefits of mindful eating in improving overall health, weight management, and emotional well-being, with a focus on long-term sustainable results.
- 3. Discuss case studies and real-world examples that highlight successful applications of mindful eating, showcasing the collaborative efforts of psychologists and dietitians in promoting healthier eating behaviors.

#### **Abstract**

A lot of Research is done in the domains of Nutrition of Psychology and of Psychiatry, for the treatment of Eating disorders (Anorexia Bulimia and Binge eating).

Even though the conceptualization of the eating disorder is done by the therapist to the patient, the patient still resists to the psychotherapy, to the education guidelines of the Dietitian, or even to an urgent Medical Intervention.

The importance of the **Mindful Eating** is that the patient adopts a healthy nutritional behaviour and enjoys food, without considering it, as an enemy or as consolation. Mindful eating concerns the interaction between the Emotions of the patient with his/her Eating Behaviour. The most common Mindful eating practices are Present moment (1) awareness of the sensory properties of food, (2) Present moment of awareness of internal bodily sensations, (3) Present moment awareness of cues that elicit eating or the urge to eat, (4) Acceptance of cravings, (5) Acceptance and/or decentering from food-related thoughts, (6) Decenting from cravings. (K.Tapper 2022).

The Transtheoretical Model (also called the Stages of Change Model) developed by Prochaska and DiClemente in the late 1970s, evolved through studies examining the experiences of smokers who quit on their own with those requiring further treatment to understand why some people were capable of quitting on their own. It was determined that people quit smoking if they were ready to do so. Thus, the Transtheoretical Model (TTM) focuses on the decision-making of the individual and is a model of intentional change. The TTM operates on the assumption that people do not change behaviours quickly and decisively. Rather, change in behaviour, especially habitual behaviour, occurs continuously through a cyclical process. The TTM is not a theory but a model; different behavioural theories and constructs can be applied to various stages of the model where they may be most effective. (W.W.LaMorte 2022) Introduced in 1981, the **Transtheoretical model** (TTM) has become one of the most popular and enduring theories in the field of health promotion and health education. It has been applied to diverse health behaviours, including the cessation of addictions, participation in cancer screening, and the adoption of positive lifestyle behaviours. (Spencer L (2007)

Motivational interviewing (MI) is a client—cantered counselling technique designed to resolve a client's ambivalence towards behaviour change, thereby turning their intrinsic motivation into action (Gilla I. et al. 2019) Motivational interviewing (Miller and Rollnick 2002, 2013) is founded partly on the clinical intuition of its founders and partly on psychological research, which shows that when a person is ambivalent about making a particular change in his or her behaviour, a prescriptive approach is likely to engender resistance and decrease the probability of change. Hence, giving orders and prescribing changes in behaviour, as we have been taught to do, may often be countertherapeutic. Instead, people are more likely to change when it is their own free decision, for reasons that they have determined and endorsed. The skill of the therapist is to guide the patient toward internally motivated change. (Edward V. et al.2017)

Consequently, an innovative therapeutic tool could be created and dedicated to Eating Disorders, (particularly in my research for Binge eating disorder), so that the treatment or the management of these diseases can be definitely efficient. This innovative tool could be adopted by all health professionals who cope with these diseases, from their point of practice respecting each other's principles.; psychologists, nutritionists, psychiatrists.

- 1. Tapper Katy, "Mindful eating: what do we know so far?" Nutrition Bulletin, Volume: 47, Issue: 2, Pages: 168-185, First published: 10 May 2022, DOI: (10.1111/nbu.12559)
- 2. Edward V.N 2017, "Motivational interviewing in Addiction treatment", in Motivational Interviewing for Clinical Practice: A Practical Guide for Clinicians, Levounis et al. 2017, American Psychiatric Association, USA
- 3. Spencer L. et al 2007, "The Transtheoretical model as applied to dietary behaviour and outcomes", Nutrition Research Reviews, USA



## Kountouri Chrystalla

RD Clinical Dietitian, GHS, Cyprus

#### **Title of Presentation**

## **GeSY: A Challenging Era**

#### **CPE Level**

Level I assumes that the participant has little or no prior knowledge of the areas covered. The focus of the activity is to increase the core knowledge of the participant.

#### After this presentation, the attendee will be able to:

Know general information about GeSY and the challenges regarding the GeSY and the clinical dietitians

#### Description (Focus Statement)

How does GeSY really work from the inside.

There will be presented some statistical data regarding the visits and the diagnosis in the GeSY from/to RD. Also there will be a small comparison between GeSY and other health care systems around the world.

#### **Learning Outcomes Assessment**

There will be presented some statistical data regarding the visits and the diagnosis in the GeSY from/to RD. Also there will be a small comparison between GeSY and other health care systems around the world.

## Abstract

Since December 2020, health care professionals including the clinical dietitians, provide services in the General Health System (GHS), under the GHS Law and Regulations, internal regulations and Decisions. GHS is important for all people especially to those who have historically faced disparities in chronic disease rates due to socioeconomic inequalities and reduced access to health care. Currently there are about 235 clinical dietitians contracted to GeSY, a number that keeps increasing. The GHS is changingand growing continuously with the contribution of the contractors, the patients, the committee and the CyDNA.

In this presentation there will be presented some statistical data regarding the number of visits and the referral diagnosis to the clinical dietitian contracted with the GeSY. There will be a small comparison between GeSY and other health care systems around the world and also look into the future plans and challenges.

- 1. https://www.gesy.org.cy/
- 2. Martin H et.al (2022) Advocating for Expanded Access to Medical Nutrition Therapy in Medicare Journal of the Academy of Nutrition and Dietetics 122(1), 175-181
- 3. https://www.nhs.uk/
- 4. https://www.virtualhealthclinic.com/referral-for-dietician
- 5. Mulquiney, K. J., et.al. (2018). Referrals to dietitians/nutritionists: A cross-sectional analysis of Australian GP registrars' clinical practice. Nutrition & dietetics: the journal of the Dietitians Association of Australia, 75(1), 98-105

## **Dr Latzourakis Evangelos**

PhD, MSc, Renal Pg Cert, BSc, RN, Lecturer, University of Nicosia, Cyprus

#### Title of Presentation

## The role of the Nurse in the care of people with Kidney failure

#### **CPE Level**

Level III assumes that the participant has thorough knowledge of the literature and professional practice within the areas covered. The focus of the activity is synthesis of recent advances and future direction.

#### After this presentation, the attendee will be able to:

- 1. Understand the role of nurses in the care of people with Kidney failure
- 2. Perceive the factors that affect the implementation of nurses' roles in the care of people with Kidney failure
- 3. To identify ways to expand and improve the role of nurses in the care of people with Kidney failure

#### **Description (Focus Statement)**

The collaboration of nurses with dietitians and nutritionists is very important for the care of kidney patients. Understanding how nephrology nurses perceive and experience their roles and identifying the factors that positively or negatively affect the performance of these roles will help us understand how we should prepare them to achieve their effective collaboration with dietitians and nutritionists.

#### Learning Outcomes Assessment

Answering the multiple-choice question following the completion of the presentation.

#### Abstract

#### Background:

Chronic kidney disease (CKD) is recognized as a leading public health problem worldwide that impacts more than 10% of the global population. Healthcare systems are facing considerable growth in the number of people with CKD and its substantial financial burden.

#### Aim:

The aim of the study was to understand how nurses who provide care to people with CKD perceive and experience their roles and to identify different factors that positively or negatively affect the implementation of nurses' roles.

#### Methods:

An Interpretative Phenomenology Approach (IPA) was conducted that involved in depth individual semi-structured interviews with sixteen nurses working in CKD care. The sample was purposive and homogeneous, and the participants came from all the district hospitals of the Republic of Cyprus. The transcribed data was analysed, and key themes were identified.

#### Findings:

The study revealed that nurses have multiple roles in CKD care, including machine operators, providers of holistic care, unit bureaucrats, patient educators, and emotional supporters. However, it was clear that these roles differed amongst various work settings. Various factors affecting nurses' roles were identified and classified into major themes: Nurse preparation, Organisational issues, Barriers to patient education, Difficult patients, and Nurses' defensive behaviour.



#### Conclusion:

Nurses play a key role in the provision of quality care to patients with CKD, including the appropriate education. There are numerous factors that may facilitate or inhibit nurses' professional roles performance, and a proposed framework has been developed to enhance CKD care that describes how healthcare organisations, nurses, and patients could contribute to and support the delivery of high-standard nursing care.

- 1. Agustina, F., Yetti, K., & Sukmarini, L. (2019). Contributing factors to hemodialysis adherence in Aceh, Indonesia. Enfermería Clínica, 29 (52), 238-242. https://www.elsevier.es/es-revista-enfermeria-clinica-35-articulo-contributin g-factors-hemodialysis-adherence-in-S113086211930124X
- 2. American Nephrology Nurses Association (ANNA) (2022). The nephrology nursing specialty background information (online). Available at https://www.annanurse.org/professional-development/practice/scope-of-practice/background-information (Accessed 4 November 2022)
- 3. Pursio, K., Kankkunen, P., Sanner, S.E., & Kvist, T. (2021). Professional autonomy in nursing: An integrative review. Journal of Nursing Management, 29 (6), 1565-1577. https://doi.org/10.1111/jonm.13282



## **Dr Loucaides George**

BSc, Master Med Sci, PhD, Exercise Physiologist, Cyprus Sports Organization, Cyprus Sports Research Center, Cyprus

#### **Title of Presentation**

## Marathon training needs and performance

#### CPE Level

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to:

- 1. To obtain a general knowledge on the load required to train for the marathon.
- 2. To comprehend the need for nutritional support of the marathon runner based on the training requirements.
- 3. To gain an understanding of the need for cooperation between coaches, athletes and sports nutritionists.
- 4. To understand the need in both elite and recreational runners for nutritional support based on individual needs.

#### **Description (Focus Statement)**

The presentation aims to provide knowledge on the training load required for someone to train and participate in the marathon, both at the recreational and elite levels. The marathon distance is a very popular sporting event and there is a substantial increase in participation, worldwide and in Cyprus. These runners have an increased need for professional guidance in order maximize and optimize their performance, through evidence based training, supplemented by the contribution of sports nutritionists. Performance and recovery from training and racing, may be greatly influenced and determined by the optimal nutritional support. A cooperation among scientists in the field of Sport Science is essential and vital.

#### Learning Outcomes Assessment

- 1. The participant understands the load required to train for the marathon and how this load relates to nutrition.
- 2. The participant acquired basic understanding on the parameters influencing marathon performance.
- 3. The participant understands the need for essential nutritional elements in marathon performance such as carbohydrates, proteins, fats, electrolytes.
- 4. The participant acknowledges that the timing of nutrient uptake is important in recovery and performance.

#### Abstract

The marathon event has been increasing in popularity in terms of participation over the years. In Cyprus the past decade, more and more recreational runners have started training for the marathon event. As the number of participants is increasing, the need for professional guidance with the help of Sport Scientists is becoming more essential. Sports nutritionists have a very important role to play in supporting runners throughout this process.

Marathon runners have to undergo rigorous and intensive training, both at the elite and the recreational level. Therefore, the nutritional habits of these runners must reflect the replacement of the nutrients needed for training, performance and recovery.

- 1. Haugen et al. (2022), The Training Characteristics of World-Class Distance Runners: An Integration of Scientific Literature and Results-Proven Practice. Sports Medicine Open, 8:46.
- 2. Loucaides G. (2010) Comparison of Training Intensities for Optimal Endurance Running Performance. Doctoral thesis, Staffordshire University. (https://eprints.staffs.ac.uk/1920/)
- 3. Training log data from Amine Khadiri / Elia Ioannou (2023).



### Markidou Eliza

Clinical Dietitian, Ministry of Health, Cyprus

#### Title of Presentation

## **Nutritional Policies from Ministry of Health**

#### Abstract

The Nutrition Department in the M.O.H Cyprus has been very active over the years with a number of programs and interventions in order to reduce Childhood Obesity and other Nutrition Problems. Our main aim is to have a Nutrition strategy for better Health. According to the 5th round of COSI (Childhood Obesity Surveillance Initiative WHO). Cyprus has the highest rate of Childhood Obesity for children 6-10 years old among 38 countries.

A number of preventing programs have been implemented. Based on our evaluations the most effective and successful programs for childhood obesity are the following:

- 1. Become a Health Ambassador A representative number of children from each school are trained to become health ambassadors in order to be able to promote Healthy Eating and exercise among their classmates.
- 2. Mediterranean Diet Back to a successful program that involves three pillards School, parents and students. The program aims to introduce children in the glory of the mediterranean diet as part of the tradition and also for the most healthy sustainable model of eating world wide.

Other program include

- a. National guideline for nutrition age 0-6, 6-12, 12-18
- b. Healthy Breakfast at school
- c. Monitor School Country
- d. Hands Up- Eat Healthy and dance
- e. Kindergarten healthy eating and a number of policies such as food reformulation and food marketing reduction to children.



## **Dr Michaelides Michalis**

PhD of Medical & Exercise Physiology, Scientific Director of the Cyprus Sports Medicine & Research Centre - Incoming President of the Cyprus Sports medicine Association, Cyprus Sport Organization, Cyprus Association of Sports Medicine, Cyprus

#### **Title of Presentation**

## **Sports Performance from Sports Medicine Perspective**

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### Abstract

Sports Medicine aims to optimize athletes' sports performance by providing comprehensive care that encompasses, overtraining and injury prevention, treatment, rehabilitation, and performance enhancement, ultimately helping athletes achieve their full potential while minimizing health risks.



## Michaelidou Nikoleta

MSC, RD, IOC Sports Nutrition Diploma Certified, Clinical Dietitian/Sports Nutritionist, Cyprus Sports Research Center, Cyprus

#### Title of Presentation

## **Sports Performance from Nutrition Perspective**

#### CPE Level

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to

Realize the importance of sports nutrition to sports, realize the goals of a sports nutrition plan and know the nutrition guidelines for an elite footballer.

#### **Description (Focus Statement)**

Importance of Sports Nutrition to Sports in general and in specific to elite football.

#### **Learning Outcomes Assessment**

By following the guidelines to various nutrition plans of athletes and specifically football.

#### Abstract

Athletes were always seeking ways to improve performance through diet and this many times leads them to misinformation and incorrect nutrition plans. Sports nutrition or performance nutrition has evolve a lot throughout the years and especially after the 1980s where research in performance labs as well as in the fields of various sports was performed. The outcomes of research can help an athlete realize the importance of sports nutrition and that is a must to have his/her own nutrition plan and specific nutrition goals at each stage of their season. An athlete should have nutrition goals as well as performance goals and should have an individual nutrition plan covering the training and competition needs taking into consideration the sport and any special needs the athlete may have. For football sports nutrition has become extremely important and more and more managers and footballers realize the effect of nutrition to their daily performance in training as well as in the games.

- 1. Anderson L, Orme P, Michele R, Close G, Morgans R, Drust B, Morton J (2015). Quantification of traing load during one-two-and three game week schedules in professional soccer players from the Englisg Premier League: implications for carbohydrate periodization. Journal of Sport Sciences, http://dx.doi.org/10.1080/02640414.2015.1106574
- 2. Burke L, Castell L, Douglas C, Graeme C, Costa R, Besbrow B, Halson S, Lis D, Melin A, Peeling P, Saunders P, Slatern G, Sygo J, Witard O, Bermon S, Stellingwerff T. (2019) International Association of Athletics Federations Consensus Statement 2019: Nutrition for Athletics. International Journal of Sport Nutrition and Exercise Metabolism, 29-73-84
- 3. Malsagova K, Kopylov A, Sinitsyna A, Stepanov A, Izotov A, Butkova T, Chingin K, Klyuchnikov M, Kaysheva A, (2021). Sports Nutrition: Diets, Selection Factors, Recommendations. Nutrients, 13,3771 doi.org/103390/nu13113771



## **Prof Nicolaides Andrew**

DSc, MS, PhD, FRCS, FRCSE, Honorary Professor of Surgery, University of Nicosia Medical School, Cyprus

#### **Title of Presentation**

Folic acid deficiency, homocysteine blood levels and atherosclerotic cardiovascular events: a 19 year follow-up study in an initially asymptomatic Cypriot cohort

#### **CPE Level**

Level III assumes that the participant has thorough knowledge of the literature and professional practice within the areas covered. The focus of the activity is synthesis of recent advances and future direction.

#### After this presentation, the attendee will be able to:

- 1. Know about the association between homocysteine blood levels and risk of atherosclerotic cardiovascular disease
- 2. Know about the importance of folic acid in the diet in relation to homocysteine blood levels
- 3. The high susceptibility of MTHFR 766-T allele carriers to high levels of homocysteine in the absence of adequate folic acid intake

#### Description (Focus Statement)

Similar to cholesterol, homocysteine is an emerging cardiovascular risk factor.

Homocysteine is particularly important in Cyprus because (a) there is lack of folic acid fortification of grain products and (b) there is folate deficiency in a large proportion of the population.

There is a need for folic acid supplementation of food in Cyprus.

#### Learning Outcomes Assessment

The above statements are based on the available literature and data from the Cyprus Epidemiological Study on Atherosclerosis (CESA).

## Abstract

#### Background

Elevated blood homocysteine has been associated with increased risk of atherosclerotic cardiovascular disease (ASCVD) <sup>1</sup> and according to MTHFR C677–T genotype they are higher at lower levels of folate intake from diet. <sup>2,3</sup> This is so in Cyprus, Middle East, Asia and China, but not so in USA and Europe because of grain fortification with Folic Acid.

Early studies were restricted to elderly or high-risk European populations and produced controversial results. More recent studies have been in younger populations at low-, intermediate- and high-risk. Homocysteine is now established as an independent predictor of ASCVD risk in regions without grain fortification by Folic Acid.<sup>4</sup>

A 12-year prospective study involving 2,009 individuals free from ASCVD demonstrated that homocysteine was significantly related to ASCVD events and all cause death with the best cutpoint volues as 9.47 and 11.84 µmol/L respectively. In the upper quartile, the relative risk for coronary heart disease was 3.76 (95% CI 1.22-11.4) ( P=-0.044) after adjusting for age,sex, BMI, smoking, hypertension, diabetes, cholesterol, HDL and triglyceride concentrations.<sup>5</sup>



#### Results from CESA

In the Cyprus Epidemiological Study on Atherosclerosis (CESA) there were 1000 individuals, age 40-89 (mean 57.8±10.5) with 160 ASCVD Events at 17-year follow-up. Ultrasonic arterial scan of both carotid and both common femoral bifurcations were performed with measurements of atherosclerotic plaque thickness at baseline and during follow up. <sup>6</sup> The prevalence of MTHFR T allele in Cyprus was 79.8%, similar to that in China (73.0%) and higher than Europe (59.6%). <sup>7,8</sup>

The mean homocysteine blood level at recruitment was  $12.8\pm5.8 \,\mu$ mol/L; it was >  $14.0 \,\mu$ mol/L in 25% and >  $18.0 \,\mu$ mol/L in 10% of the Cypriot cohort. Compared with the two lower quartiles of homocysteine, the rate of plaque growth was double in the 3rd quartile and 2.5x in the 4th quartile of homocysteine. These data confirm the findings of Rasouli et al in 2005.9

The 10-year ASCVD cumulative event rate (MI, onset of angina, CABG, stenting, ischaemic stroke, TIA, claudication, critical limb ischaemia and cardiovascular death) was 6% in the first (lowest) quartile, 8% in the 2nd quartile, 12% in the 3rd quartile and 26% in the 4th (uppermost) quartile of homocysteine (P < 0.001).

In carriers of the MTHFR C677 T allele, the 10-year ASCVD event rate was 19% for those in the lower quartile of folate blood level and 10% for those in the upper 3 quartiles of folate (P = 0.020). However, in carriers of the CC alleles the 10-year ASCVD event rate was 13% for those in the lower quartile of folate blood level and 11% in those in the upper 3 quartiles of folate (P = 0.916).

#### Recent RCTs

A RCT involving 20,7 $^{12}$  patients with hypertension comparing enalapril with enalapril plus folic acid demonstrated a 21% reduction in stroke (HR 0.79. 95% Cl 0.68 to 0.93; log-rank P=0.003).  $^{10}$  There was greater benefit in certain subgroups: 36% in those with total Cholesterol > 200 mg/dL,  $^{11}$  73% in those with plasma homocysteine > 15  $\mu$ mol/L and low platelet count. 12 Also, the reduction of stroke was proportional to reduction in homocysteine.  $^{13}$ 

The most recent Cochrane meta-analysis of 2017 of 10 RCTs of homocysteine lowering treatment versus placebo demonstrated a primary or secondary reduction in stroke (HR 0.90, 95% CI 0.82 to 0.99).<sup>14</sup>

#### Conclusions

- 1. Homocysteine is now accepted as a risk factor for plaque progression and future ASCVD Events.
- 2. Homocysteine is particularly high in Cyprus.
- 3. In Cyprus, the harmful effect of homocysteine is more evident in low-risk individuals and carriers of MTHFR C677–T allele who have folate deficiency.
- 4. There is enough evidence of potential benefit by lowering high homocysteine (> 12 μmol/L) in individuals and legislating to fortify grain products with folic acid.

- 1. Clarke R et al. N Engl J Med 1991;324:1149-55
- 2. Ashfield-Watt PA et al. Am J Nut 2002;76:180-6
- 3. Panayiotou A, Nicolaides A et al. Expert Opin Ther Targets 2009;13(1):1-11
- 4. Ganguly P and Alam SF, Nutr J 2015;146:1-10  $\,$
- 5. Sun Y et al. Circ J 2009;73:1423-30
- 6. Nicolaides AN, Panayiotou A, Griffin M et al, JACC 2022;1969-82
- 7. Qin X et al. Neurology 2020
- 8. Spence et al. Stroke 1999;30:969-73
- 9. Rasouli ML et al. Atherosclerosis 2005;181:159-165
- 10. Huo Y et al. JAMA 2015;313(13):1325-35
- 11. Qin X et al. Stroke. 2016;47:2805-12
- 12. Kong X et al. Am Coll Cardiol 2018;71:2136-46
- 13. Huang X et al. Neurology 2017;89:2101-07
- 14. Marti-Carvajal AJ et al. Cochrane meta-analysis 2017;8:CD006612



## Ntorzi Nicoletta

Phd can., RDN, CDN, MS, Clinical Dietitian, CyDNA, Cyprus

#### **Title of Presentation**

## Results of Army Study in Cyprus for Weight and Eating Behavior of Soldiers

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to:

- 1. Know how the body composition can change during military service.
- 2. Inform the contributory factors that can change during military service.

#### Description (Focus Statement)

Military service is a crucial phase in a young individual's life, where physical fitness and nutritional habits play an essential role in ensuring the overall well-being of soldiers. This study focuses on assessing the body composition and nutritional habits of soldiers aged 18-20 years during their 1-year service in the Cyprus Army. It aims to identify changes in their body composition and dietary choices during their military service.

#### Learning Outcomes Assessment

- 1. Assess through knowledge
- 2. Interactive presentation
- 3. Presenting the results
- 4. Discussion with audience
- 5. Post presentation question

#### Abstract

#### Introduction:

Military service is a crucial phase in a young individual's life, where physical fitness and nutritional habits play an essential role in ensuring the overall well-being of soldiers. This study focuses on assessing the body composition and nutritional habits of soldiers aged 18-20 years during their 1-year service in the Cyprus Army. It aims to identify changes in their body composition and dietary choices during their military service.

#### Methods:

A cross-sectional study was conducted, involving 300 soldiers aged 18-20 years who had completed their 1-year service in the Cyprus Army. Body composition measurements, including weight, height, body fat percentage, and muscle mass, were assessed at the beginning and end of their service.

Nutritional habits were evaluated through dietary recall surveys.

#### Results:

The study revealed significant changes in the body composition of soldiers during their military service. At the start of their service, most soldiers had a relatively normal body mass index (BMI), but by the end, there was a noticeable increase in their weight. The average body fat percentage had also increased. Muscle mass had marginally declined, indicating a shift towards higher fat-to-muscle ratio.



Nutritional habits had evolved during the service period, with soldiers reporting an increase in the consumption of high-calorie, low-nutrient foods. A decrease in fruit and vegetable intake was noted. This change in dietary choices was associated with the nature of military training and potentially a lack of access to healthier food options.

#### Comparison with Other Studies:

This study aligns with previous research that has shown that military service can lead to changes in body composition, including increased weight and altered dietary habits. These findings emphasize the importance of addressing soldiers' nutritional education and providing access to healthier food options within military environments to support their overall health.

#### Conclusion:

The study highlights the significance of monitoring the body composition and nutritional habits of soldiers during their military service. It underscores the need for targeted interventions and education to promote healthier dietary choices and overall well-being among soldiers aged 18-20 years in the Cyprus Army. Addressing these issues can contribute to their long-term health and fitness, both during and after their military service.

- 1. LUTZ, L.J., GAFFNEY-STOMBERG, E., WILLIAMS, K.W., MCGRAW, S.M., NIRO, P.J., KARL, J.P., CABLE, S.J., CROPPER, T.L. and MCCLUNG, J.P., 2017. Adherence to the Dietary Guidelines for Americans Is Associated with Psychological Resilience in Young Adults: A Cross-Sectional Study. Elsevier Inc.
- 2. MCADAM, J., MCGINNIS, K., ORY, R., YOUNG, K., FRUG, A.D., ROBERTS, M. and SEFTON, J., 2018. Estimation of energy balance and training volume during Army Initial Entry Training. Journal of the International Society of Sports Nutrition, (1), pp. 1.
- 3. NYKÄNEN, T., PIHLAINEN, K., SANTTILA, M., VASANKARI, T., FOGELHOLM, M. and KYRÖLÄINEN, H., 2019. Diet Macronutrient Composition, Physical Activity, and Body Composition in Soldiers During 6 Months Deployment. Oxford University Press / USA.



## **Dr Panayiotou Andrie**

PhD, Associate Professor in Public Health, School of Health Sciences, Cyprus University of Technology, Cyprus

#### Title of Presentation

## Adherence to the Mediterranean diet and atherosclerotic cardiovascular events: Follow-up data from a Cypriot cohort

#### **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

#### After this presentation, the attendee will be able to:

- 1. Familiarize themselves with the current evidence on the association between Mediterranean diet and ASCVD
- 2. Assess new data presented on the association between adherence to the
- 3. Mediterranean diet and ASCVD in a Cyprus cohort with long-term follow-up.

#### Description (Focus Statement)

Current evidence on the association between MedDiet and ASCVD will be presented as well as new data on the above association from a Cyprus cohort with no ASCVD at baseline and long-term follow-up.

#### Learning Outcomes Assessmen

Summary question

## Abstract

Higher adherence to the Mediterranean diet has been associated with lower risk for ASCVD events and mortality. The aim of the study was to assess the association between the MedDiet Score and 10-year risk for myocardial infarction (MI), stroke and cardiovascular death, but also for all types of atherosclerotic cardiovascular disease (ASCVD) events in the cohort of the Cyprus Epidemiological Study on Atherosclerosis (CESA)(n=1102) with a 15-year follow-up.

The primary outcome of atherosclerotic cardiovascular events (ASCVE) was a composite of myocardial infarction (MI), stroke or cardiovascular death. Cardiovascular death included death due to coronary heart disease, heart failure, ischemic stroke and sudden death. Adherence to the Mediterranean diet was estimated using the MedDiet Score which captures information on the main components of the Mediterranean diet pattern (score 0-55). A cut-off point of 32 for the MedDiet Score was used in the analysis (maximum sensitivity and specificity point at ROC curve). The 10-year ASCVD risk in subjects with a MedDiet Score <32 was 16% Vs 5% in those with a MedDiet Score >32 (p<0.001). The same was shown for the 15-year risk (19% Vs 8%; p<0.001).

In this large Cyprus cohort with long follow-up, there is evidence of an association between adherence to the Mediterranean diet, as captured by the MedDiet Score, and 10-year risk of ASCVD, further highlighting the importance of the Mediterranean diet pattern in primary prevention of ASCVD.



- Nicolaides AN, Panayiotou AG, Griffin M, Tyllis T, Bond D, Georgiou N, Kyriacou E, Avraamides C, Martin RM. Arterial Ultrasound Testing to Predict Atherosclerotic Cardiovascular Events. J Am Coll Cardiol. 2022 May 24;79(20):1969-1982. doi: 10.1016/j.jacc.2022.03.352. PMID: 35589158.
- Rees K, Hartley L, Flowers N, Clarke A, Hooper L, Thorogood M, Stranges S. 'Mediterranean' dietary pattern for the primary prevention of cardiovascular disease. Cochrane Database Syst Rev. 2013 Aug 12;(8):CD009825. doi: 10.1002/14651858.CD009825.pub2. Update in: Cochrane Database Syst Rev. 2019 Mar 13;3:CD009825. PMID: 23939686.
- 3. Lim GB. Mediterranean diet superior to low-fat diet for secondary prevention of CVD. Nat Rev Cardiol. 2022 Jul;19(7):432. doi: 10.1038/s41569-022-00727-4. PMID: 35624289.
- 4. Nicolaides AN, Griffin M, Panayiotou AG, Tyllis T, Bond D, Georgiou N, Kyriacou E, Avraamides C, Martin RM. Performance of SCORE2 and SCORE2-OP risk algorithms in a Cypriot cohort. Int Angiol. 2022 Dec;41(6):492-499. doi: 10.23736/S0392-9590.22.04958-6. Epub 2022 Oct 26. PMID: 36285529.

## **Dr Papakonstantinou Aimilia**

PhD, Assistant Professor in Nutrition and Metabolism, Laboratory of Dietetics and Quality of Life, Department of Food Science and Human Nutrition, Agricultural University of Athens, Greece

## **Title of Presentation**

## **Functional Food and Prevention of Chronic Diseases**

#### **CPE** Level

Level I assumes that the participant has little or no prior knowledge of the areas covered. The focus of the activity is to increase the core knowledge of the participant.

## After this presentation, the attendee will be able to:

- 1. To identify which ingredients and foods are considered to be functional
- 2. Knowledge of basic concepts and recent developments in the field of functional and novel foods
- 3. Appreciation of innovation in foods for chronic disease prevention and treatment
- 4. To understand and discuss novel functional foods and future projects
- 5. Develop opinion of functional ingredients and foods to address multiple consumer needs

## Description (Focus Statement)

Functional ingredients and foods are the present and future for chronic disease prevention and treatment. Novel ingredients and foods are being constantly developed in a world that has many demands, including the importance of sustainable nutrition, and individual needs to be addressed.

## Learning Outcomes Assessment

Lecture type with many examples of functional foods already in the market using powepoint presentation and interaction with questions posed to the audience.

## Abstract

Functional ingredients and foods describe the importance of eating the appropriate nutrients or ingredients or foods in promoting health and preventing chronic diseases, aside their primary role of providing the body with the required amount of essential nutrients such as proteins, carbohydrates, vitamins, fats, and oils needed for its healthy survival. Functional food sources are growing in popularity because they are exceptionally nutritious and provide many medical advantages. They can help ensure against infection, prevent supplement deficiency, and advance appropriate health development and improvement. In this talk we will discuss the definition of functional ingredients and foods, provide the latest trends and scientific based evidence for choosing functional foods for chronic disease prevention. We will also discuss novel functional foods, innovation, current and future projects. For example, we will discuss the beneficial health effects of carob consumption, of certain honey varieties, of different bread types and pasta, as well as novel food products not yet in the market, such as fruit juices enriched with probiotics and vitamin D.



- 1. Zacharodimos N, Athanasaki C, Vitsou-Anastasiou S, Papadopoulou OS, Moniaki N, Doulgeraki AI, Nychas GE, Tassou CC, Papakonstantinou Emilia. Short-Term Effects of Fruit Juice Enriched with Vitamin D3, n-3 PUFA, and Probiotics on Glycemic Responses: A Randomized Controlled Clinical Trial in Healthy Adults. Metabolites. 2023 Jun 25;13(7):791. doi: 10.3390/metabo13070791. PMID: 37512498; PMCID: PMC10385322.
- Papakonstantinou Emilia, Orfanakos N, Farajian P, Kapetanakou AE, Makariti IP, Grivokostopoulos N, Ha M, Skadamis PN. Short-term effects of a low glycemic index carob-containing snack on energy intake, satiety, and glycemic response in normal-weight, healthy adults: Results from two randomized trials. Nutrition. 2017; 42:12-19. doi.org/10.1016/j.nut.2017.05.011.
- 3. Papakonstantinou E, Oikonomou C, Nychas G, Dimitriadis GD. Effects of Diet, Lifestyle, Chrononutrition and Alternative Dietary Interventions on Postprandial Glycemia and Insulin Resistance. Nutrients. 2022 Feb 16;14(4):823. doi: 10.3390/nu14040823. PMID: 35215472; PMCID: PMC8878449.



## **Dr Papalazarou Anastasios**

PhD on Human Nutrition and Dietetics, Department of Dietetics-Nutrition Science of Harokopio University in Athens, Dietitian, Scientific Associate of Harokopio university of Athens, Nutrition and Dietetic department, Greece

## Title of Presentation 1

## **Mindset and Weight Management**

## **CPE Level**

Level III assumes that the participant has thorough knowledge of the literature and professional practice within the areas covered. The focus of the activity is synthesis of recent advances and future direction.

## After this presentation, the attendee will be able to:

The attendee will be able to improve her/his dietetic practice by incorporating techniques to modify clients' mindset and way of thinking on areas like body image, effects of food on health etc.

## **Description (Focus Statement)**

Mindset is a cornerstone in weight management process.

The placebo/nocebo effect shows us that the way we perceive stimuli is more important than the stimuli itself. "Keep your eyes on the prize" is a crucial approach to achieve goals.

## Learning Outcomes Assessment

Application of knowledge into practice.

## Abstract

It is well known that in order to manage to lose, but mainly to maintain weight loss, we must modify our behavior. That is, to replace the old bad/unhealthy habits with new healthier ones. In order to approach the new modified/healthy situation and even more to make the new healthy habits a way of life, we need to change our attitude towards not only food, but also to our current lifestyle.

The example of the placebo/nocebo effect shows us that the way we perceive stimuli is perhaps more important than the stimuli itself. The way we perceive a situation seems to affect not only our behavior (which is a subjective criterion) but also our hormonal status (which is an objective criterion). Putting that in the weight management field, seems that our perceived body image or the perceived effect of a specific food (being good or bad) to our health, has a crucial impact not only on our effort to get rid of the excess weight, but also to our health status too.

It has been established that goal setting is a key technique in behavior modification. In other words, setting realist and achievable target behaviors that, by achieving them, we gradually begin to build our new habits and create a new healthy lifestyle. It is therefore understood that the achievement of these goals is an important issue in weight control in general. It seems that people who are more motivated with a strong drive and high commitment to goal achievement do better than people with less commitment (keep your eyes on the prize). So, in dietetic practice, working with patients in this motivation / goal setting area seems to be highly important to achieve healthy habits.



Finally, facing things with a more positive dimension, (seeing their positive side), works beneficially in improving behaviors. In a representative study of hotel cleaners, this effect on their behavior was investigated. Specifically, half of them (intervention group) were explained that their work is actually exercise and like all exercises have beneficial effects on their health. The perception of work as a form of exercise led to a reduction in body weight, a reduction in body fat percentage and an improvement in health indicators.

In conclusion, the change of attitude towards our body image, food, but also our way of life in general, can work beneficially in the modification of dietary behaviors while improving health parameters. Let's not forget that Socrates said «the truth is not what people see but what they perceive they see».

- 1. Crum A. Mind Over Milkshakes: Mindsets, Not Just Nutrients, Determine Ghrelin Response. Health Psychology 2011
- 2. Neumann M. at al. "The expectations of individuals are a powerful modulator of their cognitive, emotional and physical experiences." Frontiers in Nutrition, Review (Oct) 2022
- 3. Alia J. Crum and Ellen J. Langer Mindset Matters: Exercise and the placebo effect. Psychological Science 2007.



## Title of Presentation 2

Debate: The role of artificial sweeteners and light products in the promotion of weight loss and diabetes management. (CON)

## **Abstract**

Growing concerns about health and quality of life have encouraged people to adapt healthy lifestyles and avoid the consumption of food rich in sugars, salt, or fat to prevent obesity and other non-communicable diseases, such as type II diabetes. Most recent dietary guidelines for Americans, but also from the World Health Organization, suggest the limitation of sugar intake to less than 10% of total energy. This recommendation has made food products containing non sugar sweeteners (NSSs) rather than simple sugars (monosaccharides and disaccharides) increasingly popular. Replacement of sugars with NSSs bears promise of health benefits primarily by reducing the contribution of sugars to daily calorie intake and thus reducing the risk of unhealthy weight gain. However, evidence for health effects due to use of NSSs is conflicting. Results from observational as well as prospective cohort studies suggest the possibility of long-term harm in the form of increased risk of obesity, type 2 diabetes, cardiovascular diseases and mortality. in In addition, the World Health Organization released a guideline for people without diabetes that recommended against using non-sugar sweeteners for weight control and prevention of non-communicable diseases (May 20023) Last but not least low-fat, light and diet versions of products may actually contribute to rising obesity rates by encouraging over consumption compared to regular products both in the short- and long-term. In conclusion, weight management should be better approachεδ by natural ways based on the principl: We can eat everything, but in moderation.

- 1. World Health Organization. Use of non-sugar sweeteners: WHO guideline. 2023. www.who.int/publications/i/item/9789240073616.
- 2. Sylvetsky, A., & Rother, K. (2018). Nonnutritive Sweeteners in Weight Management and Chronic Disease: A Review. Obesity, 26(4), 635-640. https://doi.org/10.1002/oby.22139
- 3. Pang, M., Goossens, G., &Blaak, E. (2021). The Impact of Artificial Sweeteners on Body Weight Control and Glucose Homeostasis. Frontiers In Nutrition, 7. https://doi.org/10.3389/fnut.2020.598340
- 4. Azad, M., Abou-Setta, A., Chauhan, B., Rabbani, R., Lys, J., &Copstein, L. et al. (2017). Nonnutritive sweeteners and cardiometabolic health: a systematic review and meta-analysis of randomized controlled trials and prospective cohort studies. Canadian Medical Association Journal, 189(28), E929-E939. https://doi.org/10.1503/cmaj.161390
- 5. Qin, P., Li, Q., Zhao, Y., Chen, Q., Sun, X., & Liu, Y. et al. (2020). Sugar and artificially sweetened beverages and risk of obesity, type 2 diabetes mellitus, hypertension, and all-cause mortality: a dose–response meta-analysis of prospective cohort studies. European Journal Of Epidemiology, 35(7), 655-671. https://doi.org/10.1007/s10654-020-00655-y



## **Prof Papandreou Dimitrios**

Dr (Med), M.Ed, M.Sc, RDN, FHEA, Professor of Nutrition, UAE, College of Health Sciences, University of Sharjah, UAE

## Title of Presentation

# Chrononutrition: Is Eating According to Circadian Rhythm the Right Choice?

## **CPE Level**

Level III assumes that the participant has thorough knowledge of the literature and professional practice within the areas covered. The focus of the activity is synthesis of recent advances and future direction.

## After this presentation, the attendee will be able to:

- 1. Learn the different types of chronotypes and how lifestyle and environmental factors may have adverse affects to health.
- 2. Learn how genetic variants can influence the circadian rhythm and effect metabolic health.

## **Description (Focus Statement)**

Nutrient metabolism is under circadian regulation. Disruption of circadian rhythms by lifestyle and behavioral choices such as work schedules, eating patterns, and social jetlag, seriously impacts metabolic homeostasis.

## Learning Outcomes Assessment

- 1. Evaluate the current research on the pros and cons of eating based on each different chronotype.
- 2. Understand how different types of food have beneficial and detrimental effects to individual health by altering the clock genes.

## Abstract

Lifestyle and environmental factors of modern societies (i.e., artificial lighting, jetlag, shift work, and around-the-clock access to energy dense food) can induce disruptions of the circadian system and thereby adversely affect individual health. Metabolic dysfunction due to chronic misalignment of an organism's endogenous rhythms is detrimental to health, increasing the risk of obesity, metabolic and cardiovascular disease, diabetes, and cancer. From a nutritional genomics perspective, genetic variants in clock genes can both influence metabolic health and modify the individual response to diet. In this view, the study of the impact of the timing of eating by matching elements from nutritional research with chrono-biology, that is, chrono-nutrition, could have significant implications for personalized nutrition in terms of reducing the prevalence and burden of chronic diseases.

- 1. Franzago, M et al. Chrono-Nutrition: Circadian Rhythm and Personalized Nutrition. Int. J. Mol. Sci. 2023, 24, 2571. https://doi.org/10.3390/ijms24032571.
- 2. Ahluwalia, M.K. Chrononutrition-WhenWe Eat Is of the Essence in Tackling Obesity. Nutrients 2022, 14, 5080. https://doi.org/10.3390/nu14235080.
- 3. Henry et al. Chrononutrition in the Management of Diabetes. Nutrition and Diabetes (2020)1 0:6 https://doi.org/10.1038/s41387-020-0109-6.



## **Dr Petrou Panayiota**

MD, Senior Neurologist and Head of Day Care Clinic, Multiple Sclerosis and Neuroimmunology Center, Senior Lecturer Hadassah University Hospital, Hebrew University of Jerusalem, Israel

## Title of Presentation

# Pomegranate seed oil (Granagard), a natural antioxidant to target neurodegeneration in Multiple Sclerosis

## **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

## After this presentation, the attendee will be able to:

- 1. Understand the mechanisms that are involved in Multiple sclerosis pathogenesis
- 2. Understand the role of degeneration in Multiple sclerosis and related symptoms
- 3. Understand the rational of the use of Granagard for the treatment of Multiple Sclerosis patients

## **Description (Focus Statement)**

Multiple sclerosis is chronic autoimmune inflammatory disease of the central nervous system which leads finally to patients's disability. Current available treatments can reduce inflammatory activity and risk for disability. During the last years, the role of degeneration in Multiple sclerosis is more and more understood and one of the main unmet needs in MS management is the lack of treatments that can delay or reverse this degeneration.

In this session will discuss the potential use of Granagard, which as a strong natural anti-oxidant in patients with Multiple Sclerosis, can target nerodegeneration.

## Learning Outcomes Assessment

Updates for the role of degeneration in MS will be presented shortly and the role of anti-oxidants against deurodegeneration in Multiple sclerosis. Results form studies in our centre (Hadassah, university hospital, Jerusalem) both in animal models and clinical trials support the use of anti-oxidants (Granagard ) in MS patients. These results will be presented.

## Abstract

Multiple sclerosis (MS) is a chronic inflammatory disease of the central nervous system and is associated with demyelination, neurodegeneration, and sensitivity to oxidative stress. Although immune-mediated demyelination is the main pathogenetic process in multiple sclerosis (MS), axonal damage and loss are increasingly documented to play a central role, in disease progression and irreversile disability.

Cognitive impairment in MS has been neglected in the past. With the evolution of new, more effective disease modifying medications and the recognition of the role of axonal and neuronal damage, CNS atrophy and cognitive disability are increasingly highlightened as key parameters of disease activity. Cognitive problems are present from the early stages of the disease and reflect disability progression during all stages of the disease.

Oxidative damage brain is associated with aging and a prominent process in several neurodegenerative diseases, representing an important mechanism responsible for cognitive decline in chronic CNS diseases.



Pomegranate seed oil (PSO) comprises mainly mainly by Punicic Acid (PA), a poly-saturated fatty acid, considered as one of the strongest antioxidants in nature. Studies from our group have shown that PSO in the animal model of MS (EAE), reduced demyelination and oxidation of lipids in the brains of the affected animals, and improved their clinical disease course. When administrated to MS patients we have seen indications of improvement/ stabilization of cognitive disability.

Transplantation of human Mesenchymal stem cells (hMSCs) to the animal model of MS, is shown to be effective but short lived due to the poor survival of the transplanted cells. MSC transplantation to MS patients with progressive disease was beneficial and our trials proved the need of repeated injections. Administration of Granagard to EAE mice transplanted with hMSCs increased the length of the clinical effect, most probably as a result of the increased survival of the transplanted cells due to the reduction of the oxidative/inflammatory climate in the diseased brain . This is in addition to the neuroprotective and immunosuppressive effects of Granagard by itself and suggests that Granagard, may prolong the clinical benefits of stem cell transplantation in neurological diseases.

- 1. Binyamin, O. et al: 2015. Treatment of a multiple sclerosis animal model by a novel nanodrop formulation of a natural antioxidant. Int J Nanomedicine. 10:7165-7174.
- 2. Petrou, P. et al: Beneficial effects of a nano formulation of pomegranate seed oil, GranaGard, on the cognitive function of multiple sclerosis patients. Mult Scler Relat Disord.2020: 54:103103.
- 3. Petrou P. et al: Beneficial effects of autologous mesenchymal stem cell transplantation in active progressive multiple sclerosis. BRAIN 2020: 143; 3574-3588 | 3574.
- 4. Kati Frid el al: Granagard administration may prolong the survival of human mesenchymal stem cells transplanted into a mouse model of Multiple Sclerosis. 2023 In press.

## **Dr Philippou Christiana**

PhD in Nutrition and Dietetics - Specialized on Nutrition Education - University of Nicosia, Doctorate Studies in Clinical Dietetics, Nutrition Science and Health Education - Specialized in Health Education - Middlesex University, UK, MSc/AP4 Food and Nutrition - Specialization in Sports Nutrition - Southern Illinois University at Carbondale, USA, RDN (Registered Dietitian/Nutritionist, USA, Europe) and Licensed Dietitian in Cyprus, BSc Food and Nutrition - Specialized in Clinical Dietetics - Southern Illinois University at Carbondale, USA, Minor in Chemistry - Southern Illinois University at Carbondale, USA, Current Position: Health Education (HomeEconomics), Inspector in Secondary Education in the Ministry of Education, Sports & Youth, Inspector of Health Education (Home Economics) in Secondary Education, Ministry of Education, Sports & Youth, Vice President Cyprus Dietetic and Nutrition Association (CyDNA), Cyprus

## Title of Presentation

# **Nutrition Policies, Procedures and Programmes in the Cyprus Ministry of Education, Sports and Youth**

## **Abstract**

## Introduction:

The Health Education (Home Economics) course and programs in secondary Education in the Cyprus Ministry of Education, Sports & Youth provide a holistic development of the health of an individual, since its content includes the topics in all the aspects of health (physiological, psychological, emotional, sociological, and mental).

Basically, the course suggests a preventive approach to health and is organized in four main domains of Health Education, which they aim to enhance the knowledge and acquire skills and attitudes towards health. The four domains are:

- Development and empowerment of self esteem
- · Development of safe and healthy lifestyle
- Growth and improvement of social self
- Development of active citizens

In the Health Education course and programs emphasis is given on the opportunities provided to students, as active citizens, to be able to claim changes to their immediate and wider environment. In particular, the aim is to strengthen them through the development of personal and social skills and attitudes, while creating a supportive environment towards a healthy lifestyle. This is achieved through active teaching strategies that are designed to maintain the interest and motivation of students, contributing to changing behaviors and ultimately improving their quality of life. Furthermore, it is accepted that the holistic development of students also improves their learning outcomes.

The importance of the Health Education (Home Economics) course emerges through the cultivation of the students' consciousness that health is placed in a wider social context. In this context, students are encouraged to act collectively in collaboration with the community in general, as health promoters emphasizing the determinants that affect health and promoting environmental changes.

The Nutrition topics are taught under the domain II - Development of safe and healthy lifestyle -but at the same time it is interrelated to the other domains as for example to develop healthy eating habits the development and empowerment of self-esteem and social self as well as the development of active citizen are important to achieve the main goal of developing healthy eating habits.



#### Methods:

Health Education (Home Economics) course and programs recommend a preventive approach for all dimensions of health, since its content ensures the holistic concept of health, as it includes thematic sections concerning all its dimensions.

Each unit emphasizes one of the dimensions of health without, however, ignoring the interconnection with the other dimensions of health, giving students the opportunity to meet the interdependence of the individual and the intended behavior with the financial, cultural, social, and political environment.

Nutrition Education is also approached based on the philosophy of a) Empowerment of the individual though pedagogical approaches that contribute to the empowerment of students with active participation and capacity for action and b) Creating a supportive environment such as schools of Health Promotion.

The methods and techniques of active participation include, work plan or research study, investigation, problem solving, cooperative learning methods, case study, visits, role playing games, visualization, reflection, mind map, creative thinking techniques

## Conclusion:

The Ministry of Education, Sports and Youth considers the Health Education course and programs very important and effective in the overall students' education and healthy lifestyle.

The course of Health Education in Cyprus follows the worldwide guidelines about the teaching of Health Education, and it is well designed academically and infrastructurally. Moreover, the Health Education teaching stuff have a strong background from well acknowledge universities from Greece, United Kingdom, and USA.

The ultimate goal of the Health Education as far as the Nutrition topics is for the students to recognize the importance of healthy eating in the promotion of physical and mental health and in the prevention of diseases and to recognise the importance of balance diet and healthy lifestyle.

- 1. Ιωάννου, Κούτα & Χαραλάμπους (2010). Αναλυτικό Πρόγραμμα Αγωγή Υγείας, ΥΠΑΝ
- 2. Mukhamedzhanov, E., Tsitsurin, V., Zhakiyanova, Zh., Akhmetova, B., & Tarjibayeva, S. (2023). The effect of nutrition education on nutritional behavior, academic and sports achievement and attitudes. International Journal of Education in Mathematics, Science, and Technology (IJEMST), 11(2), 358-374. https://doi.org/10.46328/ijemst.3133
- 3. http://www.pi-schools.gr/download/publications/epitheorisi/teyxos8/6.pdf http://panacea.med.uoa.gr/topic.aspx?id=467
- 4. Byrd-Bredbenner, C., O' Connell, L.H., Shannon, B. & Eddy, J.M. (1984). A nutrition curriculum for health education: Its effects on students' knowledge, attitudes, and behavior. The Journal of School Health, 54, 10, 385-388.



## **Dr Pieri Myrtani**

PhD in Human Physiology, Associate Professor, Department of Life Sciences, University of Nicosia, Cyprus

## Title of Presentation

## Eating for Two: How Our Diet's microRNAs Influence Our Microbiome

## **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

## After this presentation, the attendee will be able to:

- 1. Understand the fundamental role of the gut microbiota in human health, extending knowledge beyond digestive wellness to include impacts on metabolism, immune function, bioactive compound synthesis, and mental health through the gut-brain axis.
- 2. Comprehend how various dietary components (macronutrients, micronutrients, fibers, probiotics, prebiotics, and food-derived polyphenols and especially microRNAs) influence the composition and function of the gut microbiota, particularly focusing on the mechanisms of bacterial modulation and the systemic effects of microbial metabolites.
- 3. Evaluate the prospects and complexities involved in creating personalized nutrition plans that consider individual differences due to genetics, epigenetics, environment, and lifestyle, aiming for optimized health outcomes through microbiota management.

#### **Description (Focus Statement)**

This session delves deep into the dynamic interplay between nutrition and the gut microbiome, an exciting frontier in health science that underscores the potential for dietary strategies to beneficially shape our internal microbial ecosystem. Participants will explore the profound impact of the gut microbiota on various aspects of human health, learn how specific nutrients and food components can alter microbial composition and functionality, and contemplate the realistic challenges in tailoring individual nutrition schemes for health optimization.

#### Learning Outcomes Assessment

The achievement of the above-stated objectives can be assessed via interactive Q&A sessions at the end of the talk.

## Abstract

The intricate ecosystem of the human gut is an assembly of trillions of microorganisms, collectively known as the gut microbiota. This complex community plays a crucial role in human health and disease, influencing diverse physiological, metabolic, and immunological processes. The concept of "training" the gut microbiota through dietary interventions has recently garnered attention, positing nutrition as a powerful tool to shape this internal ecosystem beneficially. In this presentation the dynamic interaction between nutrition and the gut microbiome is explored, elucidating the potential to modulate microbial compositions to enhance health outcomes.

We initiate by dissecting the fundamental role of the gut microbiota in health and disease. The conversation extends beyond the traditional focus on digestive health, encompassing the microbiota's influence on metabolism, immune modulation, synthesis of vital bioactive compounds, and its potential impact on mental health through the gut-brain axis. This foundational knowledge underscores the significance of maintaining a balanced microbiome for overall health.



We will delve into the gut microbiota's plasticity, emphasizing its responsiveness to dietary alterations. We will discuss how macronutrients (carbohydrates, proteins, and fats) and micronutrients (vitamins and minerals), along with other dietary components like fibers, probiotics, prebiotics, and food-derived polyphenols, can selectively nourish specific bacterial strains, consequently impacting the microbiota's composition and functionalities. We unravel the mechanisms through which these components modulate the microbial profile, focusing on their ability to affect bacterial proliferation, metabolism, and the production of short-chain fatty acids (SCFAs) and other metabolites with systemic effects. We especially focus on the role of microRNAs from food (namely XenomiRs, or Exo-miRNAs) and the role these "heretic" molecules might play in the regulation of our microbiome.

Finally, the feasibility and challenges of crafting individualized nutrition schemes will be discussed, contemplating inter-individual variations stemming from genetic, epigenetic, environmental, and lifestyle factors.

- Pieri, M., Theori, E., Dweep, H., Flourentzou, M., Kalampalika, F., Maniori, M. A., Papagregoriou, G., Papaneophytou, C., & Felekkis, K. (2022). A Bovine miRNA, Bta-miR-154c, Withstands In vitro Human Digestion but Does Not Affect Cell Viability of Colorectal Human Cell Lines After Transfection. FEBS Open Bio, 12(5), pp. 925-936
- 2. Frame, L.A., Costa, E. and Jackson, S.A., 2020. Current explorations of nutrition and the gut microbiome: a comprehensive evaluation of the review literature. Nutrition Reviews, 78(10), pp.798-812.
- 3. Wilson, A.S., Koller, K.R., Ramaboli, M.C., Nesengani, L.T., Ocvirk, S., Chen, C., Flanagan, C.A., Sapp, F.R., Merritt, Z.T., Bhatti, F. and Thomas, T.K., 2020. Diet and the human gut microbiome: an international review. Digestive diseases and sciences, 65, pp.723-740.
- 4. Zmora, N., Suez, J., & Elinav, E. (2019). You are what you eat: diet, health and the gut microbiota. Nature Reviews Gastroenterology & Hepatology, 16(1), pp.35-56



## Dr Poulia Kalliopi Anna

MMedSci, PhD, Assistant Professor of Clinical Dietetics, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, Greece

## **Title of Presentation**

## **Nutritional Guidelines from stage 1 to ESKD**

## **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

## After this presentation, the attendee will be able to:

- 1. Identify the differences in nutritional needs in patients with CKD.
- 2. Know the current guidelines regarding the management of CKD in different stages.
- 3. Identify all the appropriate ways of the provision of nutritional support in patients with CKD

## **Description (Focus Statement)**

The session will present the current guidelines for the management of all the stages of CKD. Active discussion will be enforced, and a short case study will be presented to.

#### Learning Outcomes Assessment

All the current guidelines will be presented. Moreover, the diverse needs of the patients with CKD will be presented and active discussion will be reinforced by paradigms and small case studies to enhance understanding.

## Abstract

It has been almost 20 years since the first nutrition guidelines for patients with end-stage renal disease were published. The Kidney Disease Outcomes Quality Initiative (KDOQI) was a cornerstone that changed dramatically the nutritional management of CKD patients. In 2020 the KDOQI Clinical Practice Guideline for Nutrition in CKD: 2020 Update was published, joined with the Academy of Nutrition and Dietetics. The recent guidelines focus not only in patients on renal replacement but to the CKD stages 1-5 including those on transplantation.

Apart from the KDOQI 2020 nutritional guidelines, the medical teams dealing with CKD patients will also have relevant guidelines on hospitalized patients, published in 2021 by the European Society of Clinical Nutrition and Metabolism (ESPEN). These guidelines are a useful tool for clinicians and clinical dietitians for the management of patients with Acute Kidney Injury (AKI), patients with CKD in the acute care the overall nutritional support during hospital stay.

Having these guidelines available, undoubtedly the nutritional assessment, management, and the provision of nutritional support of patients with CKD is based on evidence-based data. Nonetheless, there are some aspects that need extra attention, in terms of dietary manipulation and availability of the methods and procedures proposed in clinical practice. The plant-based diets, the very low protein diets, the maintenance of dietary fiber intake alongside with the necessity of potassium control are issues that need to be stressed out and emphasized. Moreover, evidence on the provision of nutritional support on patients with AKI and CKD during hospitalization is of immense importance, especially for the clinicians and dietitians working in hospitals.



In 2022 the new guidelines for the Diabetic Kidney Disease (DKD) were also published, giving emphasis on the lifestyle changes needed for the management of the disease. Moreover illustrations to make more explicable these guidelines in the form of the patients' plate were also provided.

Finally in the session, the guidelines for other codnitions of CKD will be presented, i.e. protein losing nephropaties and Autosomal dominant polycystic kidney disease (ADPKD).

- Ikizler TA, Burrowes JD, Byham-Gray LD, Campbell KL, Carrero JJ, Chan W, Fouque D, Friedman AN, Ghaddar S, Goldstein-Fuchs DJ, Kaysen GA, Kopple JD, Teta D, Yee-Moon Wang A, Cuppari L. KDOQI Clinical Practice Guideline for Nutrition in CKD: 2020 Update. Am J Kidney Dis. 2020 Sep;76(3 Suppl 1):S1-S107. doi: 10.1053/j.ajkd.2020.05.006. Erratum in: Am J Kidney Dis. 2021 Feb;77(2):308. PMID: 32829751.
- Fiaccadori E, Sabatino A, Barazzoni R, Carrero JJ, Cupisti A, De Waele E, Jonckheer J, Singer P, Cuerda C. ESPEN guideline on clinical nutrition in hospitalized patients with acute or chronic kidney disease.
   Clin Nutr. 2021 Apr;40(4):1644-1668. doi: 10.1016/j.clnu.2021.01.028. Epub 2021 Feb 9. PMID: 33640205.
- 3. Kistler BM, Moore LW, Benner D, Biruete A, Boaz M, Brunori G, Chen J, Drechsler C, Guebre-Egziabher F, Hensley MK, Iseki K, Kovesdy CP, Kuhlmann MK, Saxena A, Wee PT, Brown-Tortorici A, Garibotto G, Price SR, Yee-Moon Wang A, Kalantar-Zadeh K. The International Society of Renal Nutrition and Metabolism Commentary on the National Kidney Foundation and Academy of Nutrition and Dietetics KDOQI Clinical Practice Guideline for Nutrition in Chronic Kidney Disease. J Ren Nutr. 2021 Mar;31(2):116-120.e1. doi: 10.1053/j.jrn.2020.05.002. Epub 2020 Jul 29. PMID: 32737016; PMCID: PMC8045140.
- 4. Rossing P, Caramori ML, Chan JCN, Heerspink HJL, Hurst C, Khunti K, Liew A, Michos ED, Navaneethan SD, Olowu WA, Sadusky T, Tandon N, Tuttle KR, Wanner C, Wilkens KG, Zoungas S, Craig JC, Tunnicliffe DJ, Tonelli MA, Cheung M, Earley A, de Boer IH. Executive summary of the KDIGO 2022 Clinical Practice Guideline for Diabetes Management in Chronic Kidney Disease: an update based on rapidly emerging new evidence. Kidney Int. 2022 Nov;102(5):990-999. doi: 10.1016/j.kint.2022.06.013. PMID: 36272755.
- 5. Campbell KL, Rangan GK, Lopez-Vargas P, Tong A. KHA-CARI Autosomal Dominant Polycystic Kidney Disease Guideline: Diet and Lifestyle Management. Semin Nephrol. 2015 Nov;35(6):572-581.e17.



## Preventi Fani

Dietitian - Nutritionist, MSc, President of the Hellenic Dietetic Association, Hellenic Dietetic Association, Greece

## **Title of Presentation**

## Intermittent Fasting: A Novel Approach or Just Another FAD Diet?

## **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

## After this presentation, the attendee will be able to:

- 1. Understand if Intermittent Fasting belongs to the category of FAD diets.
- 2. Assess whether there is a difference in efficacy between Intermittent Fasting and Continuous Energy Restriction, in terms of outcomes in weight loss and other cardiometabolic markers.
- 3. Assess in which population and in which specific cases, a dietitian could recommend the application of Intermittent Fasting.

## **Description (Focus Statement)**

Intermittent fasting may be implemented as an alternative strategy to Continuous Energy Restriction for weight management tailored to the specific needs and acceptance of the individual.

Although the current recommendation is "intermittent or continuous calorie restriction achieved similar short-term BW reduction," the latest evidence remains inconclusive to whether IF has additional benefits to CER.

The available evidence suggests that Intermittent Fasting produce equivalent weight loss when compared to Continuous Energy Restriction, with most studies showing no differences between groups in weight or body fat loss.

#### Learning Outcomes Assessment

A literature search was conducted using PubMed and Scopus databases, including publications from 2018 to 2023 (previous 5 years)

## Abstract

A FAD Diet is a popular dietary pattern known to be a quick fix for obesity. These diets are quite appealing due to the proposed claims, but the lack of scientific evidence is a big question mark. Limited evidence exists to support the proposed claims; rather certain studies suggest the negative health consequences of long-term adherence to such dietary patterns.

One approach to improving weight and metabolic outcomes is Intermittent Fasting (IF), which consists of multiple different timing schedules for temporary food avoidance, including alternate-day fasting, other similar full-day fasting patterns, and time-restricted feeding (where the day's food is consumed over a 6-h period, alowing for 18 h of fasting). These feeding schedules have favourable metabolic effects by intermittently inducing the metabolism of fatty acids to ketones.

## Is IF a FAD Diet or a Novel Approach?

The regimens overall lead to a decrease in weight and have been linked to improvements in dyslipidemia and blood pressure. While more research is needed on longer-term outcomes and this approach should be avoided health conditions, intermittent fasting should be considered as an option for individuals who have a pattern of unhealthy weight gain using standard eating patterns.



- Silva Al, Direito M, Pinto-Ribeiro F, Ludovico P, Sampaio-Marques B. Effects of Intermittent Fasting on Regulation of Metabolic Homeostasis: A Systematic Review and Meta-Analysis in Health and Metabolic-Related Disorders. J Clin Med. 2023 May 26;12(11):3699.
- 2. Elortegui Pascual P, Rolands MR, Eldridge AL, Kassis A, Mainardi F, Lê KA, Karagounis LG, Gut P, Varady KA. A meta-analysis comparing the effectiveness of alternate day fasting, the 5:2 diet, and time-restricted eating for weight loss. Obesity (Silver Spring). 2023 Feb;31 Suppl 1(Suppl1):9-21.
- 3. Hassapidou M, Vlassopoulos A, Kalliostra M, Govers E, Mulrooney H, Ells L, Salas XR, Muscogiuri G, Darleska TH, Busetto L, Yumuk VD, Dicker D, Halford J, Woodward E, Douglas P, Brown J, Brown T. European Association for the Study of Obesity Position Statement on Medical Nutrition Therapy for the Management of Overweight and Obesity in Adults Developed in Collaboration with the European Federation of the Associations of Dietitians. Obes Facts. 2023;16(1):11-28.
- 4. Titmus M. The influence of time-restricted eating on weight management and metabolic health. British Dietetics Association. 2021

## **Dr Risvas Grigoris**

PhD in Applied Dietetics - Nutrition, MMedSci in Public Health Nutrition, MSc in Health Services Management, BSc in Dietetics, Vice President of EFAD, Academic Director - Aegean College, Greece

## Title of Presentation

# Policy priorities and advocacy for the profession of Dietitians - Nutritionists in Europe by EFAD

## **CPE Level**

Level I assumes that the participant has little or no prior knowledge of the areas covered. The focus of the activity is to increase the core knowledge of the participant.

## After this presentation, the attendee will be able to:

- 1. Identify current policy priorities and challenges for Nutrition and Health in Europe
- 2. Explore how EFAD advocates for the profession of Dietetics
- 3. Understand how they will be able to participate in and/or use EFAD's work

## **Description (Focus Statement)**

Dietitians - Nutritionists in Europe are expected to operate within a set of current policy priorities and challenges for Nutrition and Health that may affect their everyday practice. Conference attendees will explore how EFAD advocates for the profession of Dietetics and understand how they will be able to participate in and/or use EFAD's work, to help them acclimatise in a changing European environment.

#### Learning Outcomes Assessment

Through an MCQ but mainly through Cypriot colleagues' participation in EFAD activities.

## Abstract

Dietitians - Nutritionists in Europe are expected to operate within a set of current policy priorities and challenges for Nutrition and Health that may affect their everyday practice. The farm to fork European Strategy on Food, the new food systems, the challenge of riorienting health systems in Europe, the notion of dietetic care as a human right, the role that dietitian-nutritionists have to play in combating literacy issues and inequalities, the responsibility to communicate in an evidence-based and effective way, as well as sustainability and efficient financing of our work are key issues to consider nowadays. Conference attendees will explore how EFAD advocates for the profession of Dietetics, through are communication channels and media, through the deliverables of our annual workplans with the participation of our volunteers and staff and understand how they will be able to participate in and/or use EFAD's work, to help them acclimatise in a changing European environment.

- 1. https://www.efad.org/wp-content/uploads/2021/11/32.13.1-EFAD-Strategy- Aug-2021-DEF.pdf
- 2 https://www.efad.org/wp-content/uploads/2022/10/EFAD-Budapest-resoluti on\_-FINAL\_with-signatories-1.pdf
- 3. https://www.efad.org/wp-content/uploads/2023/09/198.5.1-WHO72-EFAD-j oint-statement-on-72wd17e-D-PR-NCDs-220545.pdf



## **Dr Sarigiannis Yiannis**

PhD in Medicinal Chemistry, Associate Professor in Chemistry, Department of Health Sciences, School of Life & Health Sciences, University of Nicosia, Cyprus

## **Title of Presentation**

## GLP1 agonists - Are they the solution for weight loss?

## CPE Level

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

## After this presentation, the attendee will be able to:

- 1. Understand the results of the use of GLP-1 agonists
- 2. Understand the differences among the GLP-1 agonists

## **Description (Focus Statement)**

GLP-1 agonists are the Game Changers in weight loss and not only.

## Learning Outcomes Assessment

The last results of the trials will be discussed.

## **Abstract**

An ideal anti-obesity drug should produce sustained weight loss with minimal side effects. It is therefore unsurprising that anti-obesity drug discovery programmes have been littered with false starts, failures in clinical development, and withdrawals due to serious adverse and side effects. Drugs that target pathways in metabolic tissues, such as adipocytes, liver and skeletal muscle, shown potential in preclinical studies.

Improvements in the understanding of peptidergic signalling of hunger from the gastrointestinal tract mediated mostly by peptide YY (PYY) and glucagon-like peptide-1 (GLP-1), and its upstream pathways in the hypothalamus, opened up new pathways for obesity treatment.

Currently, there are two obesity treatments that target glucagon-like peptide 1 receptors (GLP-1's) originally used to treat type 2 diabetes. It is expected in the near future that more medications targeting GLP-1's as well as dual and triple-agonists will be marketed enhancing the therapeutic pharetra against obesity. In addition further advancements in drug delivery increase the possibilities for successful and efficient treatments. GLP-1 agonists are just the beginning.

- 1. Andersen, A., Lund, A., Knop, F.K. et al. Glucagon-like peptide 1 in health and disease. Nat Rev Endocrinol 14, 390-403 (2018).
- 2. Chichura, K.S., Elfers, C.T., Salameh, T.S. et al. A peptide triple agonist of GLP-1, neuropeptide Y1, and neuropeptide Y2 receptors promotes glycemic control and weight loss. Sci Rep 13, 9554 (2023).
- 3. Hanssen, R., Rigoux, L., Kuzmanovic, B. et al. Liraglutide restores impaired associative learning in individuals with obesity. Nat Metab 5, 1352-1363 (2023).
- 4. Wang J-Y, Wang Q-W, Yang X-Y, Yang W, Li D-R, Jin J-Y, Zhang H-C and Zhang X-F (2023) GLP?1 receptor agonists for the treatment of obesity: Role as a promising approach. Front. Endocrinol. 14:1085799



## **Dr Vassilopoulou Emilia**

PhD, Clinical Research Fellow (Milan) / Asst Professor of Diet and Nutrition (Thessaloniki)
Pediatric Unit, Fondazione IRCCS Ca' Granda Ospedale Maggiore, Policlinico / International Hellenic University,
Thessaloniki, Greece

## **Title of Presentation**

## **Guiding New Parents to Prevent Food Allergies in Infancy**

#### **Abstract**

Recently published data from high-impact randomised controlled trials show the strong potential of strategies to prevent the development of food allergy in high-risk individuals. This presentation aims to review the current status of infant feeding guidelines and their international adoption, analyse the evidence supporting a universal approach to infant feeding, talk about practical issues, and pinpoint knowledge gaps that need to be filled by future studies. The United States and Australia currently only has guidance for the prevention of peanut allergy, even though other data and several other countries support early egg and peanut introduction. Although children without risk factors can still acquire food allergies, eczema is thought to be the largest risk factor for IgE-mediated allergies. Both peanuts and eggs should be introduced at 6 months of life, but not earlier than 4 months, in order to prevent allergies to either of them. Although it's not necessary, some families might wish to screen before introducing. Although it's not necessary, some families might wish to screen before introducing. This is the ideal moment to introduce additional allergies. Infants should be offered a varied diet after being introduced to complementary foods, since this may help promote the prevention of food allergies. Using hydrolyzed formula in the first year of life does not provide any protection against food allergies or sensitivities. It is not advised for mothers to exclude common allergens from their diets during pregnancy and/or nursing in an effort to prevent food allergies. While it is generally advised that women breastfeed their infants exclusively, there is no particular correlation between exclusive breastfeeding and the primary prevention of any particular food allergy.

Highlights and requirements for additional research in the future

- The most effective way to prevent food allergies is to introduce allergenic foods into an infant's diet as soon as possible; however, local guidelines for complementary feeding differ.
- Research shows that the introduction of allergy solids during the first year of life is highly embraced by the community, despite the fact that the prevalence of food allergies has not increased as expected. There isn't much information available on other regions' adoption of newborn feeding guidelines.
- Infant feeding trials have identified a number of obstacles to the regular introduction of allergenic foods into the infant's diet; these probably warrant for intervention techniques.
- More investigation is required to comprehend alternative approaches to preventing food allergies, especially in infants who develop dietary allergies before solid introduction comences

Food-allergic children with ARFID may have an even more limited dietary repertoire due to fear of allergenic reactions, leading to heightened nutritional concerns. Healthcare professionals should maintain a high index of suspicion for ARFID in these cases and be prepared to address both the food allergy-related issues and the broader eating behaviors that ARFID encompasses. Early recognition and a multidisciplinary approach involving dietitians and mental health professionals are crucial in providing comprehensive care for these vulnerable individuals. Efforts to manage ARFID in children with food allergies should go hand in hand with addressing their unique nutritional needs and dietary restrictions.



## **Dr Vlahoyiannis Angelos**

MSc, PhD, Part-Time Lecturer, Department of Life Sciences, University of Nicosia, Cyprus

## Title of Presentation

# **Nutritional Pathways to Sleep Optimization: Bridging Dietetics and Sleep Science**

## **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

## After this presentation, the attendee will be able to:

- 1. Understand basic sleep principles and address the prevalence of inadequate sleep as a significant public health concern.
- 2. Understand the mechanisms initiating sleep and their link to nutrition.
- 3. Recognize the impact of food on sleep regulation and the potential of nutritional interventions to optimize sleep.

## **Description (Focus Statement**

This presentation provides a comprehensive overview of the relationship between nutrition and sleep, introducing the foundational principles of sleep, the growing public health concern of inadequate sleep, and the influence of nutrition on sleep regulation. Insights into the mechanisms that initiate sleep will be explored, highlighting the link between dietary choices and sleep optimization.

#### **Learning Outcomes Assessment**

- 1. Participants will be prompted to discuss the foundational principles of sleep and reflect on the importance of addressing inadequate sleep as a public health concern.
- 2. Attendees will be tasked with explaining the mechanisms that initiate sleep and how they are linked to nutrition.
- 3. Participants will be asked to discuss the influence of food on sleep regulation and how nutritional interventions can be employed to optimize sleep.

## Abstract

Sleep is a complex physiological phenomenon, governed by intricate mechanisms that ensure its proper regulation and maintenance. As the prevalence of sleep inadequacies continues to rise, the imperative to comprehend the mechanisms of sleep regulation, particularly in a public health context, has intensified. The foundational principles of sleep highlight the consequences of inadequate sleep on public health.

Homeostatic regulation plays a pivotal role in maintaining equilibrium in sleep-wake cycles, responding to internal physiological cues. In this sense, the relationship between homeostatic sleep regulation and nutrition emerges as a focal point. Recent studies suggest that nutritional choices and dietary patterns can influence sleep, with potential implications for sleep duration and macrostucture. Nutritional interventions, such as carbohydrate manipulations, both acute and long-term, offer promising results for modulating and optimizing sleep, highlighting the profound influence of diet on sleep regulation and optimization. By integrating findings from cutting-edge scientific research, an integrative understanding of the synergy between nutrition and sleep is presented. The potential of dietary interventions to enhance sleep quality underlines the need for an integrative approach, converging nutrition science and sleep research.



- 1. Vlahoyiannis, A., Sakkas, G. K., Manconi, M., Aphamis, G., & Giannaki, C. D. (2020). A critical review on sleep assessment methodologies in athletic populations: factors to be considered. Sleep medicine, 74, 211-223.
- 2. Vlahoyiannis, A., Aphamis, G., Andreou, E., Samoutis, G., Sakkas, G. K., & Giannaki, C. D. (2018). Effects of high vs. low glycemic index of post-exercise meals on sleep and exercise performance: a randomized, double-blind, counterbalanced polysomnographic study. Nutrients, 10(11), 1795.
- 3. Vlahoyiannis, A., Giannaki, C. D., Sakkas, G. K., Aphamis, G., & Andreou, E. (2021). A systematic review, meta-analysis and meta-regression on the effects of carbohydrates on sleep. Nutrients, 13(4), 1283.



## **Dr Vlassopoulos Antonis**

PhD, MSc(MedSci), BSc, RD, Senior Research Fellow in Food & Nutrition, Agricultural University of Athens, University of Glasgow, ESDN Obesity EFAD, Greece

## **Title of Presentation**

# Medical Nutrition Therapy Guidelines for the Treatment of Obesity: A Paneuropean Approach

## **CPE Level**

Level III assumes that the participant has thorough knowledge of the literature and professional practice within the areas covered. The focus of the activity is synthesis of recent advances and future direction.

## After this presentation, the attendee will be able to:

- 1. Have an overview of the latest guidelines in the dietetic treatment of obesity in adults and children
- 2. Discuss the different dietary interventions available for the treatment of obesity
- 3. Design evidence based patient-centered dietary interventions for the treatment of obesity

## Description (Focus Statement)

The session aims to familiarise dietitians with the latest high quality evidence available in the topic of obesity treatment and help them understand which dietary interventions are effective and for which patient group.

## Learning Outcomes Assessment

The audience should be able to understand which dietary interventions are supported by high quality evidence and which are still in the research stage. Following that the audience should be able to communicate guidelines to patients and other healthcare professionals with an aim to design interventions based on the highest quality evidence.

## Abstract

## Introduction:

Obesity affects nearly 1 in 4 European adults and 1 in 3 European children increasing their risk for mortality and physical and psychological morbidity. Obesity is a chronic relapsing disease characterized by abnormal or excessive adiposity with risks to health. Medical nutrition therapy based on the latest scientific evidence should be offered to all Europeans living with obesity as part of obesity treatment interventions.

## Methods:

Through the collaboration of EASO and EFAD, two expert committees were set-up to review the topic of medical nutrition therapy in the treatment of obesity These committees aimed to review the existing literature and propose a set of Guidelines for the dietary treatment of obesity applicable across Europe.

Two systematic reviews were conducted to identify the latest evidence published in the November 2018-March 2021 period and to synthesize them in the European guidelines for medical nutrition therapy in adult and childhood obesity.



## Results:

Medical nutrition therapy should be administered by trained dietitians as part of a multidisciplinary team and should aim to achieve positive health outcomes, not solely weight changes. A diverse range of nutrition interventions are shown to be effective in the treatment of obesity and its comorbidities, and dietitians should consider all options and deliver personalized interventions. For children, multicomponent behavioural interventions are generally considered to be the gold standard treatment. Although caloric restriction-based interventions are effective in promoting weight reduction, long-term adherence to behavioural changes may be better supported via alternative interventions based on eating patterns, food quality, and mindfulness. The Mediterranean diet, vegetarian diets, the Dietary Approaches to Stop Hypertension, portfolio diet, Nordic, and low-carbohydrate diets have all been associated with improvement in metabolic health with or without changes in body weight. Pulses, fruit and vegetables, nuts, whole grains, and dairy foods are important elements in the medical nutrition therapy of obesity. Evidence for meal replacement protocols in adults are supportive of their effectiveness while intermittent fasting was not found to be superior to other interventions and concerns were raised about its impact on disordered eating behaviours.

## Discussion:

Any nutrition intervention should be based on a detailed nutritional assessment including an assessment of personal values, preferences, and social determinants of eating habits. Dietitians are expected to design interventions that are flexible and person centred. Approaches that avoid caloric restriction or detailed eating plans (non-dieting approaches) are also recommended for improvement of quality of life and body image perception.

- 1. WHARTON, Sean, et al. Obesity in adults: a clinical practice guideline. Cmaj, 2020, 192.31: E875-E891.
- 2. Maria Hassapidou, Antonis Vlassopoulos, Marianna Kalliostra, Elisabeth Govers, Hilda Mulrooney, Louisa Ells, Ximena Ramos Salas, Giovanna Muscogiuri, Teodora Handjieva Darleska, Luca Busetto, Volkan Demirhan Yumuk, Dror Dicker, Jason Halford, Euan Woodward, Pauline Douglas, Jennifer Brown, Tamara Brown; European Association for the Study of Obesity Position Statement on Medical Nutrition Therapy for the Management of Overweight and Obesity in Adults Developed in Collaboration with the European Federation of the Associations of Dietitians. Obes Facts 20 January 2023; 16 (1): 11-28. https://doi.org/10.1159/000528083
- 3. Maria Hassapidou, Kerith Duncanson, Vanessa Shrewsbury, Louisa Ells, Hilda Mulrooney, Odysseas Androutsos, Antonis Vlassopoulos, Ana Rito, Nathalie Farpourt, Tamara Brown, Pauline Douglas, Ximena Ramos Sallas, Euan Woodward, Clare Collins; EASO and EFAD Position Statement on Medical Nutrition Therapy for the Management of Overweight and Obesity in Children and Adolescents. Obes Facts 20 January 2023; 16 (1): 29-52. https://doi.org/10.1159/000527540



## Dr Wakil Elie

Pharm D., Director; Human Relations Consultant, E.W. Human Development Ltd, Cyprus

## Title of Presentation

## Managing the Fear of uncertainty

## **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

## After this presentation, the attendee will be able to:

- 1. Learning to understand the limits fear imposes in business and relationships.
- 2. Changing the relationship to fear and how it impacts our lives.
- 3. Achieving a more positive and motivated work environment.
- 4. Stretching comfort zones resulting in increased business efficiency.

## **Description (Focus Statement**

In these challenging times, uncertainty is part of our daily life; Most of the time it is accompanied by worry and fear. "Will I get sick?" "How will I be able to pay the bills?"

So much uncertainty led us to so much worry! All of us worry at some time, some for prolonged periods.

We should be living the present, staying connected to ourselves, to each other, to our community and to our environment. We need to learn to stay in the present and deal with any challenge.

#### Learning Outcomes Assessment

- 1. Manage fear effectively in the workplace to boost productivity and improve intrapersonal and intraworkplace relations.
- 2. Confront fears powerfully to open new opportunities.
- 3. To welcome and embrace change rather than fear it.
- 4. Dealing with fear of failure and perfectionism and their hindrance to productivity.

## Abstract

Fear is one of the most powerful emotions. It can create strong signals of response when we're in emergencies. It can also take effect when you're faced with non-dangerous events, like exams, public speaking, or a new job. It's a natural response to a threat that can be either perceived or real.

Some people become overwhelmed by fear and want to avoid situations that might make them frightened. You can learn to feel less fearful and to cope with fear.

Lots of things make us feel afraid. Being afraid of some things can keep you safe. Fearing failure can make you try to do well.

When you feel frightened, your mind and body work very quickly:

- Your heart beats very fast.
- Your breath very fast.
- Your muscles feel weak.
- You sweat a lot.
- You find it hard to concentrate.
- You feel frozen.
- You have hot and cold sweats.



Fear may be a one-off feeling when you are faced with something unfamiliar. It can also be an everyday, long-lasting problem. Fear can affect all of us every now and then. It is only when it is severe and long-lasting that it becomes a mental health problem. If it feels like your fears are taking over your life, then it's a good idea to ask your doctor for help.

How can I help myself?

## 1. Face your fear if you can.

If you always avoid situations that scare you, you might stop doing things you want or need to do. Exposing yourself to your fears can be an effective way of overcoming this anxiety.

## 2. Know yourself.

You can try setting yourself small, achievable goals for facing your fears.

#### 3. Exercise.

Exercise requires some concentration, and this can take your mind off your fear.

## 4. Relax.

Relaxation techniques can help you with the mental and physical feelings of fear. It can help just to breathe deeply.

## 5. Healthy eating.

Eat lots of fruit and vegetables and try to avoid too much sugar. Try to avoid drinking too much tea and coffee.

## 6. Avoid alcohol, or drink in moderation.

The after-effects of alcohol can make you feel even more afraid.

#### References

1. Jeffers, Susan. Feel the Fear and Do It Anyway. Ballantine Books, 2008.



## Prof Yamasaki Patrikiou Edna

MSc, MD, PhD, Professor, Department of Life Science University of Nicosia, Cyprus

## **Title of Presentation**

## Maternal microbiome and brain development

## **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

## After this presentation, the attendee will be able to:

- 1. Extend their knowledge of the mother-foetus connection through the placenta that goes beyond the exchange of nutrients, gases and excretion of waste
- 2. Grasp the potential role of the microbiota in shaping the fetal brain.

## Description (Focus Statement)

The gut-brain axis consists in a bidirectional communication between the central and enteric nervous systems, and has been linked to several neurodegenerative and mental health disorders.

From a different point of view, while the maternal microbiota has been described to shape the infant microbiota postnatally, the presentation will focus on the potential contribution of the maternal gut microbiota in shaping the fetal (prenatal) brain, derived from animal and human studies.

## Learning Outcomes Assessment

Self reflection.

## Abstract

Gut microbiota has been deemed essential to human health. More recently it has been linked to a bidirectional communication between the gastrointestinal tract and the central nervous system, the gut-brain axis (or GBA).

Although established at birth, the gut microbiota can still undergo changes at different life stages in humans, such as during infancy, childhood, puberty, aging, pregnancy, following the use of drugs, etc.

The development of the central nervous system happens in two different phases:

- 1. Prenatally when brain structures are fully formed, neuronal proliferation, differentiation and migration takes place, the final neuronal numbers are reached, and synaptogenesis begins;
- 2. Postnatally when synaptogenesis is completed, neurons become myelinated, and the process of remodelling or refinement of synapses take place.

It is then expected that insults or influences taking place at these two different phases can lead to gross structural and functional disturbances or predominantly functional disturbances, respectively, although in many cases, the distinction is not very clear.



While most of the studies refer to the infant microbiota being acquired during the perinatal and early postanal periods and relate this infant microbiota to mental disorders (e.g., autism, ADHD, anxiety, etc.), there is a recent interest in the role of maternal and not the fetal gut microbiota in shaping and defining fetal central nervous system development. Animal studies show that maternal microbiota during pregnancy can influence structural and functional changes in brain development, and human studies correlate maternal fecal microbiota with structural and behavioral disturbances and delayed developmental milestones in children.

We will review the current literature that supports those findings and tentatively suggest how dietary interventions could help support a normal brain development.

- Sajdel-Sulkowska, E.M et al., 2023. The Impact of Maternal Gut Microbiota during Pregnancy on Fetal Gut-Brain Axis Development and Life-Long Health Outcomes. Microorganisms 2023,11,2199. https://doi.org/10.3390/microorganisms11092199
- 2. Codagnone et al., 2019. Programming Bugs: Microbiota and the Developmental Origins of Brain Health and Disease. Biological Psychiatry Volume 85, Issue 2, 15 January 2019, Pages 150-163
- 3. Zheng Sun et al., 2023. Revealing the importance of prenatal gut microbiome in offspring neurodevelopment in humans. eBioMedicine 2023;90: 104491 Published Online 1 March 2023 https://doi.org/10. 1016/j.ebiom.2023.104491
- 4. Yuliya, E et al., 2014. Microbiota and neurodevelopmental windows: implications for brain disorders. Trends in Molecular Medicine Volume 20, Issue 9, September 2014, Pages 509-518



## **Prof Zampelas Antonis**

BSc, Food Science and Technology, Agricultural University of Athens, MSc, Food Science, University of Reading, UK, PhD, Human Nutrition, University of Surrey, UK, Professor, President of the Management Board, Hellenic Food Authority (EFET), Member of the Management Board, European Food Safety Authority (EFSA), Professor of Human Nutrition, Department of Food Science and Human Nutrition, Agricultural University of Athens, Greece, Honorary Professor, Division of Medicine, University College London (UCL), Visiting Professor, Department of Life and Health, University of Nicosia, Cyprus, Greece

## Title of Presentation

## "One Health": The challenges are ahead

## **CPE Level**

Level II assumes that the participant has general knowledge of literature and professional practice in the areas covered. The focus of the activity is to enhance knowledge and application by the participant.

## After this presentation, the attendee will be able to:

- 1. Understand the principles and the approach of "One Health".
- 2. Become familiar with the nature of collaboration among several disciplines to promote public health.
- 3. Understand the neccesity of all the programs and actions under the umbrella of "One Health" to be data driven and evidence based.

#### Description (Focus Statement)

The rationale for the presentation is for the attendees to become familiar with the concept of "One Health".

#### **Learning Outcomes Assessment**

They are not assessed

## Abstract

One Health' is an integrated, unifying approach to balance and optimize the health of people, animals and the environment. It provides a new way towards connecting and integrating knowledge, data and expertise across a wide range of disciplines. "One Health" disciplines include Public Health, Veterinary, and Environmental Sectors and it is particularly relevant for Food and Water Safety, Nutrition, Control of Zoonoses, Pollution Management, and combatting Antimicrobial Resistance. Application of the One Health approach will enable health assessments to be delivered holistically, integrate diverse data, transcend regulatory silos, and recognize the inextricable link between the health of humans, animals, plants and their shared environment [1].

The One Health High Level Expert Panel (OHHLEP), which was established in May 2021, and provides an advisory function to FAO, UNEP, WHO and WOAH, recognized three Pathways of change to provide a framework for the prioritization and implementation of high-level actions under the "One Health" [2]:

- Pathway 1: Actions related to policy development, political will, enabling regulatory frameworks, equitable investments and promoting institutionalization of intersectoral governance.
- Pathway 2: Actions related to implementation of One Health including scaling up of capacity development, community engagement and mobilization for action, multisectoral coordination, collaboration and communication, and equitable integration of sectors.
- Pathway 3: Actions related to strengthening the scientific evidence base, fostering knowledge exchange, technology transfer and continuing education, using better data and evidence to inform best practice, innovation and enabling access to new tools and technologies.

The Hellenic Food Authority (EFET) sets quality standards that must be met by foods provided for consumption and the raw materials or additives intended to be added to foods in order to protect public health and to prevent consumers from fraudulent practices. Consequently, it plays, together with the other National Competent Food Authorities of the European Union Member States, an integral role as part of the "One Health" concept to promote Public Health [3].

EFET is also the National Focal Point of EFSA, which operates in all four "One Health" domains (i.e. human, animal, plant and environmental health), and provides integrated and transdisciplinary advice to risk managers including policymakers.

The challenge which a nutritionist and/or a dietitian faces as a part of the "One Health" concept is to design and implement nutrition programs in the community settings. In order to do that, the need for national nutrition and health surveys, national food composition tables and surveillance of food-born diseases is paramount. The food industry needs to take more initiatives to improve the safety and the nutritional value of their products. These aspects have then to be in parallel with animal health and welfare, animal feed, plant protection and plant health. In totality, primary production, agricultural economic policy, and the food sector, are "doomed" to work together under major unpredictabilities, namely the major environmental and climate crisis, the increased food insecurity, wars and uncontrolled immigration.

- 1. Osman Dar and Catherine Machalaba, Wiku B. Adisasmito, Salama Almuhairi, Casey Barton Behravesh, Pépé Bilivogui, Salome A. Bukachi, Natalia Casas, Natalia Cediel Becerra, Dominique F. Charron, Abhishek Chaudhary, Janice R. Ciacci Zanella, Andrew A. Cunningham, Nitish Debnath, Baptiste Dungu, Elmoubasher Farag, George F. Gao, David T. S. Hayman, Margaret Khaitsa, Marion P. G. Koopmans, John S. Mackenzie, Wanda Markotter, Thomas C. Mettenleiter, Serge Morand, Vyacheslav Smolenskiy, and Lei Zhou (the One Health High-Level Expert Panel (OHHLEP)". One Health Theory of Change. https://www.fao.org/one-health/background/ohhlep/en
- 2. Devos Y, Bray E, Bronzwaer S, Gallani G and Url B, 2022. Editorial: Advancing food safety: strategic recommendations from the 'ONE Health, Environment & Society Conference 2022'. EFSA Journal 2022;20(11):e201101, 6 pp. https://doi.org/10.2903/j.efsa.2022.e201101
- 3. ΕΦΕΤ. Ετήσιος Απολογισμός Δράσεων 2022. https://www.efet.gr/files/ad2022.pdf



# BIOGRAPHIES

## **Alexandrou Nectarios**

Founder & Director G.D.A Sports LTD, Sport Events & Mental Education, GROWTH. Daily. Always, Cyprus





## **Prof Andreou Eleni**

**Prof Eleni Andreou** is a Clinical Dietitian, Professor at the University of Nicosia and the Head of the Life Sciences Department of the School of Life and Health Sciences.

She possesses a B.Sc. (Summa Cum Laude) from Youngstown State University, USA, in Dietetics (Food and Nutrition/Dietetic). She continued the biennial academic and practicum (postgraduate level) in the Clinical Dietetics (including Administrative and Community) at the same university and in Southside & Northside Memorial Hospital in the Ohio. She was granted the title of RD by the Commission on Dietetic Registration of USA upon the completion of the



qualification exams. She received the Doctorate in Professional Studies from Middlesex University with the title Clinical Dietetics, Nutrition Sciences and Health Education with the area of interest in Behavioural Modification. She is Certified Dietitian with specialization in Eating Disorders and Renal Dietetics.

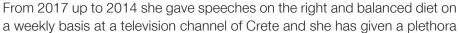
Currently, she practises the profession as private clinical dietitian and as academician d teaches at University of Nicosia the programmes of Dietetics and Nutrition as Professor. Also, she is a researcher in her field and collaborates with medical centres, consults companies in Food and Pharmaceutical Industry, and she is the Scientific Advisor and member of other Health Associations.

She is an author of scientific articles in peered review journals and books related to dietetics and nutrition. Her research interest is Eating Disorders, Mindful Eating, Renal Dietetics, Mediterranean Diet and Metabolic Problems, Cancer and Cognition. She is currently the President of the Cyprus Dietetic and Nutrition Association, the president of the Cyprus Society of Clinical Nutrition and Metabolism (CySPEN), the president of the Cyprus Registration Board for Food Scientists, Technologists and Dietitians and board member of the Cyprus Atherosclerosis Association.



## **Androulaki Niki**

Mrs Niki Androulaki is a graduate of the Higher education Institution of nutrition and diet of Thessaloniki since 2002. She submitted a senior thesis involving the psychological factors that affect the eating habits of overweight, anorexic and bulimic people. In her further education she attended online courses regarding childhood obesity and the safety and quality of foods (HACCP) from the centre of continuous education of the National and Kapodistrian University of Athens.





of speeches and has taken part in various conferences concerning ways to educate people on healthy diet. She is a member of the steering committee of the National Health Education network which falls under the Ministry of Education and is a member of the Union of the dieticians and nutritionists of Greece. Furthermore, she is the general secretary of the Institution of Nutrition , research and studies. She works in her private office in Chania offering dietary services emphasizing on medical diet , dealing with numerous clinical cases.

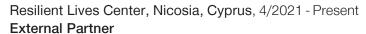


## **Angastinioti Elina**

## RELEVANT EXPERIENCE

Elina Angastinioti, Nicosia, Cyprus, 09/2019 - Present Private Practice

- Conducted individualized nutrition assessments based on laboratory tests, data and analysis of dietary habits
- Educated clients about the long-term health benefits of balanced diet and exercise programs
- Participated in tube feeding management in various settings
- Promoted good nutrition and healthy lifestyle via social media platforms



- Completed in depth-initial and follow up visits for young children and teenagers and implemented individualized nutrition care plans
- Attended multidisciplinary meetings
- Worked with patients with eating disorders to help them achieve their individualized nutrition goals

Eastern Michigan University Athletics Department, Ypsilanti, MI, 08/2016 - 06/2018 Sports Nutrition Intern

- · Development of educational materials, newsletters and social media content
- Responsible for recording and analysing data from eating disorder questionnaire
- Student-athlete education through group presentations, cooking demonstrations and grocery store tours

## EDUCATION

**Eastern Michigan University**, Ypsilanti, Ml Degree Granted: 08/2019 **Master of Science in Dietetics** Overall GPA: 3.95/4.0

Reading University, Reading, United Kingdom
Bachelor of Science in Nutrition and Food Science

Degree Granted: 05/2013

## ACADEMIC HIGHLIGHTS

## **Poster Presentations**

Topic: Food preferences of International Students at a Midwestern University

Academy of Nutrition and Dietetics, Food and Nutrition Conference and Expo, Chicago, IL, 10/2017

<u>Topic:</u> Perception of and adherence score to a Mediterranean diet in Cyprus and the United States

Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo, Boston, MA, 10/2016

## **PUBLICATIONS**

Angastinioti E, Gossett Zakrajsek A, Hutchins-Wiese H, An Exploratory Study Examining Mediterranean Diet Perceptions, Eating Practices, and Food Choice of Emerging Adults from Cyprus and the United States World Nutrition 2020;11(4): 22-43

## PROFESIONAL MEMBERSHIPS

- Cyprus Dietetics and Nutrition Association, 2019 present
- Academy of Nutrition and Dietetics, 2017 present



## **Prof Benardot Dan**

Dan Benardot is Professor of Practice in the Center for the Study of Human Health at Emory University, following his retirement as tenured Full Professor of Nutrition, and Full Professor of Kinesiology and Health at Georgia State University (GSU), where he currently holds the rank of Professor Emeritus. He received a PhD in Human Nutrition and Human Service Studies from Cornell University, and an Honorary Doctorate (DHC) from Marywood University for his work in sports nutrition. He is a Fellow of the American College of Sports Medicine, and is a Registered Dietitian/Nutritionist (Academy of Nutrition and Dietetics. From 2002 through 2017 he served as founder/director of the Laboratory for Elite Athlete Performance at GSU. He has written several books and book



chapters on sports nutrition, and numerous scientific refereed publications that focus on within-day energy balance and related issues in competitive athletes. A recently published article is entitled "Nutritional Concerns for the Artistic Athlete". His most recent book is the 3rd edition of "Advanced Sports Nutrition" © 2021, and another recent book is "American College of Sports Medicine's Nutrition for Exercise Science" © 2019. In 1993 he received the American Dietetic Association's Sports and Cardiovascular Nutrition achievement award; in 1995 he was initiated into the Alumni Honor Roll for the State University System of New York; in 1996 USA Gymnastics presented him with the Outstanding Educator Award following the team's Olympic gold medal at the Atlanta Olympic Games; he also served as nutritionist for several other US Olympic teams, including USA Track and Field (marathon, 2004 Athens Olympics) and USA Figure Skating (multiple Olympic games). As part of an intellectual property endeavor, Dr. Benardot is inventor of NutriTiming® software, which assesses real-time energy balance and nutrient intake. In his current role as Professor at Emory University, he created a class that had never been taught entitled "Nutrition for the Performing Arts".



## **Brown Sophia**

## PROFILE

I am a UK trained, registered dietitian. From May 2020-April 2023 I worked for the NHS as a Children's Dietitian (increasing responsibilities) supporting children with specific dietary requirements or children who needed specialised nutrition support as part of a treatment plan.

Since April 2023 I moved to Cyprus for family reasons but still working remotely for the NHS, in a remote, locum role.



## **EMPLOYMENT HISTORY**

Senior Specialist Children's Dietitian Allergy, Faulty Growth Portsmuth Teaching Hospitals, NHS Trust

August 2023 - To date

Senior Specialist Children's Dietitian Liver Transplant/ Leeds Teaching Hospitals, NHS Trust

July 2022 - April 2023

This post has a higher degree of autonomy that my previous positions (Band 7), while giving me the opportunity to carry out highly specialist clinical assessments and ongoing dietetic management of children with new areas that I have not worked before, namely liver disease as well a variety of neurological conditions including ketogenic diet for children with refractory epilpsy.

Specialist Children's Dietitian / Leeds Teaching Hospitals, NHS Trust

June 2021 - July 2022

This was a Band 6 appointment, with additional responsibilities versus my previous position such as providing and leading student training, participating in service improvement proposals as well as an increased caseload.

## Children's Dietitian / Leeds Teaching Hospitals, NHS Trust

June 2020 - June 2021

Main duties included included providing nutritional intervention in paediatric oncology/heamatology patients, aiming to prevent malnutrition, as well as ensuring that the child's weight gain & growth are least affected by their disease, or side effects of treatment.

Leeds Children's Hospital, 'Centre of Excellence in Supportive Care', as designated by the Multinational Association of Supportive Care in Cancer (MASCC). Leeds is the first Children's Hospital in the world to be awarded this status, and it was an honour to have worked as part of this team for my first job.

## **EDUCATION**

Masters in Nutrition & Dietetics / The University of Nottingham, UK Grade: First Class Honours

September 2016 - June 2020

- Accepted on course with an unconditional offer and included in Higher Achievers' Scheme
- Elected course representative in years 1,2 & 4 Represented the student body in meetings with faculty, participated in advisory committees for the planning and participation of key events. These roles were instrumental in helping me improve my presentation, organisational and time-management skills, but most importantly to appreciate the importance of effective communication and teamwork in achieving good results.

## MEMBERSHIPS AND CERTIFICATIONS

- HCPC registration in the UK since July 2020 (DT 31021)
- Registered Dietitian in Cyprus since October 2020
- Member of the British Dietetic Association
- Member of the Cyprus Dietitians and Nutritionists Association

# Calmon - Spanou Alini

A passionate dietitian born and raised in Brazil and is for 17 years living in Europe that started a career in marketing and business administration adding human resources management degree in the curriculum before becoming a dietitian, successfully treting obesity and chronic diseases at Bioiatriki Nutrition based in Athens.

Developing an Integrative Nutrition Centre able to merge nutritional, medical and diagnosis services is the focus of my carrear.



#### PROFESSIONAL SUMMARY

- Head Dietitian and business developer at Bioiatriki Nutrition
- · Background in financial institutions when working with business administration
- International experience with costume behaviour within academic and profesional ground
- Creation of Bioiatriki Nutrition focused on disease prevention and chronic diseases diagnostic and nutritional treatment

#### **EDUCATION**

Master of Science in Clinical Dietetics, University of Nicosia

Oct 2019 - May 2022

#### **EXTENDED EDUCATION**

Blackburn Course in Obesity Medicine - Treating Obesity, Harvard Medical School

June 2017

#### HARD SKILLS

- · Planning and implementing dietary plans
- · Analyzing and recording data
- Knowledge of nutritional values
- Proficiency with job-specific computer software and apps
- Proficiency in Portuguese, English
- Conversation Level in Greek

#### SOFT SKILLS

- Problem-solving skills
- Critical thinking
- · Teamwork skills
- Emotional intelligence
- · Positive and able to motivate others



### **Dr Charidemou Evelina**

**Dr Evelina Charidemou** is currently a lecturer in Metabolism at the University of Nicosia. After completing her PhD in Biochemistry from the University of Cambridge, she moved to back to Cyprus as a Marie Curie follow at the University of Cyprus. She specialises in Nutritional Biochemistry and Metabolism. Her research focuses on the development of metabolomics and lipidomics tools to investigate aspects of the Metabolic Syndrome, particularly Type II diabetes and Non-alcoholic fatty liver disease. Specifically, she is using high-performance liquid chromatography and multivariate bioinformatic tools to analyse biological samples and identify biomarkers to understand the underlying mechanism of metabolism in diseases.



Dr. Charidemou presented her work in National and International Conferences; The 12th and 14th International Conference of the Metabolomics Society in Dublin and Seattle respectively as well as the 11th annual Metabomeeting in Nottingham UK. In the 2nd Metabolomics Sardinian Scientific School she was awarded the best presentation and she was invited to publish her research work at the International Journal of Biochemistry and Cell Biology. Dr. Charidemou has published her work at high impact journals such as Journal of Clinical Investigations Insights, Hepatology, Cell Science, Diabetologia and she has multiple scientific collaboration with the University of Oxford UK, University of Aarhus Denmark, Imperial College, as well as the University of Cyprus. In addition, she is an active member of the International Metabolomic Society, the European Society for Clinical Nutrition and Metabolism, the Biochemical Society and she founded the Cyprus Metabolomic Network, of which she is currently the President.

### **Prof Constantinidou Fofi**

Fofi Constantinidou, Ph.D., CCC-SLP, CBIS, FASHA, FACRM, is Professor of Language Disorders and Clinical Neuropsychology, & Founding Director, Center for Applied Neuroscience, University of Cyprus. Prior to repatriating to Cyprus, she was Professor of Speech Pathology and Audiology at Miami University, Ohio, USA where she established the Miami University Sports Concussion Management Program. For over 25 years, her research, teaching, and clinical expertise center on acquired adult neurological disorders. Fofi's innovative research focuses on the neurophysiological underpinnings of cognitive, linguistic, and psychosocial deficits resulting from acquired brain injury and aging, and more recently, long-COVID, and the development of effective neurorehabilitation modalities



to improve patient outcomes. She has published and presented extensively in this area and has a 25-year extramural funding record as PI from the European Union, the National Institutes of Health (USA), the Cyprus Research & Innovation Foundation, and the industry.

Fofi is an ASHA & ACRM Fellow with extensive professional service and leadership positions in ACRM, the European Speech & Language Association and the Cyprus Association of Registered Speech Language Pathologists. Prestigious awards include the Distinguished Researcher Award of the Cyprus Research & Innovation Foundation, and ACRM Distinguished Member Award. She is the 2023 recipient of the ACRM Women in the Rehabilitation Sciences Award. Her vision is to contribute to precision cognitive rehabilitation and improve patient outcomes through evidence-based research and capacity building.



# **Dr Constantinou Haris**

**Haris Constantinou** MD, BSc is a physician specialized in Internal Medicine. He earned his MD at University of Thessaly, Greece. He also holds a Bachelor of Science in Nutritional Sciences and Dietetics from Harokopio University of Athens, Greece.

Dr Haris is a consultant physician at Internal Medicine Department and the Director of the Obesity Medicine Clinic at Larnaca General Hospital, Cyprus.



# **Dr Dimosthenopoulos Charilaos**

Dr Charilaos Dimosthenopoulos received his PhD from the Medical School of the Kapodistriakon University, Athens. He holds a Bachelor degree on Biology from the School of Biology of the Aristotle University of Thessaloniki, a Postgraduate Diploma (PostDip in Dietetics) in Dietetics from Leeds Metropolitan University and a Master of Medicine and Science in Human Nutrition (MMedSci) from Sheffield University, UK. He holds a HACCP Inspector Certificate from the Agricultural University and TUV AUSTRIA. He works as Chief Dietitian of the Department of Clinical Nutrition, at the General Hospital of Athens "Laiko" being responsible for the dietary monitoring and treatment of patients of various clinical conditions, since 2002. He has



numerous publications while he has numerous participations in Greek and International congresses with oral presentations, abstracts and posters. He is Board member of the Society for the Study of Risk Factors for Vascular Diseases (EMPAKAN) and Board member of the Hellenic Diabetes Society (EDE). He is member of the Executive Committee of the Diabetes and Nutrition Study Group (DNSG) and was the Leader of the EFAD's European Specialist Dietetic Networks (ESDNs) Diabetes (2018-2022). He is teaching in 6 different postgraduate programs of the National and Kapodistrian University of Athens, the Aristotelian University of Thessaloniki and the University of West Attica, Athens.



### **Prof El Ghoch Marwan**

Currently is an Associate Professor in Applied and Technical Dietetic Sciences (MED/49) at the Department of Biomedical, Metabolic and Neural Sciences, of the University of Modena and Reggio Emilia, Italy. In 2005 Professor El Ghoch earned a Degree in Medicine and Surgery from the University of Bologna (Alma Mater Studiorum - UNIBO), Italy. In 2010 earned the medical speciality in Clinical Nutrition, from the University of Modena and Reggio Emilia (UNIMORE), Italy. Since 2005 he is registered in the Order of Physicians and Surgeons of the City of Bologna in Italy. In 2020 Professor El Ghoch earned the European fellowship in Obesity Management from the European Association for the Study of Obesity (EASO). He is considered an expert in obesity and eating disorders treatments,



and gained an international leadership in the study of body composition in anorexia nervosa and sarcopenic obesity. Author of more than 120 papers published in high-ranking peer-review journals in the field of medicine, clinical nutrition and dietetics. Currently covers the role of Associate Editor in Diabetology & Metabolic Syndrome BMC.

## **Erotokritou George**

As an original chef, he is very independent. He completes every task that he will decide to and he is not a quitter. He likes having control. He is passionate, inventive, observative and energetic. He pushes things to the limit. He is profound and a very active person. There is always something more beyond what we see in that person. He presents a calm, independent profile out to the world, whilst an enormous and extreme power, an intense passion, strong will and persistence lie beneath. He has a penetrating mind. Do not be amazed at being bombarded with a great number of questions, he is just trying to look into your way of thinking and evaluate the situation in order to propose the appropriate plate that fits to your temperament.



For George, cooking is science and every plate is a gourmet, "chemical" composition ready to impress everyone, even the most demanding palate.

George was born and raised in Limassol and he studied in Gourmand Institute. His contact with Cookery started at the age of 16, when he began working in several restaurants, for pocket money at first and after that as a hobby. Now, as a professional chef, he has gained a place amongst the greatest kitchens of luxurious hotels and restaurants in Cyprus. His mastery and his professionalism have given him many prizes that are the crowning glory of his love and persistence in offering. Articles for George Erotokritou can be found in Financial Mirror and magazines like Cyprus Gourmet, Time Oute, Vivendi, Prima, Omikron, OK, Down Town and Taste. Matthew Stowell, in particular, wrote that: «George possesses a certain type of generosity that manifests itself in feeding others well». The journalist Lena Tsoukala characterized him as a rising star in the map of Gastronomy in Cyprus.

In 2014 he starts cooperating with the TV show "Gia Sena" and Christina Aristotelous in Mega TV presenting the cooking section every Thursday.

In 2015 he presents the cooking charity show "Kitchen Stars" in PLUS TV.

In 2016 he moves to SIGMA TV taking over the guidance of the tv show "Mia Valitsa Gevsis" with Christina Dimitriou.

In 2017 he returns to Christina Aristotelous and the tv show "Me Agapi Christiana"

He has worked with the "Taste" magazine having his own column under the title "Let's cook"

He participated, along with the Symphony Orchestra of Cyprus, in the opera "Bon Appetit" of the American composer Lee Hoiby.

#### As he says:

Cooking would be nothing if there was not kindness in us; a kindness that comes from the sensuality of things, a sensuality that is the same as the one that somebody expresses for a painting, a composition, a clear symphony, a way of giving in a coordinated form the total instrumentation of sensations.



## **Francois Bethany**

#### **EDUCATION**

Kings College London (2018-2020)
PG Diploma Dietetics
Degree classification: Distinction

University College London (2015-2016)
MSc Eating Disorders and Clinical Nutrition

Degree classification: Distinction

The University of Manchester (2012-2015)
BSc Biomedical Sciences with Honours
Degree classification: Upper Second Class



#### **EMPLOYMENT**

#### Orri Eating Disorder Service - Specialist Eating Disorder Dietitian (September 2021-Present)

I currently work in the daycare programme which follows a group therapy structure and timetable. I manage a caseload of up to 25 clients with a range of eating disorders independently, involving an initial assessment and regular follow ups. This involves working with the client to formulate a meal plan and guidance around what meals and snacks should look like in terms of food groups and portion sizes. Sessions also include carers and family to support clients needs at home. I deliver regular therapy groups on a range of different themes including motivation, accountability, change, goal setting and food & feelings. I work closely with the wider therapeutic team and also case manage a number of clients and act as the main point of contact in their treatment. I also liaise with the kitchen team to ensure meals served are varied and meet clients needs. In this role I have also supported dietetic students and dietetic assistants.

#### Rhitrition - Freelance Specialist Eating Disorder Dietitian (January 2021-October 2021)

I saw clients for individual dietetic sessions online independently. I supported individuals with a range of eating disorders including, binge eating disorder, anorexia nervosa, bulimia nervosa and disordered eating. I liaised with clients GPs and psychologists to support clients and used sessions to review progress and set ongoing goals and intentions.

#### Ellern Mede Centre for Eating Disorders-Specialist Eating Disorder Dietitian (March 2020-September 2021)

I managed a case load of children and adolescents in an inpatient setting with diagnosed eating disorders. I assessed individuals and their nutritional needs on admission, formulated meal plans taking into consideration refeeding risk and regularly reviewed these alongside the client to ensure they were meeting their nutritional goals. I also formulated NG feeding plans and supported clients to transition from supplements to oral food. I provided psychoeducation around the importance of normalising eating behaviours and helped patients to challenge their eating disorders. I facilitated groups including food preparation and social eating groups. I worked closely with the wider MDT in regular meetings and shared by evaluations of clients progress and recommendations in treatment. I also worked closely with patients families and carers to support smooth transitions home.

### Dr Galatou Eleftheria

**Dr Eleftheria Galatou** holds 2 Bachelor diplomas in Biology and Pharmacy of the Aristotle University of Thessaloniki. In 2009 he completed her Master thesis in "Applied Genetics and Biotechnology". In 2014, she completed her doctoral thesis in Molecular Physiology and Pharmacology in the Department of Physiology, School of Biology, Aristotle University of Thessaloniki. After completing her Ph.D., she worked as a post-doctoral researcher at AUTH (2014 -2016). During her research career, she was involved in in vitro and in vivo experimental models. Specifically, she focused on the isolation and culture of primary cardiac myocytes in combination with molecular biology techniques, biochemistry and modern imaging techniques of living cells. At the same time, she extensively



worked with in vivo experimental models of diabetic rats and transgenic mice for the determination of mechanisms of pathogenesis, toxicity and therapeutic applications of new possible pharmaceutical targets. Currently, she is an Assistant Professor at the University of Nicosia, where she teaches Pharmacology and Toxicology. Moreover, Dr. Galatou is an external evaluator of the Committee for the Evaluation and Reimbursement of Medicines for Human Use at National Organization for Medicines (EOF) in Greece. Dr Eleftheria Galatou is a reviewer for several scientific journals and she is management committee member at COST action "EU-METAHEART G16225 - IMproving Preclinical Assessment of Cardioprotective Therapies". She has authored/co-authored several research publications and book chapters published in valid international scientific journals and conference proceedings and has presented her research at numerous scientific conferences.



### **Dr Gianfrancesco Marco**

#### PROFESSIONAL INTEREST AND EXPERTISE

- Applied Sciences, Research & University Teaching;
- Clinical Research & Clinical Studies;
- Scientific Affairs and Strategic Marketing;
- Immunity & Inflammation, Metabolism & Obesity, Type 2 Diabetes;
- Biochemistry, Intestinal Microbiota, Lipids & Nutrition;



October 2020 to Present:

Laboratoires ORTIS Luxembourg
Scientific Affairs Lead in Marketing Department

October 2014 to October 2020:

GIGA, Biomedical Research Center of the University of Liège, Inflammation, Infection and Immunity

• 10/2018 - 10/2020:

Postdoctoral Researcher in Cellular and Molecular Immunology Laboratory

- Development of respiratory allergies treatment.
- Teaching Assistant in Biochemistry of domestic animals (2nd Bachelor), Veterinary Medicine Faculty).
- 10/2014 10/2029:

PhD in Immunometabolism and Nutrition Laboratory

- Thesis title: "Free fatty acids as modulators of the NLRP3 inflammasome in human macrophages; role in obesity/type 2 diabetes".
- Clinical Study coordinator in University Hospital of Liège for the Food4Gut multicenter (UCLouvain, ULB, ULiège) randomized placebocontrolled trial.

#### EDUCATION:

Academic year 2018-2019:

Doctorate degree in Biomedical and Pharmaceutical Sciences, Medicine Faculty, University of Liège.

Academic year 2013-2014:

Master's degree in Biomedical Sciences with specialization in Digestive system and Nutrition, Medicine Faculty, University of Liège (Academic grade: Great Distinction).

Master thesis in Medical Chemistry Laboratory, GIGA-R/Signal Transduction

Thesis title: "Involvement of Protein Acetylation in Tumor Progression".

Expertise with B16-F10 skin Melanoma cells: genes and proteins (Elongator complex) study and modulation involved in tumorigenicity.





# **Dr Giannaki Christoforos**

**Dr Christoforos Giannaki** is Clinical Exercise Physiologist and an Associate Professor in the Department of Life Sciences of the University of Nicosia, Cyprus and the PhD program coordinator in Exercise Science and Physical Education. He holds a BSc in Physical Education and Sports, an MSc in Sports Physiology, and a PhD in Clinical Exercise Physiology. So far, he has 78 research articles in scientific peer-reviewed journals, including publications in high-impact factor journals in Exercise Science, Medicine and Nutrition. He is a member of international health and medical-related bodies and the president of Exercise is Medicine Cyprus. In addition, Dr. Giannaki is an editorial board member of the BMC Nephrology, European Review of Aging and Physical Activity and Frontiers in Striated Muscle Physiology journals.





### **Gregora Poly**

Dedicated and passionate mental health activist with over 15 years of personal experience living with the diagnosis of Bipolar Disorder (BD). Committed to raising awareness, promoting understanding, and advocating for individuals and families affected by mental health challenges.

#### Personal Journey:

Successfully managed my own mental health for over 30 years, showcasing resilience and determination in the face of challenges through ongoing participation in psychotherapy and commitment to medication adherence, prioritizing personal well-being as a foundation for effective advocacy.



As a wife, mother, grandmother, and daughter, (having been raised in the diversity of the Canadian culture) I firmly believe that no one can advocate better for me and my family than myself. Throughout my life, I have always embraced a spirit of volunteerism, dedicating my time and energy to various causes and organizations in addition to mental health advocacy. These experiences have provided me with a broader perspective and a deep understanding of the diverse challenges faced by individuals in different fields.

Combining my personal journey, my multicultural background, advocacy work, and empathetic nature, I strive to foster a society that embraces mental health, empowers individuals, and supports their overall well-being. My extensive volunteering background reflects my commitment to making a positive impact on the lives of others, regardless of the field or cause.

#### **KEY SKILLS AND CONTRIBUTIONS**

**Advocacy:** Actively engaged in advocating for mental health rights, stigma reduction, and improved accessibility to mental health services.

**Education and Awareness:** Assisting in developing educational programs and workshops to Universities. Presentations to various community groups, and organizations to increase awareness and understanding of mental health issues.

**Support and Empowerment**: Provided guidance and support to individuals and families affected by mental health concerns, through my ability to empathize with others, creating a safe and non-judgmental space for individuals to share their experiences empowering them to seek appropriate treatment and access available resources.

**Volunteer Experience:** Demonstrated a lifelong commitment to volunteering, contributing time and effort to various causes and organizations outside the mental health field.

#### PROFESSIONAL DEVELOPMENT

**Speech on personal experiential journey:** Nursing Dept of the Cyprus Institute of Technology event on World Mental Health Day. First speech on personal experiential journey with mental health | Oct 2021

**Keynote Speaker:** Conference on the subject "The human rights of the mentally ill who are hospitalised' organised by the Psychiatric patients Supervisory Committee | Oct 2021

Podcast on life with BD: by Anna Procopiou Koukkides with Achilleas Koukkides | Mar 2022

Keynote Speaker: 29th Pancyprian Nurses and midwives Conference | Nov 2022

**Tv interview on life with BD:** Personal Interview on my journey with BD by Alpha Tv | Jan 2023 / Invited as guest in different television programs on mental health issues

**Keynote Speaker:** Conference hosted by the Psychiatric department of CyNMA with the title "Listen to ME" (mentored one more speaker with BD to speak of his experience) | Feb 2023

**Keynote Speaker:** Conference." Participatory decision-making between Mental Health Professionals and individuals with Neurocognitive - Neurobiological (psychiatric) disorders"

Organised by Cyprus Institute of Technology Antiphon and Kratis Training | May 2023

Expert by Experience lectures: European University of Cyprus

Lecture to undergraduate nursing students on the different methods of therapy towards dealing with mental health | Jul 2023

**Tv Interview:** CyBC discussion on Mental Health Issues with katerina Charalambous and Loucas Fourlas Oct 2023

Philileftheros Newspaper: Interview about mental health and breaking the stigma | Oct 2023

**Upcoming lectures/ events:** 12<sup>th</sup> Cyprus Dietetic & Nutrition Association Conference and Expo with Inter Participations

**Train the Trainer:** Educate the dieticians/nutritionist how to properly approach their consultees with disordered eating. | 1-3 Dec

Research group member: Cyprus Institute of Technology/Nursing Dept

MOB (Management of my Bipolarity) took part in a 2 year research in a self management groups with people suffering with BD.

**BD Group Therapy Coordinator:** Specialized Training and worked with Dr Anna Hadjioannou on group councelling and coordination

- Developed meaningful relationships with individuals seeking support, creating a safe and trusting space for them to open up about their mental health concerns.
- Utilized my relatability and empathetic nature to connect with individuals on a personal level, fostering an environment that encourages honest and open communication.
- Employed active listening skills to understand the unique challenges faced by each individual, providing tailored support and guidance.
- Collaborated with mental health professionals and community resources to facilitate holistic care for individuals in need.

2016 - 2023

Cofounder and President of Antifon: Antifon (Cypriot Observatory for Mental Health)

First mental health non profit organisation that the founders were people diagnosed with mental health issues alongside mental health processionals with people centre approach | 2022 - 2023

**Expert by Experience lectures:** Cyprus Institute of Technology/Nursing Dept.

Experiential training to mental health nursing students in within the classroom with immediate feedback. First of its kind in Cyprus. Started as a pilot for the academic year 2022 - 2023 and has received excellent feedback from students.

Public Speaking Skills: Ananta Training by Christina O'Neil

Presentation with Impact: Presentation and public speaking skills | Nov-Dec 2022

Coaching Skills: Ananta Training by Christina O'Neil / Coaching Skills | Dec 2022 - Jan 2023

Mental Health First Aider: MHFA International (Member)
MHFAider England (3 years certified accreditation) | Sept 2023

**Memberships:** As of October 2023 I have the honor of being part the group of associates of OSAK as well as a member of EUPATI Cyprus



### **Groutidou Emily**

Emily Groutidou became a Member of the Board of the Cyprus Organization of Kidney Patients, then Honorary President and from 2019 until today ohe is President. She is also a Member of the Board of the National Transplant Council of Cyprus, Vice-President of the Board of the European Federation of Nephrology and Member of the Board of the Cyprus Federation of Patient Organizations. She was diagnosed with Polycystic Kidney Disease, Type 1, at the age of 16 and underwent a kidney transplant with her mother as a donor at the age of 35. From her successful transplant onwards, her journey in Patients Advocacy began, first in Cyprus and then in European Union level through EKHA (European Kidney Health Alliance) and through EKPF



(European Kidney Patients Federation). The Pancypriot Association of Nephrologists of Cyprus, of which she is president, cares for patients from the first stages of the disease to the final stage of Chronic Kidney Disease (including transplant patients) as well as proactively informs the public about the risks involved in Nephropathy. It also provides 5 Pangyprian buses for transporting hemodialysis patients to and from the Hemodialysis Units, for their appropriate treatments.

Her purpose and goal is to improve the quality of the means of treatment by providing the most appropriate, individually, therapeutic treatment and to upgrade the services provided in all the Pangyprian hospitals with dignity and understanding.

### **Dr Heraclides Alexandros**

#### **EDUCATION AND TRAINING**

2006-2009: PhD Epidemiology and Public Health,

University College London (UCL), UK

2005-2006: MSc Health and Society: Social Epidemiology,

UCL / London School of Hygiene & Tropical Medicine, UK

2003-2004: MSc Nutrition, King's College London, UK

2000-2003: BSc (Hons) Biology, University of Bedfordshire, UK



#### PROFESSIONAL EXPERIENCE

#### **Current Position**

2020 - Associate Professor Epidemiology and Public Health

Department of Health Sciences, School of Sciences, European University Cyprus

#### **Past Positions**

2014 - 2020	Associate Professor in Epidemiology and Public Health,
	Department of Primary Care and Population Health, University of Nicosia Medical School
2014 - 2019	Assistant Professor in Epidemiology and Medical Statistics,
	St George's University of London Medical School at University of Nicosia
2013	Honorary Research Associate, Neuroepidemiology and Ageing Research Unit,
	School of Public Health, Imperial College London, UK
2012 - 2014	Postdoctoral Research Fellow and Research Faculty Associate
	Cyprus Institute of Neurology and Genetics and the Cyprus School of Molecular Medicine
2012 - 2014	Lecturer (part-time) in Epidemiology and Research Methods
	European University Cyprus
2011-2012	Lecturer (part-time) in Epidemiology, Medical Statistics and Research Methods
	University of Nicosia
2011 - 2012	Postdoctoral Researcher (gene-environment interactions)

2011 - 2012 Postdoctoral Researcher (gene-environment Interactions)

Molecular Epidemiology Group, German Institute of Human Nutrition (DIfE), Germany

2011 - 2012 External Research Associate (gene-environment interactions)

Genetic and Molecular Epidemiology Group, Clinical Research Centre, Lund University, Sweden

2010 - 2012 Postdoctoral Research Fellow (type 2 diabetes prediction)

Epidemiology Unit, Steno Diabetes Research Center, Denmark

2009 - 2010 Research Associate

MRC Unit for Lifelong Health and Aging, UK; University of Wageningen, The Netherlands

#### **Professional Memberships**

2020 - Member (Founding) Cyprus Epidemiology and Public Health Association (CyEPHA)

2013 - Member of the Cyprus Society of Human Genetics

2009 - Member of the European Diabetes Epidemiology Group (EDEG)

#### Participation in local and international consortia

2013 - Member of the international Leadership in Epidemiological Analysis of longitudinal

Diabetes-related data (LEAD) Consortium.



#### Reviewer in international scientific journals

2023 - Scientific Reports

2008 - Journal of Epidemiology and Community Health

2009 - Diabetologia2011 - Obesity

2011- Nutrition Reviews

2011- Nutrition

2011- The American Journal of Clinical Nutrition

#### Selected Peer-Reviewed Publications

- 1. Pouliasi I, Hadjikou A, Kouvari K, **Heraclides A**. Socioeconomic Inequalities in COVID-19 Vaccine Hesitancy and Uptake in Greece and Cyprus during the Pandemic. Vaccines (Basel). 2023 Jul 31;11(8):1301
- Lytras T, Athanasiadou M, Demetriou A, Stylianou D, Heraclides A, Kalakouta O. Lack of association between vaccination rates and excess mortality in Cyprus during the COVID-19 pandemic. Vaccine 2023;41(18):2941-2946
- Achilleos S, Quattrocchi A, Gabel J, Heraclides A, et al. Excess all-cause mortality and COVID-19-related mortality: a temporal analysis in 22 countries, from January until August 2020. Int J Epidemiol 2022 Feb 18;51(1):35-53.
- 4. Al-Abdi T, Heraclides A, Papageorgiou A, Philippou E. Impact of the COVID-19 lockdown on lifestyle behaviors and their association with personality among adults in Qatar: A cross-sectional study. Plos one 2022. 17 (11), e0276426
- 5. Heraclides A, Fernández-Domínguez E. Mitochondrial DNA Consensus Calling and Quality Filtering for Constructing Ancient Human Mitogenomes: Comparison of Two Widely Applied Methods. International Journal of Molecular Sciences 2022. 23 (9):4651
- 6. Quattrocchi A, Demetriou CA, Mosquera MC, Charalambous A, **Heraclides A** Social inequality in obesity in an Eastern Mediterranean population: evidence from a national health survey in Cyprus. Annali di Igiene: medicina preventiva e di comunita, 2021 Oct 16.
- Kolokotroni O, Mosquera MC, Quattrocchi A, Heraclides A, Demetriou C, Philippou E. Lifestyle habits of adults during the COVID-19 pandemic lockdown in Cyprus: evidence from a cross-sectional study. BMC Public Health 2021. 21:1-11
- 8. Georgiou A, Demetriou CA, Christou YP, **Heraclides A**, Leonidou E, Loukaides P, Yiasoumi E, Pantziaris M, Kleopa KA, Papacostas SS, Loizidou MA, Hadjisavvas A, Zamba-Papanicolaou E. Genetic and environmental factors contributing to Parkinson's disease: a case-control study in the Cypriot population. Frontiers in Neurology 2019 10:1047
- 9. Philippou E, Pot GK, **Heraclides A**, Richards M, Bendayan R. Dietary glycaemic index and cognitive function: prospective associations in adults of the 1946 British birth cohort. Public Health Nutrition. 2018;22(8):1
- Demetriou CA, Heraclides A, Salafori C, Tanteles GA, Christodoulou K, Christou Y, Zamba-Papanicolaou E. Epidemiology of Huntington Disease in Cyprus: A 20-Year Retrospective Study. Clin Genet. 2018; 93(3):656-664.
- 11. Heraclides A, Bashiardes E, Fernández-Domínguez E, Bertoncini S, Chimonas, M, Christofi V, King J, Budowle B, Manoli P, Cariolou MA. Y-chromosomal analysis of Greek Cypriots reveals a primarily common pre-Ottoman paternal ancestry with Turkish Cypriots. PLoS One 2017,12(6): e0179474.
- 12. Heraclides A, Meidtner K, Buijsse B, van der Schouw YT, et al Investigation of gene-diet interactions in the incretin system and risk of type 2 diabetes: the EPIC-InterAct study. Diabetologia, 2016; 59: 2613–21
- 13. Heraclides A, Jensen TM, Rasmussen SS, Eugen-Olsen J, Haugaard SB, Borch-Johnsen K, Sandbæk A, Lauritzen T, Witte DR. The association between the immune marker soluble urokinase plasminogen activator receptor (suPAR) and incident diabetes is modified by smoking and body weight status among people with impaired glucose regulation. Diabetologia, 2013; 56: 1542-6
- 14. Frank LK, Heraclides A, Danquah I, Bedu-Addo G, Mockenhaupt FB, Schulze MB. Measures of general and central obesity and risk of type 2 diabetes in a Ghanaian population. Trop Med Int Health. 2013; 18:141-51



# **EXCELLENCE IN NUTRITION & DIETETIC RESEARCH AND PRACTICE**

- 15. Mühlenbruch K, Heraclides A, Steyerberg E, Joost H, Boeing H, Schulze MB. Assessing improvement in disease prediction using Net Reclassification Improvement: Impact of risk cut-offs and number of risk categories. Eur J Epidemiol, 2013; 28:25-33
- 16. Struijk EA., **Heraclides A.**, Witte DR, Soedamah Muthu SS, Geleijnse JM, Toft U, Lau CJ. Dairy product intake in relation to glucose regulation indices and risk of type 2 diabetes. (Nutr Metab Cardiovasc Dis. 2013; 23:822-8)
- 17. Ahmad S, Heraclides A, Sun Q, Elgzyri T, Rönn T, Ling C, Isomaa B, Eriksson K, Groop L, Franks PW, Hansson O. Telomere length in blood and skeletal muscle in relation to measures of glycaemia and insulinaemia Diabetic Medicine 2012; 29:e377-81
- 18. Heraclides A, Mishra G, Hardy R, Geleijnse M, Black S, Prynne C, Kuh D, Soedamah-Muthu S. Dairy Intake, blood pressure and incident hypertension in a general British population: the 1946 birth cohort Eur Jour Nutr 2012;51:583-91
- 19. Heraclides A, Chandola T, Witte DR, Brunner EJ. Work Stress, Obesity and the Risk of Type 2 Diabetes: Gender-Specific Bidirectional Effect in the Whitehall II Study. Obesity 2012; 20:428-433
- 20. Heraclides A, Witte D, Brunner EJ. The association between father's social class and adult obesity is not explained by educational attainment and an unhealthy lifestyle in adulthood Eur J Epidemiol, 2008; 23:573-79
- 21. Heraclides A, Chandola T, Witte DR, Brunner EJ. Psychosocial stress at work doubles the risk of type 2 diabetes in middle-aged women: Evidence from the Whitehall II study. Diabetes Care, 2009; 32: 2230-5
- 22. **Heraclides A**, Brunner EJ. Social mobility and social accumulation across the life-course in relation to adult overweight and obesity: The Whitehall II study. JECH, 2010; 64: 714-9



### **Dr Hileti Dona**

**Dr Dona Hileti** is a Clinical Paediatric Dietitian and a Lecturer in Nutrition at the University of Nicosia. Dr Hileti has academic, teaching and clinical experience both in UK and in Cyprus. She worked as a Senior Dietitian at Great Ormond Street Hospital for Sick Children in London and also participated in research projects and audits in collaboration with the Institute of Child Health in London. Dr Hileti authored a chapter in the Textbook of Clinical Paediatric Dietetics, an article for the Encyclopedia of Food Sciences and Nutrition and several research papers in the field of iron chelation and nutrition. She also worked with the Cyprus Paediatric Society to develop information on Childhood nutrition for parents which forms part of the child's personal health records. Furthermore,



Dr Hileti has been an invited speaker on the topic of nutrition in the early years of life, in a number of conferences both locally and abroad. She is currently leading a prospective study in Cyprus on the role of early nutrition behavior and the development of childhood obesity. She is also currently supervising PhD students partaking research studies on the eating behavior of infants.

# **Dr Karagiannis Dimitrios**

Dimitrios Karagiannis earned a Bachelor's, Master's and Doctoral Degree in Clinical Nutrition from the Department of Nutrition and Dietetic at Harokopio University of Athens. He also received the European Society for Clinical Nutrition and Metabolism Diploma in Clinical Nutrition and Metabolism. Currently he serves in the largest hospital in Greece (Evangelismos General Hospital, Athens) for the last 10 years as a Clinical Dietitian, where he is a member of the ICU, Internal Medicine, and Gastroenterology Nutrition Support Team. Having 16 years of experience in the field of Nutrition and Clinical Dietetics, Dimitrios has been involved in numerous trials and projects related to the effects of diet and malnutrition on parameters influencing the survival,

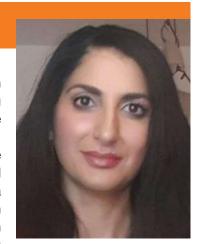


length of hospital stay and human fertility. He has work experience in the field of Dietetics and Metabolism, been working within 5 different hospitals and community settings. Currently, he also serves as a Research Associate of the Department of Nutrition and Dietetic at Harokopio University. Until now, he worked closely with student form local internship programs and he was Responsible for Graduate Students Practice Placement for almost 16 years. He participated for almost 12 years in the activities of the Hellenic Dietetic Association, as a member of the organizing committee of conferences, seminars and practice working groups. Since 2012, he is a Member and Life Long Learning Teacher of the Hellenic Society of Medical Nutrition, a certified instructor of the European Society of Clinical Nutrition and Metabolism and a board Member of Hellenic Society of Hospital Dietitians (2010-2014). He is reviewer in the Nutrients, Nutrition, Human Reproduction, Clinical Nutrition & Clinical Nutrition ESPEN journals, co editor of 1 Nutrition text books, co-author of 11 text-book chapters and contributed to 20 peer reviewed publications in international scientific journals. His professional value comes from dedicated team working and also from driving action with strong vision and strategic capability, focusing on quality and innovation.



### **Korfiati Persa**

**Persa Korfiati**, MA, Phd Cand., is a registered specialized psychologist with a therapeutic practice in the private sector in Nicosia CY, since 2007. Among others, she is a member at the Board of MAZI association in Cyprus and she is specializing in Eating Disorders. She is attending the University of Nicosia, in Cyprus, for her Doctoral degree in Nutrition and Dietetics department. She attended the University of Lyon II – Lumiere, in Lyon France, where she earned her BA and MA in Psychology. During her Master's degree, she followed a clinical practice in psycho-oncology at the Hopital Universitaire Hotel Dieu, in Lyon. Among others, she attended the University Lyon I Claude Bernard in Lyon, and followed the diploma of Clinical Criminology, while she was working in French schools with delinquent children.



She has published several scientific journals, some of them concerned Eating disorders, Child Delinquency, Sexual abuse and Diabetes. She is coauthor of the book in Greek, The Mental Health of the Child and the Adolescent Vol.I&2, ARMOS Editions, published in Greece and Cyprus.

She served as a psychologist, the Cyprus Diabetes Association, for ten years. She also worked for "Ena Oniro Mia efhi" association with cancerous children for two years.

She does regular speaking engagements and workshops for children, parents, adults, in schools, in working areas, in Cyprus and Greece. She is regularly sought after by the media (tv and radio channels) for her psychological expertise and writes articles in magazines.

She is fellow of the Panhellenic Psychological Association, of the Cyprus Diabetes Association and the Pacykaf Association of people with cancer.



# Kountouri Chrystalla

Chrystalla Kountouri graduated with honors (Cum Laude) from the Youngstown State University, Ohio in the United States with the Bachelor Degree of Science in Applied Science - nutrition and dietetics. She did her practicum at the Northside Memorial Hospital in Ohio and at the Jameson Memorial Hospital in Pennsylvania where she got the title of the Registered Dietitian from the CDR upon a completion of the state exam. She holds a Master degree in Healthcare Management from the Open University of Cyprus. She worked as a private clinical dietitian and from 2006-2022 she worked as a Clinical Dietitian in the General Hospital of Famagusta, covering the outpatient clinic, in-patients and also the foodservice area. In addition, from 2011-2022 she worked at the Bank



of Cyprus Oncology Center covering the out-patient clinic and in-patients. For the last year she is working in the General Health System regarding issues and procedures of the clinical dietitians in the GeSY.

She is an active member of the Academy of Nutrition and Dietetics, the Cyprus Dietetic and Nutrition Association and ESPEN. She is an initiative member of CySPEN where she served as a vice secretary (2015-2019) and a treasurer (2019-2022) of the CySPEN. Also, she is a teacher of Life Long Learning courses of ESPEN.



# **Dr Latzourakis Evangelos**

Evangelos Latzourakis graduated from the Nursing School in Athens in June 1986, and he then worked as a nurse in the General Hospital Pammakaristos in Athens. In 1991 he began working at the St Bartholomew's Hospital in London and simultaneously he completed in 1992 his specialty in nephrology nursing, ENB 136, at St Bartholomew's School of Nursing, City University London. He continued working as a specialist nephrology nurse in the heamodialysis unit and afterwards, in 1995, he got a Master's degree (MSc) in Nursing from City University in London. After the completion of his education, he moved to Cyprus and in 1997 he began working as a specialist nephrology nurse at Larnaca's Hospital, in the haemodialysis unit. At the same time, he



successfully established the Peritoneal Dialysis unit. He carried out lots of studies for the development of important clinical protocols. In 2007, he began teaching at the University of Nicosia, in the Nursing Programme. In 2010 he became and remains the leader of the Clinical Practice Committee of the nursing programme. In 2012, he got a Postgraduate Certificate in learning and teaching in higher education from Hertfordshire University. In 2018, he became a Senate member of the University of Nicosia for two years. In 2020 he was elected a member of the council of the Nephrology Sector/ Cyprus Nurses and Midwifes Association. He prepared the curriculum of the Nephrology Nursing Specialty programme which has been accredited by the European Dialysis and Transplant Nurses Association (EDTNA/ERCA). He is one of the two coordinators of the programme which started in October 2022, and provided by the Ministry of Health of Cyprus and the University of Nicosia. He acquired his PhD in 2022 at the University of Nicosia. In 2023 he took over as Erasmus coordinator for the nursing programme. Recently, he was selected as a member of the EDTNA/ERCA Accreditation Committee.



# **Dr Lavranos Giangos**

#### **CURRENT EMPLOYMENT / OCCUPATIONAL FIELD**

Ass. Professor in Internal Medicine and Public Health, EUC, Cyprus (2015-)

#### **WORK EXPERIENCE**

Consultant in Internal Medicine, Larnaca General Hospital (2014-):

**15/08/2007 - 30/05/2008:** Research manager

Coordinator of national and european

clinical research projects

Athens University, Department of Hygiene and Epidemiology



01/10/2010 - 30/06/2012: MA Health Management, Management, Public Health, Health Economics,

Research Management, Open University Cyprus, Nicosia (Cyprus), ISCED 6

09/01/2008 - 19/06/2012: PhD, Role of Estrogens in Prostate Senescence and Liver Regeneration

University of Athens (university), ISCED 6

01/10/2001 - 28/07/2007: MD, Basic and Clinical Sciences, Athens University (undergraduate), ISCED 5

#### **OVERVIEW OF RESEARCH ACTIVITY:**

Number of Publications in peer reviewed journals: 65

Overall impact factor: 73.566

H-index: 8

Total citations: 270

Congress Announcements / Presentations: 105

Invited Lectures / Round Tables: 70





### **Dr Loucaides George**

#### **FDUCATION**

- 1989: Pancyprian Lyceum Larnaca, Cyprus.
- 1997: BSc. in Kinesiology (major in exercise studies), Washington State University (U.S.A.).
- 1998: Master of Medical Science in Sport and Exercise Science, University of Sheffield (U.K.).
- 2006: Post Graduate Certificate in Research Methods, Staffordshire University (U.K.).
- 2010: PhD in Sports and Exercise Sciences, Staffordshire University.



#### **EXPERIENCE**

- 1997: 12 weeks internship at the Hellenic Sport Research Institute of the Olympic Training Center, Greece.
- 2000 up to date: Scientific Associate at the Cyprus Sport Research Center.
- 2003 2005: Vice present of the National Athletes' Commission of the Cyprus Olympic Committee.
- 2004 2006: Scientific Consultant to the Cyprus Sport Organization (CSO) on its national programs (such as Talent Development and Olympic Preparation).
- 2008: Co-founder and President of the Dro.Me.A Racing running club.
- 2012 to 2014: Member of the Committee for National Planning and Programs of the CSO.
- 2016: Member of the technical committee of the Cyprus Amateur Athletics Association.
- 2019 to date: Focal Point of CSO in the European Commission and the World Health Organization committee for HEPA.
- 2021 to present: president of the committee of the medical coverage fund, of the unlimited-term employees, of the CSO.

#### DISTINCTIONS

- Numerous times national champion in Cyprus and Greece in distance events (various categories).
- 1 silver and 1 bronze medal at the European Teams' Track & Field Cup.
- Silver medal at the world Gimnasiade High Schools Games.
- 1991 European Junior Champion, 3-km steeplechase.
- 1991. 2nd best athlete of the year in Cyprus from all sports.
- 1991. Best junior athlete of the year by the Cyprus Olympic Committee.



# Markidou Eliza

**Eliza Markidou** is the Senior Clinical Dietitian and Nutrition coordinator in the Ministry of Health AS Head of the department is responsible for all the Dietetics Departments in The Hospitals all over Cyprus as well as doe the policy making in the Nutrition Department for MOH. She collaborates with all Ministries on promoting policies towards creating a better Nutrition Department. She is the Focal Point for Nutrition for WHO and EU for Nutrition and Exercise.





# **Dr Michaelides Michalis**

BSc. MSc. PhD Scientific Director of the Cyprus Sports Medicine & Research Centre Incoming President of the Cyprus Sports Medicine Association





### Michaelidou Nikoleta

Nikoleta Michaelidou is a Clinical Dietitian, Nutritionist(RDN) and a Sports Nutritionist. Academic Background: Bachelor of Science with a major in Food and Nutrition, specialization in dietetics, from Southern Illinois University, USA (2001) She continued with aMasters degree in Nutrition and Dietetics with an emphasis in Nutrition and Physical Performance (Sports Nutrition) from Saint Louis University, USA where she was also granted the title of RD by the Commission on Dietetic Registration of USA upon the completion of the qualification exams (2004). In 2011 she received Certified Specialist in Sports Dietetics (CSSD) from Commission of Dietetic Association and in 2022 she completed the 2 years sports nutrition diploma degree from the International Olympic Committee.



She works at private practice since 2004 and since 2005 she is the sports nutritionist of the Cyprus Sports Research Center. From 2008-2018 she was the sports nutritionist of APOEL football team while from 2019 until present she is the sports nutritionist of the Cyprus Football Association and the national football teams. She has collaborations with many athletes of various sports. She is a speaker to various conferences and a collaboration with magazines. In 2007 she created the first healthy lifestyle camp for kids aged 10-14 in Cyprus and until present it continues with great success. She is an active member of the American Dietetic Association, American Overseas Dietetic Association, Cyprus Dietetic Association.



### **Prof Nicolaides Andrew**

**Andrew Nicolaides** is now Honorary Professor of Surgery at the University of Nicosia Medical School, Nicosia, Cyprus and Emeritus Professor of Vascular Surgery at Imperial College, London, UK. He is the Director of the Vascular Screening and Diagnostic Centre, Nicosia, Cyprus.

He is a graduate of Guy's Hospital Medical School, London University. He was the Professor of Vascular Surgery at Imperial College School of Medicine (1983–2000) and Medical Director of the Cyprus Institute of Neurology and Genetics (2001-2004).



He is chairman of the Board of the European Venous Forum. He is Past-President of the International Union of Angiology and Past-President of the Section of Measurement in Medicine of the Royal Society of Medicine, UK.

His research group is known internationally in several areas, which include noninvasive vascular screening and diagnostic investigation, and early detection and prevention of cardiovascular and venous disease. He is the co-author of over 700 original papers and the editor of 14 books.



### **Ntorzi Nicoletta**

Ms Nicoletta Ntorzi is a PhD candidate from Nicosia University. She studied at New York University getting a Bachelor of Nutrition and Food Studies with concentration in Dietetics. Once graduating from her Bachelor degree in 2004, she furthered her studies and completed a Masters in MS Clinical Nutrition. Also, in 2005 she was granted a position to start a Dietetic Internship in affiliation with St. Vincent's Hospital at Staten Island New York.

At present date, Nicolettas' accreditations and licenses include the following; Reregistered Dietitian Nutritionist (RDN), Certified Dietitian Nutritionist (CDN), Certification of training in children and adolescent weight management,



Certification of training in adult weight management and Licensed Clinical Dietitian in Cyprus Registration Board for Food Scientists. Today, Nicoletta practices the profession as private clinical dietitian and is an educator at University of Nicosia at the programmes of Nutrition and Dietetics. In February 2012, Nicoletta published her first book «Από το Ράφι στο Καρότσι», a guide how to shop smart in the supermarket. In June 2015, Nicoletta published her second book "Nutricef" or "Διατροσέφ'' which is available both in Greek and English. Nutrichef is a Gourmant Awarded book that has nutritional guidelines for the whole family and healthy and delicious recipes. Every recipe has it's nutritional analysis.

In conclusion, Nicoletta is currently at the board of the Cyprus Dietetic and Nutrition Association (CyDNA) since 2013 as an Assistant Secretary, board member of the Cyprus Registration Board for Food Scientists, Technologists and Dietitians, member of the American Dietetic Association (ADA) and a member of the American Overseas Dietetic Association (AODA).



### **Pahita Anna**

**Anna Pahita** is a RD Clinical Dietitian with many years of experience in both inpatient and outpatient care. She received her degree in 2006 from the University of Wales, Institute Cardiff in the United Kingdom where she gained practical experience in different hospitals of the U.K.

Anna keeps a private practice and also collaborates with nursing homes, rehabilitation centers, home care agencies and is part of the health care team of Nefrontida Hemodialysis Centre. Along with the rest of the health care team she identifies nutritional issues and provides dietetic advice.



In addition, as an Educator and part time lecturer at the University of Nicosia she has an active role in training new clinical dietitians.

Moreover, she is the secretary of the Cyprus Nutrition and Dietetic Association and member of the Health and Care Professions Council.



# **Dr Panayiotou Andrie**

**Dr Andrie Panayiotou** holds a BSc in Biology from the University of Patras (2003), a PhD in Molecular Biology (Risk Factors for Atherosclerosis) from the University of Cyprus (2008) and an MSc in Epidemiology from the LSHTM (2010). In 2011 she joined the Cyprus International Institute for Environmental and Public Health at CUT, as Lecturer, and she is currently Associate Professor in Public Health (2021-). She is an epidemiologist with special interest in prevention of cardiovascular disease and her work has focused mainly on risk factors and biomarkers (genetic, biochemical, environmental and social) for cardiovascular health, while she has recently expanded research work to include risk factors for the cardiorenal syndrome and vascular ageing



(arterial stiffness as a proxy for CVD), under the "common grounds for disease" hypothesis. Since 2011 she has established and heads the Cardiovascular Epidemiology and Genetics research lab at CII, currently housing 4 post-graduate research associates and 4 doctoral students. The CVEG lab coordinated several epidemiological studies, such as the DEpICT and CARTESIAN-CY and serves as coordinating center for the Cyprus National Registry for Familial Hypercholesterolemia (Cy-FH) for which AP is National Lead Investigator and member of the FH Studies Collaboration network. She participates in several large international consortia publishing joint results in high-impact journals such as Nature Genetics, JACC, BMJ and others (see list of publications). To date she has a total of 32 peer-reviewed journal papers, 33 conference abstracts and 2 book chapters. AP is a founding member of the Cyprus Atherosclerosis Society and elected Secretary (2019-), sits at the board of the National Bioethics Committee (second term) and heads the Cyprus Unit on Bioethics under the International Chair in Bioethics.



## **Dr Papakonstantinou Aimilia**

She is a tenured Assistant Professor in Nutrition and Metabolism and Director of the Laboratory of Dietetics and Quality of Life, Department of Food Science and Human Nutrition, Agricultural University of Athens (AUA). She graduated with a B.Sc as a dietitian and a M.Sc. in Dietetics and Nutrition from the Department of Foods and Nutrition, University of Georgia (UGA), U.S.A. She worked at UGA as a Research and Teaching Assistant (1998-2003). Upon her return to Greece, she received her PhD from the Department of Dietetics and Nutrition Sciences, Harokopio University, Athens and worked at the Lab of Clinical Dietetics as a Research and Teaching Assistant (2003-2006). In the years 2006-2013 she worked as a Dietitian at the 2nd Propaedeutic Pathology Clinic of University of



Athens, Research Unit of University of Athens and Diabetes Center, University Gneral Hospital "Attikon". In 2013 she was employed as a Lecturer in Nutrition and Metabolism. Her experience (clinical, teaching and research) is rich with many publications in peer reviewed International Journals, book chapters, research presentations at National and International Congresses, more than 200 invited talks at National and International Congresses and many undergraduate and graduate University courses that she teaches or participates. She is currently the Principal Investigator (PI) for AUA in two European Funded Projects, as Researcher in a European Horizon 2020 Program and 7 Programs from Private Company Funding. Her research interests are the effects of functional ingredients and foods and dietary patterns and habits on glucose metabolism, appetite, anthropometry and stress indices in healthy subjects, overweight, obese, women with polycystic ovary syndrome, people at high risk for developing diabetes or with diagnosed diabetes. Recently she investigates the effects of functional foods on More specifically, her research interests are on glycemic index of foods, glycemic responses, effects of foods on gut microbiota.

# **Dr Papalazarou Anastasios**

**Dr Papalazarou** has been a dietitian since 1996 and has his own private, clinical practice in Athens, Greece. He specializes in weight management and his approach to weight control focuses on cognitive behavioural modification techniques as opposed to a model of following a strict diet. Being Greek, he believes in the great value of the Mediterranean diet/lifestyle, values of which he tries to pass on to his clients as well. He is a spokesperson for brands that are aligned with his nutrition philosophy. He frequently makes guest appearances on TV and radio and writes articles for print and web media. He also has a strong academic background holding two MSc and a PhD degrees in nutrition. He is a scientific associate of Harokopio University of Athens.





# **Dr Papandreou Dimitrios**

**Dr Dimitrios Papandreou** is currently a Professor of Nutrition at University of Sharjah, UAE. He holds a Doctor of Medicine degree in Clinical Pediatric Nutrition from Medical School of Aristotle University of Thessaloniki, Greece and 2 Master degrees from Columbia University, New York, USA. He is a Registered Dietitian licensed from USA since 1998. He also holds the TLLL certificate from ESPEN and the FHEA from UK. Dr Dimitrios has published 116 full research articles in peer reviewed international journals with a total citation index of 13300, h-index 29 and i10 index of 57, respectively.



# **Dr Petrou Panayiota**

Dr Petrou Panayiota was born in Limassol, Cyprus, and she completed her Medical Degree at the Aristotle University of Thesssaloniki Medical School. She completed her specialization in Neurology at Hadassah medical centre in Jerusalem and received the Board Certification in Neurology in Israel and in Greece. Dr. Petrou is working at Hadassah since 2007 and is today a Senior consultant Neurologist and head of day care clinic at the Multiple sclerosis, Neuroimmunology and cell therapies unit and a senior lecturer in the Hebrew university hospital in Jerusalem. She is actively involved in several research studies and clinical trials in the field of Multiple sclerosis, Neuroimmunology and the use of Stem Cells in neurological diseases and has published numerous



papers in leading journals. She has been the co-Pl and Clinical Coordinator in the pivotal stem cell trials in MS and Amyotrophic Lateral Sclerosis completed at Hadassah HMO.

She has served as chairperson in Israel and International meetings and has given several invited lectures in International forums in the field of Neurology and Neuroimmunology.

She is a member of the Israel and Cyprus neurological association and is the treasurer of the Israel Neuroimmunolgy association.



## **Dr Philippou Christiana**

**Dr Christiana Philippou Charidemou** is an Inspector of Health Education (Home Economics) in Secondary Education in the Ministry of Education, Sports & Youth.

She is a Registered Clinical Dietitian and Sports Nutritionist. She earned the Doctorate in Professional Studies from Middlesex University, London, in Clinical Dietetics, Nutritional Science and Health Education and the PhD in Nutrition Education from the University of Nicosia.



She has worked for the Veterans Administration Hospital in USA and for the Athletic Department at SIU-C, USA.

She is an Adjunct Assistant Professor in the Nutrition and Dietetics Program at the EUC. She has been invited speaker in many seminars and conferences and she is an author / co-author of a number of books and scientific articles.

She is the Vice President of the CyDNA.

### **Dr Pieri Myrtiani**

**Dr Myrtani Pieri** holds a Ph.D. in Molecular Biology and Genetics from the University of Oxford, UK. She is currently serving as an Associate Professor in the Department of Life Sciences at the University of Nicosia. Her research focus is on gastrointestinal physiology and nutrient transport in various physiological and pathophysiological conditions. Furthermore, her interests include inherited kidney disorders and the role of the Unfolded Protein Response (UPR) in human pathology. To date, she has published 26 scientific papers (h-index of 14). She has been the recipient of various grants, serving either as a Principal Investigator or a partner. Dr Pieri is a member of various professional bodies such as the Physiological Society (PhySoc) and the American Physiological Society (APS).



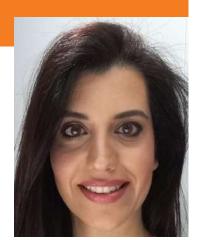
In 2022 Dr Pieri was elected as Vice-President of the Society of Biological Sciences in Cyprus. In 2011, she won the prestigious international competition, Famelab, solidifying her commitment to science outreach. As a co-founder of SciCo-Cyprus, an NGO based in Cyprus, Dr Pieri utilizes her expertise in communicating scientific issues to the public, with the aim of bridging the gap between science and society. An experienced educator, Dr. Pieri has been instrumental in designing and coordinating key courses in human anatomy and physiology for the Human Biology program and she has been involved in teaching at various programs at the University of Nicosia, including Medicine, Pharmacy, and Nursing. Her teaching approach integrates demonstrations and Problem-Based Learning (PBL) methodologies. Over the years, she has supervised Ph.D., M.Sc., and more than 50 undergraduate students, in addition to serving on various Ph.D. evaluation committees. Also, since 2023 Dr Pieri is serving as a member of the Department Postgraduate Programmes Committee (DPPC) of the Department of Life Sciences. Ethics is a cornerstone of her career as Dr. Pieri has served as the President of the Cyprus Evaluation Bioethics Committee for Biomedical Research. She has also been appointed to the National Committee for the Protection of Laboratory Animals Used in Biomedical Research, reflecting her commitment to upholding ethical standards within the scientific community. In 2020, Dr. Pieri joined the Global Young Academy (GYA), an international society of young scientists that focuses on Science Outreach and Science Diplomacy around the world and she is part of the Science Excellence and Science Education Working Groups with the focus of brining the best science education standards in higher education including PhD programs of study.



### Dr Poulia Kalliopi Anna

**Kalliopi Anna Poulia** is an Assistant Professor of Clinical Dietetics in the Department of Food Science and Human Nutrition in the Agricultural University of Athens. She has worked as a Clinical Dietitian-Nutritionist in the General Hospital of Athens "Laiko" from 2003 until 2021, with a special interest in

- nutrition in renal disease,
- · nutrition in geriatrics
- · cancer and neuro-endocrine tumors
- malnutrition and
- artificial nutrition, both enteral and parenteral.



She graduated from the Department of Science of Nutrition and Dietetics in Harokopio University of Athens and she attended the postgraduate programme leading to a Master of Science (Medical Science), with specialization in Clinical Nutrition in Glasgow University. In 2012 she fulfilled her PhD in Agricultural University of Athens, on the field of Hospital Infections and Malnutrition in the elderly.

She is the vice president of the Hellenic Medical Society of Clinical Nutrition and Metabolism (GrESPEN) and since 2011 she is a TLLL instructor for ESPEN. Since 2010 she is the Nutrition Consultant of the European Dialysis and Transplant Nurses Association/European Renal Care Association (EDTNA/ERCA).

She has contributed in several medical books regarding clinical nutrition in English and in Greek and she has participated in numerous local and international congresses as a guest speaker.

### **Preventi Fani**

Fani Preventi is a Dietitian-Nutritionist (graduated from Harokopeio University of Athens) with an MSc in Sports Nutrition (graduated from Harokopeio University of Athens). She is the President of the Hellenic Dietetic Association (HDA) since 2022 and participates in every educational action of the Association. From 2019-2022 she represented the HDA to EFAD and ICDA connecting the Greek dietitians with the European and the International Community of Dietitians. She is working as a private practice dietitian-nutritionist and she is dealing with incidences of weight control, obesity and sports nutrition in her everyday practice. She participates to a lot of workshops, webinars and conference as a speaker or as an attendee to constantly update her scientific knowledge regarding the topics of her interest. She encourages her patients to change their lifestyle by being more active and making healthy and sustainable eating choices.





### Dr Risvas Grigoris

**Dr Risvas** is a Public Health Dietitian, who has graduated from the Department of Dietetics-Nutrition Science of Harokopio University in Athens, Greece. He holds a Master from the Medical School of the University of Glasgow in Human Nutrition with specialisation in Public Health Nutrition and a second Master Kapodistrian University of Athens, in Health Services Management. Finally he has a PhD in Applied Dietetics-NutritionHarokopio University in Athens, Greece.





Agricultural University of Athens, as a lecturer, internship coordinator and researcher, as well as in private colleges and life long learning centers, up to the position of Academic Director. Since 2019 he has been working as a Programme Director in the Dietetics department of Aegean College, while he has become the Academic Director of the College since October 2023.

His authorship work includes participation in the editorial team of four academic books, as well as a Health Promotion Guide for Primary School Students. He also has 17 publications in international scientific journals, with 410 citations. He has participated as a speaker, chair and member of the organizing and scientific committee in Panhellenic and International Conferences.

He has been the General Manager of nutrimed since its foundation in 2006. He was President of the Hellenic Dietetic Association from 2010 to 2016, member of the National Nutrition Policy Committee of the Ministry of Health and Social Solidarity in Greece until 2014, and he is currently Vice-President of the European Federation of the Associations of Dietitians (EFAD).

### **Dr Sarigiannis Yiannis**

**Dr Yiannis Sarigiannis** is currently Associate Professor at the Department of Health Sciences of the University of Nicosia, Cyprus. He obtained his Diploma in Chemistry (1998) and his PhD in Medicinal Chemistry (2006) from the University of Patras, Patras Greece. Then he performed postdoctoral research at the Departments of Chemistry and Pharmacy at the University of Patras (Patras, Greece), whereas he was Visitor Scientist at the ISPA – Bari (Bari, Italy). Later, he worked as Senior Post-Doctoral Researcher at the Department of Pathology and Laboratory Medicine of the Perelman School of Medicine of the University of Pennsylvania, Philadelphia, USA (August 2014 – August 2016) in Complement Therapeutics under the supervision of Professor Lambris. He has

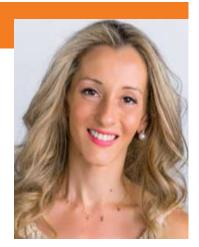


developed broad research activities covering mostly synthetic and analytical aspects of chemistry. He mainly works with bioinspired peptides with multiple applications as therapeutics, biomaterials and/or diagnostics. Research results have been published in 29 international refereed journals and 6 book chapters, more than 70 abstracts in International Conferences, 3 invited lectures, while he serves as a reviewer in several journals. He is also member of the European Venom Network (https://euven-network.eu/) working on the venoms of endemic species of Cyprus (Mesobuthus Cyprius and Macrovipera Lebetina Lebetina).



### **Dr Vassilopoulou Emilia**

Emilia Vassilopoulou holds a BSc on Nutrition and Dietetics from Harokopio University, a PhD from the Medical School of University of Athens (E.K.P.A.), during which she worked -through a Marie Curie scholarship- at the Institute of Food Research (IFR) and the University Hospital of Amsterdam (AMC), on food allergens characterization. During the post-doctoral research, she worked on eating behavior of allergic individuals and nutritional factors that contribute to immunonutrition in infants and children. Later she studied Psychology (BSc) at the Neapolis University of Paphos. She worked as an Assistant Professor of Nutrition and Dietetics at the University of Nicosia, Cyprus (2011-2018) and as an Assistant Professor of Nutrition and Dietetics at the International University of Greece (IHU) (since 2018).



She now collaborates as a Clinical Research Fellow with the Pediatric Unit, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico in Milan, Italy.

Her main research interests are relevant to allergic diseases and allergen characterization, immunomodulation through diet, effect of nutrition on neurological and mental/psychiatric disorders, and (disordered) eating behaviors. She has 100 relevant scientific publications in scientific journals with referees, 4 related chapters in books and 2 monographs, as well as participation in related research programs and scientific conferences.



### **Dr Vlahoyiannis Angelos**

Angelos Vlahoyiannis holds a PhD in Nutrition and Dietetics from the University of Nicosia. He earned honors from both the BSc. in Nutrition and Dietetics at TEI of Thessaly in Greece and the MSc. in Sports Nutrition/Dietetics and Nutritional Intervention at the University of Nicosia. After completing his postgraduate studies with honors, Angelos was recognized as the top student in the Sports Nutrition program and also earned the distinction of best postgraduate student across the entire School of Sciences and Engineering at the University of Nicosia. Currently, Angelos contributes to the University of Nicosia in multiple roles: as a part-time Lecturer, Sports Dietitian, and Internship Placement educator for the postgraduate program in Sports Nutrition. His specialization centers on the



physiological responses to carbohydrate periodization and its influence on sleep. Angelos has made significant academic contributions with 9 articles published in scientific journals. He has also shared his findings at various conferences, presenting 6 of his studies as posters and 3 as oral communications, both nationally and internationally. Notably, his master's thesis was awarded the first prize for poster communication at the 8th Conference on Biochemistry and Physiology of Exercise. His primary research interests delve into the relationship between diet and its effects on sleep architecture, physical fitness, and exercise performance.



### **Dr Vlassopoulos Antonis**

**Dr Vlassopoulos** is a Register Dietitian-Nutritionist with 10-year experience in the study of the role of foods and food processing on health. He has worked in academic institutions in Greece and the UK, is a member of expert boards, works as an FAO-consultant and has experience from private research institutes in the food industry. His research interests focus on the cardioprotective mechanisms of food bioactives, the creation of nutrition research infrastructures like food composition databases (branded and for specialized compounds) as well as the design and evaluation of food policy interventions in the general population and/or sensitive groups. He studies the pathways for successful nutrition policy interventions with an aim to combat chronic diseases and malnutrition in every



form. He is particularly interested in the study and promotion of the Mediterranean Diet beyond the food pyramid with a focus on eating and cultural habits, the study of the Mediterranean food chain and their role on human and planetary health. He is passionate about science communication and leadership and organizes training events (summer schools, masterclasses and seminars) for young scientists. He is a member of various professional and scientific bodies and an Honorary Research Fellow in the University of Glasgow. He currently serves as the Vice-President of the Hellenic Dietetic Association.

### **Dr Wakil Elie**

**Dr Elie Wakil** is a trainer and coach with multicultural experience spanning a period of 40 years.

His business experiences have been within a multicultural context across the globe (Eastern Europe, Russia, Africa, Near and Middle East, and Asia).

Dr Wakil's original educational background is in Pharmacy. He graduated from the French School of Pharmacy in Beirut and joined the Swiss pharmaceutical company, F. Hoffmann-La Roche Ltd. in 1982. He soon became a Training Manager and a Human Resource Consultant for the



Roche Pharma International division: The Training Centre he created in Nicosia in 1987 became a strategic link worldwide where Pharma International held offices. He was also acting as the "Country Manager" of Roche in Cyprus from 1998 to 2004; In his capacity, he was supervising all the local, commercial, and scientific pharmaceutical operations of G.A. Stamatis &Co Ltd, who are the local distributors for Roche in Cyprus.

As a knowledge enthusiast, Dr. Wakil is constantly in pursuit of learning, frequently attending various seminars in intercultural contexts as a means to add to his repertoire. He has enrolled in courses in management schools such as Ashridge, the London Business School in the UK, INSEAD in France as well as programmes on psychometrics (16PF-Institute of Personality and Ability Testing) and the 360° feedback process.

As a result of his extensive experience, Dr Wakil has written and facilitated numerous workshops based on developing relational fluency in the workplace in the fields of Human Relations, Leadership and Communications. The participants are mainly individuals who hold Managerial positions in their companies in an attempt to influence the work group culture from a top-down approach.

A qualified consultant for managing stress and a certified consultant for the 360° feedback process he mainly focuses on establishing a socially and emotionally intelligent group dynamic at work. The importance of wellbeing and inter relational fluency is key for "Human Relations" as Dr Wakil aims to enable companies achieve a safe space for happiness, productivity, and creativity – specifically targeting active businesspeople who work in positions that accompany high pressure environments.

He is also a certified practitioner in behavioural style analysis related to the International Ensize Dynamic Centre, an approved expert in Interpersonal Communication by the ETF (European Training Foundation, an EU agency based in Torino) and a certified professional Trainer as per the standardization requirements of the EU and Cyprus and approved Trainer-facilitator by The Cyprus Chamber of Commerce and Industry. In addition to working with individuals accompanying managerial positions, Dr Wakil also aims to promote the development of relational fluency amongst the younger population on the cusp of starting their careers. As a result, he is an accredited lecturer for the Master Curriculum in the St. Joseph University in Lebanon for both the Faculty of Sciences and the School of Pharmacy as well as an approved lecturer for the PhD curriculum at the Faculty of Medicine (Institut Superieur de Sante Publique).



### Prof Yamasaki Patrikiou Edna

**Professor Edna Yamasaki Patrikiou** (MSc, MD, PhD) is a trained medical doctor and holds an MSc and PhD in Biophysics (Neurobiology). She is a Professor at the Departments of Life and Health Sciences at the University of Nicosia in Cyprus.

She is currently the Vice-President for the Cyprus Society for Clinical Nutrition and Metabolism, the editor-in-chief of the PANR eJournal for Physical Activity, Nutrition and Rehabilitation and the Director of the Environmental Health Research Centre.



Previously Prof Yamasaki Patrikiou held the position of Vice Rector for Academic Affairs at the University of Nicosia, participating in a number of important administrative and academic committees, chairing the University Internal Quality Assurance Committee and the Erasmus Office, and being a member of the University of Nicosia Senate and Council. She was also an Ambassador of Tourism for the Republic of Cyprus until 2018.

She has established a fine record of teaching and research in her native Brazil, the USA and Cyprus, and supervision of MSc and PhD candidates in Brazil and in Cyprus. She is actively involved in local and international projects and has held grants from the Brazilian, Cyprus and European funding agencies. As a result of her involvement in research, she has published extensively in the area of the nervous system and in public health and the environment.

### **Prof Zampelas Antonis**

Antonis Zampelas is President of the Management Board of the Hellenic Food Authority for a second term (1st term 2008-2010), Member of the Management Board of the European Food Safety Authority (EFSA) and Professor of Human Nutrition at the Department of Food Science and Human Nutrition at the Agricultural University of Athens and He is also Honorary Professor, Division of Medicine, University College London (UCL) and Visiting Faculty, Department of Nutrition and Health, United Arab Emirates University.



After completing his doctoral dissertation, Prof. Zampelas worked at the University of Surrey as a Research Fellow, at the Ministry of Agriculture, Fisheries and Food, UK as a Senior Scientific Officer, and at Harokopio University, Department of Dietetics and Nutrition as Assistant Professor.

Prof. Zampelas has also served as the President of the Hellenic Society of Lipidology, Atherosclerosis and Vascular Diseases, Member of the National Nutrition Policy Committee of the Hellenic Ministry of Health, and Member of the Management Board of the European Atherosclerosis Society.

His research interests focus on the role of dietary patterns and nutrients in the prevention of chronic diseases with an emphasis on cardiovascular disease and obesity in children and adults.

For his contribution in the field of Human Nutrition, he was awarded the honorary distinction of Honorary Member of the Cyprus Association of Dietitians-Nutritionists (2021). In 1994 he received the Young Scientist of the Year Award by the British Nutrition Foundation and in 2021 and 2023 he was ranked in the Top 2% worldwide in an international database in health sciences (University of Stanford).

Google Scholar: <a href="https://scholar.google.com/citations?hl=el&user=0VdDWSEAAAAJ">https://scholar.google.com/citations?hl=el&user=0VdDWSEAAAAJ</a> Scopus: <a href="https://www.scopus.com/authid/detail.uri?authorld=7003905059">https://www.scopus.com/authid/detail.uri?authorld=7003905059</a>



OP 001	Eleftheria Panagiotou University of Nicosia, Cyprus	Evaluating the Influence of the Mediterranean Diet Adherence on allergic Diseases: A Systematic Review
OP 002	Theodoros Pavlidis University of Nicosia, Cyprus	Supplement Consumption according to sport among Cypriot Sportsmen/women: A cross-sectional & Longitudinal Study
OP 003	Maria Eleni Makreli University of Nicosia, Cyprus	Adherence to Mediterranean diet by patients with Idiopathic Inflammatory Bowel Disease (IBD) in Cyprus, Ascertainment of their Nutritional Habits and Association between Medscore and Body Mass Index (BMI)
OP 004	Christiana Mouski University of Nicosia, Cyprus	Investigation of the implementation of mindful eating by Cypriot and Greek adults using the mindful eating questionnaire (MEQ) and correlation of results with Body Mass Index and Serum Vitamin D
OP 005	Sotiria Kotopoulou University of Athens, Greece	Frequency of Fried Fish Consumption increases Dyslipidemia risk: Results from the Hellenic National and Health Survey (HNNHS)
OP 006	Theodoros Smiliotopoulos University of Athens, Greece	Fermented Food Consumption Cartograohy in the 4 Main European Regions using an online specifically derived fermented food Frequency Questionnaire (FFFQ) - A Pimento Cost Action
OP 007	Anastasia Pateli University of Nicosia, Cyprus	Eating Habits of People with Cancer diagnosis and Examination for adherence to the Mediterranean Diet: An Observational Pilot Study
OP 008	Dimitirs Papamichael University of Nicosia, Cyprus	Adherence to the Mediterranean Diet, cancer recurrence risk and disease-related fatigue levels in colorectal cancer survivors: A randomized prospective intervention study
OP 009	Farah Kadhem University of Nicosia, Cyprus	Exploring Eating Habits and Associated Factors in Cypriot Adults: A Comprehensive Investigation Using the EAT-26 Questionnaire (2023)
OP 010	Chrystalla Myriantheos University of Nicosia, Cyprus	Exploring dietary patterns and their Association with Nutrition and label use among Cypriot Adults: A Cross-sectional study

# ORAL PRESENTATIONS

## **Evaluating the Influence of the Mediterranean Diet Adherence on allergic Diseases: A Systematic Review**

Eleftheria Panagiotou<sup>1</sup>, Prof Eleni Andreou<sup>1</sup> and Stella A. Nicolaou<sup>1,\*</sup>

- <sup>1</sup> Department of Life Sciences, University of Nicosia; panagiotou.e1@live.unic.ac.cy
- <sup>1</sup> Department of Life Sciences, University of Nicosia; andreou.el@unic.ac.cy
- \* Correspondence: nicolaou.s@unic.ac.cy

### INTRODUCTION

Allergies are a common and increasing health problem affecting millions of people worldwide. In addition to genetic predisposition, this increase in allergic cases is likely to be attributed to air pollution, climate change, more time spent indoors, lack of physical activity, and alterations in people's eating habits. Recent evidence suggests that the Mediterranean diet may have a beneficial effect for people with allergies. The Mediterranean diet is based on whole grains, vegetables, beans, fruits, fish, olive oil, nuts, and seeds.

### AIMS

The purpose of this systematic review is to investigate the potential relationship between the Mediterranean diet and allergies.

### **METHODS**

Electronic databases PubMed, Scopus, Science Direct, and EBSCO were utilized to conduct this systematic review. The following keywords and their combinations were used with Boolean logic: ("allergy") AND ("Mediterranean Diet"). Initially, 623 studies were identified. After screening, 576 studies were excluded and 47 were available for eligibility. Finally, after full-text screening a total of 21 studies were included.

### RESULTS/DISCUSSION

The findings of this review showed a beneficial effect between the Mediterranean diet and allergies. It is interesting to note that almost all the studies found in this review focused on the correlation between asthma, rhinitis, eczema, and the Mediterranean diet.

### CONCLUSIONS

More high-quality studies are needed to confirm these findings and to determine the optimal composition of the Mediterranean diet for the prevention and management of allergic diseases.



## Supplement Consumption according to sport among Cypriot Sportsmen/women: A cross-sectional & Longitudinal Study

**Theodoros Pavlidis**, Prof E. Andreou, Dr E. Charidemou School of Life and Health Sciences, University of Nicosia, Cyprus

### **BACKGROUND**

It is well established that dietary supplements and ergogenic aids can enhance sports performance. It has also been proved that not all supplements are beneficial for all types of sports.

### **AIMS**

To investigate which supplements athletes in Cyprus consume depending on the sport they perform and to understand the athletes' motivation for supplement use, while indicating supplements that have been proven to enhance performance for different types of sports.

### **METHODS**

503 participants (average age: 27 years old, BMI of most participants: 18.5–24.9 kg/m2) completed a questionnaire, which consisted of 6 sections and 62 questions in total containing the following information: (1) general information about the study; (2) demographic and socioeconomic background; (3) Identification of eating habits; (4) water consumption; (5) use of nutritional supplements and ergogenic aids; (6) supplementation use after the lock down of Covid-19.

### RESULTS

The most common supplement used in cycling and football was caffeine, while the most frequent supplement used in CrossFit was protein powder. The most common motive for protein powder use was to increase or maintain muscle mass and strength. The most popular motive for creatine and caffeine utilization was to increase energy levels (decrease the feeling of fatigue).

### **DISCUSSION**

In accordance with the literature, caffeine seems to provide various benefits concerning performance in both cycling and football. In contrast, protein powder does not seem to offer any beneficial effects for CrossFit. Regarding protein powder, research supports that among its several performance enhancing effects, is the ability to increase or maintain muscle mass and strength. Concerning creatine and caffeine, one of many performance enhancing effects they induce, is decreased feeling of fatigue.

### CONCLUSION

The majority of Cypriot and Greek sportsmen/women who practice football and cycling tend to make educated choices regarding their supplementation use concerning performance enhancing effects. In contrast, most CrossFit practitioners do not consume supplements beneficial to the enhancement of performance. The participants' motive for supplement use (protein powder, creatine, and caffeine) seems to comply with existing literature concerning the beneficial performance effects these supplements induce.

### **KEYWORDS**

Supplements; ergogenic aids; sports; athletes; football; cycling; CrossFit; performance.

Reference (this is a small part of the original reference list)

- 1. 'Herbal and Dietary Supplements' (2012) LiverTox: Clinical and Research Information on Drug-Induced Liver Injury Bethesda (MD):.
- 2. D.T. Thomas, K.A. Erdman and L.M. Burke (2016) 'American college of sports medicine joint position statement. Nutrition and athletic performance', Medicine & Science in Sports & Exercise, 48(3), pp. 543-568.
- 3. Garthe, I. and Maughan, R.J. (2018) 'Athletes and Supplements: Prevalence and Perspectives', International Journal of Sport Nutrition and Exercise Metabolism, 28(2), pp. 126-138. doi: 10.1123/ijsnem.2017-0429.
- 4. López-Torres, O., Rodríguez-Longobardo, C., Capel-Escoriza, R. and Fernández-Elías, V.E. (2022) 'Ergogenic Aids to Improve Physical Performance in Female Athletes: A Systematic Review with Meta-Analysis', Nutrients, 15(1), pp. 81. doi: 10.3390/nu15010081. doi: 10.3390/nu15010081.
- 5. Porrini, M. and Del Bo', C. (2016) 'Ergogenic Aids and Supplements', pp. 128-152.



Adherence to Mediterranean diet by patients with Idiopathic Inflammatory Bowel Disease (IBD) in Cyprus, Ascertainment of their Nutritional Habits and Association between Medscore and Body Mass Index (BMI)

Maria Eleni Makreli, Prof Andreou Eleni School of Life and Health Sciences, University of Nicosia, Cyprus

### **BACKGROUND**

Until today there are not many studies investigating the adherence patients with Idiopathic Inflammatory Bowel Disease (IBD) have in Mediterranean diet (MedDiet) especially for the Cypriot population.

### **AIMS**

Our primary aim was to investigate the adherence patients with IBD in Cyprus, have in Mediterranean diet and contribute to this topic with new scientific results. Secondary aims are the ascertainment of their nutritional habits and to investigate any associations among MEDSCORE (a tool for measuring the adherence to MedDiet) and Body Mass Index (BMI). Methods: In order to conduct our research we provided our online questionnaire through social media, which included questions for participants medical history regarding IBD, some questions based on demographical characteristics, nutritional habits, their perception for their weight and the 14-questions of MEDSCORE. The questionnaire was open for 1 month. Results: 52 participants were enrolled in the study [11 with Crohn's disease (CD), 9 with Ulcerative Colitis (UC), 5 without diagnosis but with IBD symptoms and the rest had no physical association with IBD, they were however interested in the topic due to the educational purpose our research had. The majority of the participants with or without IBD (29%) had medium adherence to MedDiet, whereas there was a positive association among MEDSCORE and BMI. Participants with high adherence to MedDiet had BMI levels outside the normal ranges (18.5-24.9kg/m^2) (26,33 kg/m^2 average BMI of participants with very good adherence, 21,65 kg/m^2 in participants with lower adherence to Mediterranean diet). Their nutritional habits are in accordance with their dietary choices however they seem to lack nutritional education.

### **DISCUSSION**

Small sample size seems to interfere with the reliability of our results, however the fact that our results indicate good internal consistency and some of them are in accordance with the literature indicate potential in our research.

### CONCLUSION

Further research needs to be conducted regarding nutrition and especially MedDiet and IBD in order to have clear associations and conclusions.



### Reference (Representative part of the original Reference List)

- 1. Caio, G., Lungaro, L., Caputo, F., Zoli, E., Giancola, F., Chiarioni, G., De Giorgio, R. and Zoli, G. (2021) 'Nutritional Treatment in Crohn's Disease', Nutrients, 13(5), pp. 1628. doi: 10.3390/nu13051628. doi: 10.3390/nu13051628.
- 2. Chicco, F., Magrì, S., Cingolani, A., Paduano, D., Pesenti, M., Zara, F., Tumbarello, F., Urru, E., Melis, A., Casula, L., Fantini, M.C. and Usai, P. (2021) 'Multidimensional Impact of Mediterranean Diet on IBD Patients', Inflammatory bowel diseases, 27(1), pp. 1-9. doi: 10.1093/ibd/izaa097.
- 3. Damas, O.M., Garces, L. and Abreu, M.T. (2019) 'Diet as adjunctive treatment for inflammatory bowel disease: review and update of the latest literature', Current treatment options in gastroenterology, 17, pp. 313-325.
- 4. Merra, G., Noce, A., Marrone, G., Cintoni, M., Tarsitano, M.G., Capacci, A. and De Lorenzo, A. (2020) 'Influence of Mediterranean Diet on Human Gut Microbiota', Nutrients, 13(1), pp. 7. doi: 10.3390/nu13010007. doi: 10.3390/nu13010007.
- 5. Radziszewska, M., Smarkusz-Zarzecka, J., Ostrowska, L. and Pogodziński, D. (2022) 'Nutrition and Supplementation in Ulcerative Colitis', Nutrients, 14(12), pp. 2469. doi: 10.3390/nu14122469. doi: 10.3390/nu14122469.



Investigation of the implementation of mindful eating by Cypriot and Greek adults using the mindful eating questionnaire (MEQ) and correlation of results with Body Mass Index and Serum Vitamin D

Mouski Christiana, Prof Eleni Andreou University of Nicosia, Cyprus

### INTRODUCTION

Obesity is still one of humanity's chronic pandemics with various complications and Cyprus and Greece are not on the track and obesity and overweight percentages are high. Treatment can be challenging and the main strategies include, decrease calorie intake, increased physical activity and behavior modification. Mindful eating (ME) is a relatively a recent topic of interest which is included in the behavior modification strategy. Scientific research proposes that ME is likely to have positive impact on problematic eating behaviors such us binge eating and in weight management. Therefore, would be advantageous to be incorporated in weight management advice to the population. The main purpose of this study is to examine the hypothesis if ME could be an advantageous tool for public health mainly through its relation to BMI. Also, to our knowledge there has not been research investigating the potential relation of serum vitamin D on ME. The main aim of this study is to identify the prevalence of ME (and its scales) in adults in Cyprus and Greece its relation to Body Mass Index (BMI) and the potential relation with serum vitamin D.

### METHODOLOGY

This is a longitudinal, observational, cross-sectional study among N = 174 (sample of this study 2023) and N = 438 (total sample till now) Cypriot and Greek adults who completed an online self-reported questionnaire including demographics, anthropometrics, nutritional habits, the MEQ and questions regarding vitamin D (only for N = 174).

### **RESULTS**

ME Mean score was  $2.48 \pm 0.35$  (N =174) and  $2.68 \pm 0.35$  (N = 438), where most of the sample 83.91 % (N = 174) and 77.2 % (N =438) found to be medium "mindful eaters". BMI was found to be significantly related to ME p = 0.007 (N = 174) p < 0.001 (N =438). None relation between ME with serum vitamin D was found but ME was found to be correlate with vitamin D supplementation p = 0.011. A difference between those who seasonally took supplementation and those who didn't take any was noticed p = 0.043. A percentage of 57.5% of the sample answered "no" to whether they take or no a vitamin D supplement and 63.8 % reported that they haven't had a vitamin D test in the last 12 months.

### CONCLUSIONS

In conclusion ME found to be related with BMI, so it is recommended to evaluate its addition among the behavioural changes for the prevention and treatment of obesity. The lower scores in the external and awareness scale indicate the need for interventions to the public in order to increase the relevant practises and alleviate this issue. In addition, it is recommended to educate the public about vitamin D. Its sources, the diagnosis of deficiency and the evaluation of the possible use of supplements according to one's lifestyle. Further research is needed.

### KEYWORDS

Mindfulness, "Mindful Eating", BMI, Vitamin D, Obesity, Overweight.

# Frequency of Fried Fish Consumption increases Dyslipidemia risk: Results from the Hellenic National and Health Survey (HNNHS)

Sotiria Kotopoulou<sup>1,2</sup>, Antonis Zampelas<sup>1,2</sup>, Emmanuella Magriplis<sup>1</sup>

<sup>1</sup>Department of Food Science and Human Nutrition, Agricultural University of Athens, 11855 Athens, Greece <sup>2</sup>Hellenic Food Authority, 11526 Athens, Greece

### INTRODUCTION

Dyslipidemia (DYS) is a major risk factor for cardiovascular disease (CVD)1, affecting more than 50% of Greek adults2. Although fish consumption has been reported to reduce DYS risk, results remain controversial. In Greece, fried fish is a significant source of trans-fatty acids (TFA), particularly among older adults (≥51 years)3, which may impact the protective effect that its consumption exerts.

### AIM

To investigate the potential association of fried fish consumption with DYS among adult Greeks.

### **METHODS**

Study participants were drawn from the HNNHS national representative sample (n=3742, ≥19 years, 59.3% females). The fish consumers (n=668, 17.9%) and fried fish consumers (n=139, 20.8% of fish consumers) were identified. Quantity and frequency of fish intakes were determined based on the 2-24h recalls and the Food Propensity Questionnaire (FPQ). Multivariable logistic analyses were used to evaluate possible associations with DYS.

### RESULTS/DISCUSSION

The median fish intake was 151.0 (81.0, 227.5) gr/day, ranging from 150.0 (80.0, 213.3) gr/day as non-fried to 152.0 (101.0, 252.0) gr/day as fried. 66.9% (n=93) of participants consumed fried fish less than once a month. 56.1% (n=78) of fried fish consumers were ≥51 years and had higher median energy intake, total TFA (%energy), and total salt intake, with the majority ingesting ≥2300 mg/day (p for all<0.05) compared to non-fried fish consumers. Although eating fried fish slightly decreased the odds of having DYS [OR: 0.9, 95% CI: 0.82, 0.98], consuming fried fish 1-3 times/month increased the odds of having DYS significantly [OR: 3.6, 95% CI: 1.19, 10.70]. No significant associations were identified with the quantity or frequency of non-fried fish consumption.

### CONCLUSION

More frequent fried fish consumption increased the odds of having DYS. Our findings suggest that, in order to protect public health, consumer advocacy efforts should not only target dietary guidelines but also fish cooking methods.

### Reference

- 1. Du Z, Qin Y. Dyslipidemia and Cardiovascular Disease: Current Knowledge, Existing Challenges, and New Opportunities for Management Strategies. J Clin Med. 2023;12(1):363. doi:10.3390/jcm12010363
- 2. Stergiou GS, Ntineri A, Menti A, et al. Twenty-first century epidemiology of dyslipidemia in Greece: EMENO national epidemiological study. Hellenic J Cardiol. 2023;69:1-8. doi:10.1016/j.hjc.2022.10.002
- 3. Magriplis E, Marakis G, Kotopoulou S, et al. Trans fatty acid intake increases likelihood of dyslipidemia especially among individuals with higher saturated fat consumption. Rev Cardiovasc Med. 2022;23(4):130. doi:10.31083/j.rcm2304130



# Fermented Food Consumption Cartograohy in the 4 Main European Regions using an online specifically derived fermented food Frequency Questionnaire (FFFQ) - A Pimento Cost Action

Theodoros Smiliotopoulos<sup>1</sup>, Michail Syrpas<sup>2</sup> and Emmanuella Magriplis 1\*

- \*Correspondence: emagriplis@aua.gr; Tel.: +30-210-5294701
- <sup>1</sup>Laboratory of Dietetics and Quality of Life, Department of Food Science and Human Nutrition,

Agricultural University of Athens, Iera Odos 75, 118 55 Athens, Greece.

<sup>2</sup>Department of Food Science and Technology, Faculty of Chemical Technology,

Kaunas University of Technology, Radvilėnų pl. 19, 50254 Kaunas, Lithuania.

### INTRODUCTION

In the past years, the potential health benefits of various fermented foods, the microorganisms contributing to the fermentation process, and the resulting fermentation metabolites have been of great interest<sup>(1)</sup>. Nevertheless, assessing the potential health benefits of many fermented foods remains in many cases understudied, and primarily requires consumption data.

### AIM

The main aim of this program is the collection and data analysis of fermented food consumption, using predefined food substrates, in the four main European Regions, as defined by EuroVoc. The project is carried out in conjunction with PIMENTO COST Action (CA20128)<sup>(2)</sup>.

### METHODS

An online Fermented Food Frequency Questionnaire (FFFQ) was developed by the core team of the project including 12 categories of fermented food groups, to consider the breadth of most fermented foods. Details on various subtypes of each broader fermented food group was then assessed. For example, consumption of fermented dairy, then explicitly unfolds to yogurt, fermented milk and various cheese types to further differentiate on the acting microorganism and fermentation process. Frequency and specific quantity, based on validated picture books and grids were used during FFFQ formulation. The final FFFQ was launched online in October's second half and with adult participants residing in Europe, and having web access being included. To assure representativeness, a predefined sampling frame was formulated, using STEP procedure. A minimum of 1536 required from each European Region for representativeness and 80% study power. A validation process will be undertaken to assure the repeatability and accuracy of the FFFQ<sup>(3)</sup>. Main consumers characteristics will also be assessed.

### RESULTS/DISCUSSION

This collaborative action for the first time will report consumption data regarding fermented food products in the European population and can be used in the future for more precise study derivations.



### CONCLUSIONS

The results are expected with great anticipation, as there are no specific recommendations on fermented foods' consumption in Europe<sup>(4)</sup>.

### References

- 1. Marco ML, Heeney D, Binda S et al. (2017) Health benefits of fermented foods: microbiota and beyond. Curr Opin Biotechnol 44, 94-102.
- 2. PIMENTO (2021) Promoting Innovation of ferMENTed fOods (PIMENTO)-CA20128. https://www.cost.eu/actions/CA20128/ (accessed October 15 2023
- 3. Willett W, Willett W (2012) 1 Overview of Nutritional Epidemiology. In Nutritional Epidemiology, pp. 0: Oxford University Press.
- 4. Chilton S, Burton J, Reid G (2015) Inclusion of Fermented Foods in Food Guides around the World. Nutrients 7, 390-404.



# Eating Habits of People with Cancer diagnosis and Examination for adherence to the Mediterranean Diet: An Observational Pilot Study

**Anastasia V. Pateli,** Prof Eleni Andreou University of Nicosia, Cyprus

### INTRODUCTION

Cancer is a disease that affects millions of people, being one of the leading causes of death worldwide. Proper nutrition can relieve cancer patients from the onset of symptoms, improve their health throughout their treatment and adequately support survivors after treatment. The World Cancer Research Fund and the American Cancer Research Institute find that diets rich in fruits and vegetables significantly reduce the risk of several cancers. In the last decade, several reports indicate a protective role of the Mediterranean Diet against neoplastic diseases.

### **METHODS**

This study is an observational pilot study, We created a questionnaire, with data from previous surveys, therefore, it is secondary data. However, it is important to note that a category of questions is primary and was created by the research team. The sample of the study were adults from Cyprus and Greece with history of cancer. The results were analyzed by the SPSS 2017 statistical program.

### **RESULTS**

The main results of the present study were that the average BMI of the participants was 26.6 kg/m2, although there were interesting data regarding weight fluctuations before, during and after the disease. The main side effects of the treatments following were fatigue (55.3%) and loss of appetite (41.9%). 85.1% did not have a dietitian during and after the disease, while 74.5% would like to have one. The average score obtained from the MED-Score for the attachment of the participants to the Mediterranean Diet was 7.26.

### **CONCLUSIONS**

Based on the results of the present study, it is confirmed that nutrition can play a decisive role in the treatment of cancer, but also its symptoms. Therefore, the role of the dietitian is essential and all cancer patients should have access to it.

# Adherence to the Mediterranean Diet, cancer recurrence risk and disease-related atigue levels in colorectal cancer survivors: A randomized prospective intervention study

*Mr Demetris Papamichael,* Prof Eleni Andreou, Dr Evelina Charidemou and Prof Kyriacos Felekkis (PI)

Colorectal cancer is one of the most prevalent malignancies worldwide, and its survivors often face a range of physical and psychological challenges post-treatment. Among these challenges, the risk of cancer recurrence and the burden of cancer-related fatigue are of particular concern. While advancements in medical treatments have improved survival rates, it is becoming increasingly evident that lifestyle factors, such as diet, play a crucial role in the long-term health and well-being of colorectal cancer survivors.

The Mediterranean Diet, characterized by a high intake of fruits, vegetables, whole grains, legumes, and olive oil, along with moderate consumption of lean proteins, particularly fish, and a limited intake of red meat and saturated fats, has garnered substantial attention for its potential health benefits. Numerous studies have highlighted its positive impact on reducing the risk of chronic diseases, including cardiovascular disease, type 2 diabetes, and cancer.

However, limited research has explored the potential benefits of the Mediterranean Diet in the context of cancer survivorship, specifically its effects on cancer recurrence risk and the management of cancer-related fatigue. This prospective intervention study seeks to address this gap in knowledge by investigating the impact of adherence to the Mediterranean Diet on colorectal cancer survivors.

The aim of this study is to assess whether a randomized dietary intervention, focusing on the Mediterranean Diet, can reduce the risk of cancer recurrence and improve levels of cancer -related fatigue among colorectal cancer survivors. This research is grounded in the understanding that lifestyle factors, including diet, can significantly influence the long-term health and quality of life for cancer survivors.

In this study, it will be provided an overview of the rationale for examining the relationship between diet and cancer survivorship, summarize key findings from existing literature on the Mediterranean Diet and cancer prevention, and outline the objectives and methods of the prospective intervention study.

### References

- Álvarez-Bustos, A., de Pedro, C.G., Romero-El as, M., Ramos, J., Osorio, P., Cantos, B., Maximiano, C., Méndez, M., Fiuza-Luces, C., Méndez-Otero, M., Mart n, S., Cebolla, H. & Ruiz-Casado, A. 2021, "Prevalence and correlates of cancer-related fatigue in breast cancer survivors", Supportive Care in Cancer, 29.11 (2021): 6523-6534
- 2. Baguley, B.J., Skinner, T.L., Jenkins, D.G. & Wright, O.R.L. 2020, "Mediterranean-style dietary pattern improves cancerrelated fatigue and quality of life in men with prostate cancer treated with androgen deprivation therapy: A pilot randomised control trial", Clinical Nutrition, vol. 40, no. 1, pp. 245-254
- 3. Divella, R., Daniele, A., Savino, E. & Paradiso, A. 2020, "Anticancer Effects of Nutraceuticals in the Mediterranean Diet: An Epigenetic Diet Model", Cancer genomics & proteomics, vol. 17, no. 4, pp. 335-350
- 4. Dulskas, A., Gaizauskas, V., Kildusiene, I., Samalavicius, N.E. & Smailyte, G. 2020, "Improvement of Survival over Time for Colorectal Cancer Patients: A Population-Based Study", Journal of clinical medicine, vol. 9, no. 12, pp. 4038. doi: 10.3390/jcm9124038.
- 5. Takahashi, S. 2022, "Fatigue and its management in cancer patients undergoing VEGFR-TKI therapy", vol. 21, no. 3, pp. 397-406



# Exploring Eating Habits and Associated Factors in Cypriot Adults: A Comprehensive Investigation Using the EAT-26 Questionnaire (2023)

**Farah Kadhem**<sup>1</sup>, Nayia Andreou<sup>2</sup>, Christoforos Christoforou<sup>1</sup>, Christoforos Giannaki<sup>1</sup>, Prof Eleni Andreou<sup>1</sup> Life Science Department, School of Life and Health Sciences, University of Nicosia, Cyprus <sup>2</sup>Surrey University, UK

### INTRODUCTION

This study delves into the eating habits and behaviors of Cypriot adults aged 18 and above, categorizing them into Low Risk (LR) or High Risk (HR) for developing eating disorders (ED) based on scores from the EAT-26 questionnaire. Additionally, the research aims to assess the influence of water consumption and sleep on individuals at HR for ED, exploring correlations with stress, exercise, and other pertinent factors. The study was a collaboration of University of Nicosia and University of Surrey.

Eating disorders represent severe mental health conditions intertwined with persistent challenges in an individual's eating behaviors, feelings, and thoughts. With an escalating global trend in body image dissatisfaction and increasing cases of disordered eating, understanding these issues is crucial for mental health intervention. Athletes and individuals engaged in regular exercise face elevated risks due to the intersection of dietary habits with their performance and training programs. Recognizing these risks is vital for proactive care and education, potentially reducing ED development and facilitating early intervention for sustained recovery.

### **METHODS**

This ongoing observational cross-sectional longitudinal study utilizes a comprehensive approach, incorporating the EAT-26 questionnaire, 24-hour dietary recall, assessments of body image concerns, social media impact, stress levels, and sleep patterns. A random selection of participants aged 18 and above, totaling 1500 individuals, were included in the study. EAT-26 scores determined the HR (20 or above) and LR (20 or below) groups, with statistical analyses aligned with study objectives, yielding results with a significance level below 0.05.

### RESULTS

Of the participants, 24.1% (N=349) fell into the HR group, while 75.9% (N=1100) were classified as LR. Behavioral attitudes exhibited a highly significant correlation with both groups (p-value < 0.001). Despite no significant findings related to water consumption and sleep efficiency, strong correlations emerged between gender, body satisfaction, social media impact, and both HR and LR groups. Exercise significantly correlated with body image satisfaction and the dieting subscale (p-value < 0.001).

### CONCLUSION

Positive correlations were observed between body image concerns and exercise behaviors, while social media influence varied significantly between HR and LR groups. No conclusive results were found regarding sleep efficiency and hydration in participants from both groups, underscoring the need for larger-scale studies to validate these findings.

### **KEYWORDS**

eating disorders, adults, prevalence, EAT-26 questionnaire, social media, body dissatisfaction, body image, dehydration, sleep efficiency, exercise, nutrients.

## **Exploring dietary patterns and their Association with Nutrition and label use among Cypriot Adults: A Cross-sectional study**

**Chrystalla Myriantheos**<sup>1</sup>, Prof Eleni Andreou<sup>1</sup>, Phroso Hadjilucas<sup>1</sup>, Christoforos Christoforou<sup>1</sup>, Antonis Zampelas<sup>1,2</sup>

<sup>1</sup>Life Sciences Department, University of Nicosia, Cyprus

<sup>2</sup>Food Science and Human Nutrition Department, Agricultural University of Athens, Greece

### INTRODUCTION

This study investigates the Principal Component Analysis (PCA) derived dietary patterns among Cypriot adults and explores the relationship between these patterns and the utilization of nutrition labels. As dietary habits play a crucial role in overall health, understanding the factors influencing food choices, including the use of nutrition labels (NLU), is essential for promoting informed decision-making and improving public health.

### METHODS

A representative sample of Cypriot adults participated in this study, providing comprehensive dietary information through a validated survey and self-reported data. The study also assessed the frequency and determinants of nutrition label use, examining factors that may influence label utilization.

### RESULTS

Preliminary findings reveal diverse dietary patterns within the Cypriot adult population; the Mediterranean-like pattern explaining the highest variance (10.3%), the meat and fish (9.2%), the unhealthy (9%), and the easy-prepared (7.4%).

Males are associated with the Meat and fish pattern (p<.025), younger age with differences in the Mediterranean-like (p=.029), the meat and fish (p=.007), and the unhealthy (p=.005) patterns, education up to High school with the meat and fish (p=.014) and the unhealthy (p=.001) patterns, and high physical activity with the Mediterranean-like pattern (p<.001). Additionally, NLU prevalence (65.9%) is examined. Associations of NLU with gender (p<.005), education (p<.003), physical activity (p<.007), having CVD (p<.037) and associations of NLU with the Mediterranean-like (p<.001), and the unhealthy (p<.001) patterns are revealed.

### DISCUSSION

The conference presentation will delve into the implications of the observed dietary patterns and their potential impact on public health. We will discuss the role of nutrition labels as tools for guiding food choices and their contribution to the adoption of healthier dietary habits. The findings contribute to the broader understanding of factors influencing dietary behaviors among Cypriot adults and can inform targeted interventions to promote healthier eating habits.

### CONCLUSION

This cross-sectional study sheds light on the complex interplay between dietary patterns and the utilization of nutrition labels among Cypriot adults. The insights gained from this research have implications for public health initiatives aimed at improving nutrition awareness, facilitating healthier food choices, and ultimately promoting overall well-being in the Cypriot population.

### **KEYWORDS**

Dietary patterns, Cypriot adults, Cross-sectional, Nutrition label use, Mediterranean diet, Public health, Dietary habits, Informed decision-making, Nutrition education



PP 001	Pavlina Theodorou University of Nicosia, Cyprus	Adherence to the Mediterranean diet by adults worldwide and its correlation with obesity. Systematic Review.
PP 002	Tamara Al Abdi University of Nicosia, Cyprus	The effect of Personality on Chrononutrition
PP 003	Dionysia Argyropoulou University of Athens, Greece	Analysis of Nutritional Habits in Elderly with Type II Diabetes Mellitu
PP 004	Dionysia Voutou University of Nicosia, Cyprus	Presentation and Nutritional Approach of Celiac Disease: A Literature
PP 005	Panagiotis Siekkeris University of Nicosia, Cyprus	A systematic Review of the Usability Methods and other factors in the Evaluation of online Health Applications for Type 1 Diabetes
PP 006	Christina Kritikou Nicoletta Charalambous Cyprus Ministry of Education, Sports and Youth	Nutrition Guidelines and Initiatives at the Cyprus Ministry of Education, Sports, and Youth
PP 007	Anna C. Michail University of Nicosia, Cyprus	What we already know for PLADO regimens in CKD patients: Review
PP 008	Nayia Andreou University of Surrey, UK	Evaluation of the risk of eating disorders among Cypriot adults, associated with gender, BMI and body satisfaction. Pilot Study
PP 009	Savoulla Ghlobrial University of Nicosia, Cyprus	The meaning of Professional Autonomy in a Multi-professional Health Setting

# POSTER PRESENTATIONS

## Adherence to the Mediterranean diet by adults worldwide and its correlation with obesity. Systematic Review

Theodorou P., Andreou E

Life Sciences Department, School of Life and Health Sciences, University of Nicosia, Cyprus

### INTRODUCTION

Obesity, currently classified as a disease and considered among the spectrum of eating disorders, is characterized by an excessive accumulation of body fat (>25%), leading to inflammation and the onset of related diseases such as cardiovascular diseases, atherosclerosis, and Type II Diabetes. The consumption of high-energy and saturated fat foods can contribute to irreversible damage if not addressed. The Mediterranean diet emerges as a pivotal model, offering compelling remedies for mitigating health issues associated with obesity.

### OBJECTIVE/AIM

This systematic review explores interventions involving the Mediterranean diet in the context of obesity.

#### **METHOD**

A comprehensive search was conducted using narrative and systematic approaches across scientific databases, including PubMed, Scopus, and Science Direct. Search filters comprised keywords such as "Mediterranean diet," "Dietary index," "obesity," and "obese adults." Restrictions included English-language articles, studies on obese adults aged 19-44, and sources published within the last 10 years. Five articles meeting the eligibility criteria utilized the compliance of the Mediterranean diet as an intervention for weight loss.

### RESULTS/DISCUSSION

The five studies demonstrated a positive correlation between adherence to the Mediterranean diet and obesity reduction. All 9434 participants exhibited significant weight loss following a Mediterranean-style diet. However, challenges in low-equivalent countries and limited nutritional education hinder adherence, increasing the risk of cardiovascular and metabolic diseases. Community programs tailored to socio-economic contexts could enhance adherence. Despite studies meeting a validity score exceeding 10, the small sample sizes in two studies necessitate further research to corroborate findings.

### CONCLUSION

This systematic review underscores the potential benefits of the Mediterranean diet in reducing central obesity and associated chronic diseases such as cardiovascular diseases and Type II Diabetes. Addressing obesity through this dietary approach may also contribute to preventing preterm birth and related disorders indirectly linked to obesity.

### **KEYWORDS**

Mediterranean diet, Dietary index, obesity, obese adults.



### References

- 1. Accardi, G., Aiello, A., Gargano, V., Gambino, C.M., Caracappa, S., Marineo, S., Vesco, G., Carru, C., Zinellu, A. & Zarcone, M. 2016, "Nutraceutical effects of table green olives: a pilot study with Nocellara del Belice olives", Immunity & Ageing, vol. 13, no. 1, pp. 1-6.
- 2. Andreou, E., Hajigeorgiou, P.G., Kyriakou, K., Avraam, T., Chappa, G., Kallis, P., Lazarou, C.H., Philippou, C.H., Christoforou, C. & Kokkinofta, R. 2012, "Risk factors of obesity in a cohort of 1001 Cypriot adults: An epidemiological study", Hippokratia, vol. 16, no. 3, pp. 256.
- 3. Apovian, C.M. 2016, "Obesity: definition, comorbidities, causes, and burden", .
- 4. Bacopoulou, F., Landis, G., Rentoumis, A., Tsitsika, A. & Efthymiou, V. 2017, "Mediterranean diet decreases adolescent waist circumference", European journal of clinical investigation, vol. 47, no. 6, pp. 447-455.
- 5. Barbaresko, J., Koch, M., Schulze, M.B. & Nöthlings, U. 2013, "Dietary pattern analysis and biomarkers of low-grade inflammation: a systematic literature review", Nutrition reviews, vol. 71, no. 8, pp. 511-527.
- Benetou, V., Trichopoulou, A., Orfanos, P., Naska, A., Lagiou, P., Boffetta, P. & Trichopoulos, D.t. 2008, "Conformity to traditional Mediterranean diet and cancer incidence: the Greek EPIC cohort", British journal of cancer, vol. 99, no. 1, pp. 191-195.

### The effect of Personality on Chrononutrition

Tamara Al Abdi 1, Alexandros Heraclides 2, Alexia Papageorgiou 3, Elena Philippou 3

- <sup>1</sup> Qatar University, Doha Qatar
- <sup>2</sup> European University, Nicosia Cyprus
- <sup>3</sup> University of Nicosia, Nicosia Cyprus

### INTRODUCTION

The COVID-19 lockdown has had a significant impact on people's lives worldwide.

### AIM

This study aimed to investigate the effect of personality on chrononutrition during the COVID-19 lockdown.

### METHODS

Using a cross-sectional design, a convenient sample of 543 adults in Qatar completed an online questionnaire using validated tools to assess personality and chrononutrition behaviors during the first COVID-19 lockdown.

### RESULTS

Participants scoring high in openness were more likely to eat at night (mean difference (MD) = 0.41, 95% confidence interval (CI): 0.10, 0.72) compared to those scoring high in agreeableness, while those scoring high in extraversion and openness had a shorter eating window (MD = -76.6, 95%CI: -146.3, -6.93 and MD = -29.8, 95%CI: -56.5, -3.01, respectively). Participants high in extraversion had longer evening latency (MD = 66.3, 95%CI: 25.4, 107.3) and evening eating (MD = -62.0, 95%CI: -114.0, -9.0) compared those high in agreeableness. Participants high in conscientiousness showed evidence of first eating event misalignment during the weekend (MD = 22.0, 95%CI: 0.15, 43.9) and last eating event misalignment during weekdays (MD = -27.8, 95%CI: -47.3, -8.41) compared to those high in agreeableness. Lastly, participants high in openness showed evidence of eating window misalignment during the weekend (MD = 30.6, 95%CI: 5.01, 56.2).

### CONCLUSION

This study suggests that personality traits can inform personalized nutritional approaches when aiming for healthy habits during unexpected periods, such as the COVID-19 pandemic.

### KEYWORDS

COVID-19; lockdown; personality; circadian dysregulation; time-restricted feeding; dietary habit.



## **Analysis of Nutritional Habits in Elderly with Type II Diabetes Mellitu**

**Dionysia Argyropoulou¹**, Nikolaos Geladas¹, Tzortzis N. Nomikos², Vassilis Paschalis¹
¹ School of Physical Education and Sport Science, National and Kapodistrian University of Athens, Greece
² Department of Nutrition and Dietetics, Harokopio University, Athens, Greece

### INTRODUCTION

Elderly diabetic patients have to achieve and maintain optimal glycaemic regulation. Adequate protein consumption (especially amino-acids) is beneficial in this group of people since it restrains skeletal muscle wasting. Diabetic patients should also avoid dehydration, since polyuria causes excessive loss of water, while water balance helps the glucose regulation. Regarding proteins, the optimal daily intake for elderly people with chronic diseases is considered to be 1.2-1.5gr/kg of body weight, while daily water consumption should be 2L for women and 2.5L for men<sup>[1,2]</sup>.

#### ΔΙΝΛ

The aim of the present investigation was to record the nutritional habits of Greek diabetic elderly people with focus on their daily protein and water intake.

### METHODS

Three-day 24h-recalls were collected by 13 male and 14 female type II diabetic patients for the assessment of their dietary intake of macronutrients and essential amino acids. The analysis of the 24h-recalls was conducted with a diet analysis program (FoodData database<sup>[3]</sup>). Table 1 shows anthropometric characteristics of the participants.

Table 1: Anthropometric characteristics

	Age (years)	Height (cm)	Body Mass (kg)
Males (N =13)	63.7±7.8	171.6±6.5	87.1±15.2
Female(N=14)	63.1±7.6	158.9±9.6	81.0±24.1

### RESULTS/DISCUSSION

The percentage or total energy intake provided by carbohydrates, fats and proteins was 45.8±9.6% and 48.8±8.2%, 32.6±10.8% and 31.0±8.7% and 19.3±3.4% and 20.1±3.7% for males and females, respectively. The average protein intake was 0.9±0.3gr/kg/d for men and 0.8±0.2gr/kg/d for women, while the daily water intake was 1.1±0.3L and 1.1±0.2L for men and women, respectively. Table 2 shows the composition of the ingested proteins in selected amino acids.

Table 2: Amino-acid composition of protein

	histidine	isoleucine	leucine	lysine	threonine	tryptopha	valine
	(mg/gr)	(mg/gr)	(mg/gr)	(mg/gr)	(mg/gr)	n (mg/gr)	(mg/gr)
Males	17.0±10.1	24.9±11.2	42.6±19.2	40.9±20.1	22.6±9.9	6.2±2.6	28.3±12.8
Females	12.6±5.3	20.1±8.9	34.8±14.9	31.5±15.2	18.1±8.0	5.2±2.1	23.1±10.3
Average	14.7±8.1	22.4±10.2	38.6±17.2	36.1±18.0	20.3±9.0	5.7±2.3	25.6±11.7
Recommendations [4]	18.0	23.0	49.0	48.0	28.0	8.0	32.0

### CONCLUSIONS

The present study revealed that both sexes failed to follow the recommended daily protein intake (<1.2gr/kg). Low quality food intake is also of concern for both sexes, since the recommended target was reached only for the isoleucine in males. Moreover, daily water intake was almost half of the recommended amount for both sexes. Present data suggest that diabetic elderly need enhanced nutritional education in order to maintain a good health status.

### References

- 1. Bauer, Jürgen, et al. "Evidence-based recommendations for optimal dietary protein intake in older people: a position paper from the PROT-AGE Study Group." Journal of the american Medical Directors association 14.8 (2013): 542-559.
- 2. EFSA Panel on Dietetic Products, Nutrition, and Allergies (NDA). "Scientific opinion on dietary reference values for water." EFSA Journal 8.3 (2010): 1459.
- 3. U.S. Department of Agriculture, Agricultural Research Service. FoodData Central, 2019. fdc.nal.usda.gov.
- 4. Lupton, Joanne R., et al. "Dietary reference intakes for energy, carbohydrate, fiber, fat, fatty acids, cholesterol, protein, and amino acids." National Academy Press: Washington, DC, USA 5 (2002): 589-768.



## **Presentation and Nutritional Approach of Celiac Disease: A Literature**

**Dionysia Voutou,** Demetrios lacovides University of Nicosia, Cyprus

### INTRODUCTION

Celiac disease is a chronic immune disorder characterized by villous atrophy and inflammation of the small intestine. Initiated by an autoimmune response to gluten in genetically predisposed individuals, it boasts a global prevalence of 1.4%, with a more pronounced impact on women. The disease manifests with a diverse range of symptoms and is linked to various extraintestinal complications. Diagnosis necessitates a comprehensive approach, emphasizing serological tests and duodenal biopsy when gluten consumption is apparent. The primary treatment for celiac disease, adherence to a gluten-free diet since the 1950s, poses challenges. The role of dietitians in guiding and supporting patients is pivotal.

### PURPOSE

This literature review delves into celiac disease, offering valuable insights for both individuals affected by the condition and those seeking to understand it. It focuses on unraveling its pathogenesis and presenting dietary treatment, along with relevant advice.

### METHODS

An extensive search of reputable scientific sources utilizing pertinent keywords yields comprehensive information. Mechanisms of action, clinical symptoms, and potential complications of celiac disease are thoroughly explored. Additionally, a detailed examination of its nutritional approach from the perspective of the dietitian is presented.

### **DISCUSSION**

The implementation of a gluten-free diet contributes to both histological improvements in intestinal mucosa and the alleviation of symptoms in patients with celiac disease. However, the dietitian may encounter challenges such as nutritional deficiencies due to the quality of gluten-free products, incorrect nutritional choices, or malabsorption. Addressing these issues requires providing appropriate guidance.

### CONCLUSIONS

In summary, it emphasizes the importance of ongoing interdisciplinary cooperation among healthcare professionals. At the same time, it underscores the need for preventing complications and addressing challenges related to celiac disease on nutritional, economic, and social fronts, with the ultimate goal of ensuring the comprehensive well-being of patients.

# A systematic Review of the Usability Methods and other factors in the Evaluation of online Health Applications for Type 1 Diabetes

Prof E. Andreou, **Mr P. Siekkeris**, Dr Kyriakos Felekkis, Dr Zoe Roupa Life Sciences, School of Life and Health Sciences, University of Nicosia, Cyprus

### INTRODUCTION

There has been a lot of discussion in the literature about evaluating online applications for type 2 diabetes (T2D) (Georgsson, 2020). However, there is less evidence available for the evaluation of mobile technologies for type 1 diabetes (T1D). The significance of this study focuses on the evaluation of this technology and other related parameters.

### AIMS

To present the results of a literature review in relation to the usability outcomes and other parameters of the online T1D mobile and web-based applications in the international evidence. To understand the usability evaluation tools used for the applications and discuss the significance of their utilisation.

### METHODS

A systematic literature review was conducted using the University of Nicosia advanced Library Boolean search and the PICO research tool (Brown, 2019). The author searched for the period between March 2019 and Oct 2023 in ten databases, including ProQuest, PubMed, and MEDLINE. Six articles met the eligibility criteria and were considered for this review.

### RESULTS/DISCUSSION

The six studies identified used various methods and designs to produce evidence. 2/6 studies used mixed methods (Albanese-O'Neill et al., 2019, Otis et al., 2020). One used heuristic evaluation (Harrington et al., 2021, Nielsen and Landauer, 1993, Nielsen, 1994b, Nielsen, 1994a) with Pareto analysis. One used weighted scoring with feedback (Sharma et al., 2022). One used usability testing and server-based systems (Burda et al., 2022). The last study used Google and Facebook analytics, Likert scales, and open-ended questions (Ng et al., 2019). The authors considered the usability feedback and committed to act upon the knowledge received. Studies found secondary outcomes, adoption factors, and limitations.

### CONCLUSIONS

The involvement of people with T1D and/ or family members can support the acceptance and usage of technology. Effective and validated usability methods, as well as high participation rates, are crucial for successful diabetes self-management. Potential opportunities for further usability studies should address the quality of evaluation. The systematic review identifies opportunities for future studies to enhance the quality of evaluation in the dynamic field of online health applications for T1D.

### KEYWORDS

Systematic Review, Type 1 Diabetes, Usability Methods, Online Health Applications, International Evidence, Diabetes Self-Management, User-Centered Design, Mobile Technologies, Web-Based Applications, Evaluation Factors.



## **Nutrition Guidelines and Initiatives at the Cyprus Ministry of Education, Sports, and Youth**

Philippou Christiana, Kritikou Christina, **Charalambous Nicoletta** Cyprus Ministry of Education, Sports and Youth

### INTRODUCTION

The Health Education (Home Economics) program in Cyprus aims at comprehensive health development, covering physiological, psychological, emotional, sociological, and mental aspects. Organized into four domains, it promotes self-esteem, safe lifestyles, social growth, and active citizenship. Active teaching strategies empower students to claim changes in their environment, fostering a healthy lifestyle. Holistic student development positively correlates with improved learning outcomes. The course emphasizes the societal context of health, encouraging collective action and promoting environmental changes.

### METHODS

The Health Education program adopts a preventive approach, covering all dimensions of health through thematic sections. Units focus on specific dimensions while recognizing their interconnections, demonstrating the interdependence of individual behavior and the broader environment. Nutrition Education, integral to safe and healthy lifestyle development, aligns with the domains of self-esteem, social growth, and active citizenship. Pedagogical methods emphasize empowerment and create supportive environments, aligning with Health Promotion principles. Techniques include research studies, problem-solving, cooperative learning, role-playing, and visualization.

### CONCLUSION

The Ministry of Education in Cyprus acknowledges the significance of the Health Education program in fostering overall student education and a healthy lifestyle. Aligned with global guidelines, the program boasts strong academic and infrastructural design. Educators with backgrounds from reputable universities contribute to its effectiveness. The ultimate goal is for students to grasp the importance of healthy eating for physical and mental well-being, disease prevention, and the significance of a balanced diet and healthy lifestyle.

### **KEYWORDS**

Global guidelines, academic design, educators, healthy eating, disease prevention, well-being, Preventive approach, Nutrition Education, empowerment, supportive environment, Health Promotion, active participation, pedagogical methods, Health Education, holistic development, preventive approach, student empowerment, societal context, active teaching strategies.

### References

- 1. Ιωάννου, Κούτα & Χαραλάμπους (2010). Αναλυτικό Πρόγραμμα Αγωγή Υγείας, ΥΠΑΝ
- 2. Mukhamedzhanov, E., Tsitsurin, V., Zhakiyanova, Zh., Akhmetova, B., & Tarjibayeva, S. (2023). The effect of nutrition education on nutritional behavior, academic and sports achievement and attitudes. International Journal of Education in Mathematics, Science, and Technology (IJEMST), 11(2), 358-374. https://doi.org/10.46328/ijemst.3133
- 3. http://www.pi-schools.gr/download/publications/epitheorisi/teyxos8/6.pdf http://panacea.med.uoa.gr/topic.aspx?id=467
- 4. Byrd-Bredbenner, C., O' Connell, L.H., Shannon, B. & Eddy, J.M. (1984). A nutrition curriculum for health education: Its effects on students' knowledge, attitudes, and behavior. The Journal of School Health, 54, 10, 385-388.

### What we already know for PLADO regimens in CKD patients: Review

**Anna C. Michail** and Eleni Andreou University of Nicosia, Cyprus

MNT is very important to monitor and evaluate and then slow or prevent CKD progression. Based on guidelines, protein restriction is the focus, although the optimal amount of quality protein is yet to be reported. The main aim of this research is to review any recent data that would contribute to further investigation based on this topic. Balanced nutritional intervention with combination of the appropriate medication are the main aspects for managing CKD patients. Food consumption affects the balance of the body whether its acidic or alkaline. Foods that cause an acidic environment are mainly animal based protein whereas foods that have an alkaline effect are vegetarian based protein. Therefore, following a Mediterranean could lead to weight loss, reduction of glycated hemoglobin (HbA1c), lower low-density and high-density lipoproteins (LDL and HDL) and total cholesterol levels, as well as reduction of inflammation markers. National Kidney Foundation recommended vegetarianism or part-time plant-based diet due to its beneficial effects to kidney patients. The recommendations are supported by studies results which showed that a plant-based pattern may alter development or progression of some risks/harms of kidney disease such as heart disease, proteinuria, and progression of kidney loss. Further research needs to take place to demonstrate the efficacy, safety, adherence, and feasibility of plant-based diets.

### KEYWORDS

chronic kidney disease; animal protein; vegetarian protein; low protein diet; malnutrition; benefits



# Evaluation of the risk of eating disorders among Cypriot adults, associated with gender, BMI and body satisfaction. Pilot Study

Nayia Andreou<sup>1</sup>, Dr Adam Collins<sup>1</sup>, Farah Kadhem<sup>2</sup> and Prof Eleni Andreou<sup>2</sup>

- <sup>1</sup> University of Surrey, UK
- <sup>2</sup> Life Sciences Department, University of Nicosia, Cyprus

### BACKGROUND

The significant rise in prevalence rates along with the rise in the number of people treated for severe eating disorders in Cyprus has been a cause for concern. Several factors at play include warm climates leading to body revealing attire, societal expectations emphasising thinness ideals, the type of family dynamic and the post-1974 war economic and social development. The association between these and gender, Body Mass Index (BMI) and body satisfaction could lead to higher risk of eating disorder (ED) prevalence.

### OBJECTIVES

Therefore, focusing on Cypriot adults, the current study examined the differences in BMI, body satisfaction, eating habits and eating attitudes and behaviours between individuals at high risk (HR) and low risk (LR) for developing ED. The investigation ED risk, BMI perceptions, eating habits and body satisfaction between females and males was also performed.

### MATERIALS AND METHODS

The study extracted data of the first three weeks of an ongoing crosssectional study investigating eating disorder risk among the Cypriot population with the use of an online questionnaire. The present study gave emphasis on anthropometrics, the EAT-26 international validated tool, eating habits, body satisfaction and perceived BMI from that questionnaire. Participants were selected randomly and a total of 167 participants were included in the present study. Scores from the EAT-26 questionnaire were used to determine Cypriot adults at HR (20 or above) and LR (20 or below) for developing ED. Statistical tests were chosen in proportion to the study's objectives.

### RESULTS

Overall, 54% of total participants were female and 46% were male. More specifically 52% of LR participants were female and 48% were male, whereas 58% of HR participants were female and 42% were male. Specific eating attitudes and behaviours were associated with individual risk groups and gender categories. The disparity between self-reported and perceived BMI was significantly associated with risk for eating disorders (p≤0.021). However, no significant relationship was observed between risk and eating habits, body satisfaction or BMI (p>0.005).

### CONCLUSIONS

A higher frequency of females than males was observed in the HR for eating disorders group. Although no significant association between high ED risk and gender, BMI or body satisfaction was found other equally important variables like EAT-26 eating attitudes or behaviours with HR for ED and EAT-26 behaviours or body satisfaction with gender showed a significant relationship. This allows for future studies to investigate the interrelationships between those variables to enable the development of tailored interventions.

## The meaning of Professional Autonomy in a Multi-professional Health Setting

Savoulla Ghlobrial, Helen Allan, Prof Eleni Andreou, Costas Constandinou School of Life and Health Sciences, University of Nicosia Medical School, University of Nicosia Middlesex University

The complexity of health care has increased enormously over the past two decades as a result of biomedical advances, the medicalisation of everyday problems, the ageing of the population, and regulatory and cost containment activities. The responsibilities of doctors, nurses, and other health professionals have increased accordingly, the boundaries between professions have blurred, and the need for interdependence among professionals and other support and managerial personnel has increased (RaVerty, Ball, Aiken, 2001).

Professional work includes parts that are dependent, interdependent, and independent. This matrix of relationships was recognized by Abbott (1988) in his "system" of professions, in which each profession is connected to a set of responsibilities via jurisdictional linkages.

Over that last two centuries nursing has changed and developed dramatically and emerged from a hospital-based learning discipline to a university-based degree, in a struggle for recognition and professionalization.

The healthcare professions have never been static in terms of their own disciplinary boundaries, nor in their role or status in society. Healthcare provision is defined by changing societal expectations and beliefs, new ways of perceiving health and illness, the introduction of a range of technologies and, more recently, the formal recognition of particular groups, especially nurses, through the introduction of education and regulation. It has also been shaped by both interprofessional and profession-state relationships forged over time.

In Cyprus a number of factors have converged that place new pressures on professional identity which is viewed as an integral part of the nurse's personal identity (Carlsen et al. 1984, Fletcher, 2007), for example the assertion of Cyprus into the EU family and the signing up to European directives and EU nursing standards. The existence of personal identity i.e. personal moral and values is a prerequisite for the development of a professional identity (Hermansen 1987, Johnson et al., 2012) which it is described as having the feeling of being a person who can practice nursing with skill and responsibility. It also implies awareness of personal resources and limitations (Stenbock-Hult 1985, Fagerberg and Kihlgren, 2001, Johnson et al., 2012).

A certain degree of autonomy is regarded as essential to the creation of a professional atmosphere, particularly in the field of health, where group labour is commonly employed and shared/supplemented by a variety of different professional categories. These experts typically do not have the same background, let alone the same duties and routines (Meira de Melo et al., 2016).

Their professional etiquette must be governed by particular rules, which allow them some control over the working process and a certain amount of professional autonomy.

There is a debate in the field of nursing that claims that achieving a better level of autonomy by the nurse can bring a higher value and societal acknowledgment for this professional's work and function.



### SPEAKERS EMAIL ADDRESSES

A/A	Speaker	Email Address
1.	Alexandrou Nectarios	nectarios@gdasports.com
2.	Andreou Eleni	eandreou@eleniandreou.diet
3.	Androulaki Niki	androulakidiet@yahoo.gr
4.	Angastinioti Elina	eangasti@emich.edu
5.	Benardot Dan	dan.benardot@emory.edu
6.	Brown Sophia	sophia_brown_@hotmail.com
7.	Calmon-Spanou Alini	alinicalmon@gmail.com
8.	Charidemou Evelina	charidemou.e@unic.ac.cy
9.	Constantinidou Fofi	fofic@ucy.ac.cy
10.	Constantinou Haris	charisconstantinou@hotmail.com
11.	Dimosthenopoulos Charilaos	harisdimos@gmail.com
12.	El Ghoch Marwan	m.elghoch@unimore.it
13.	Erotokritou George	erotokritoug@hotmail.com
14.	Francois Bethany	bethany.francois@live.co.uk
15.	Galatou Eleftheria	galatou.e@unic.ac.cy
16.	Gianfrancesco Marco	marco.gianfrancesco@ortis.com
17.	Giannaki Christoforos	giannaki.c@unic.ac.cy
18.	Gregora Poly	gregorapoly@gmail.com
19.	Groutidou Emily	emily.pedrides@gmail.com
20.	Heraclides Alexandros	a.heraclides@euc.ac.cy
21.	Hileti Dona	hileti.d@unic.ac.cy
22.	Karagiannis Dimitrios	jimkar_d@yahoo.com
23.	Korfiati Persa	pkorfiati@hotmail.com
24.	Kountouri Chrystalla	kstalord@gmail.com
25.	Latzourakis Evangelos	latzourakis.e@unic.ac.cy

A/A	Speaker	Email Address
26.	Lavranos Giagkos	giagkos83@gmail.com
27.	Loucaides George	loucaides45@hotmail.com
28.	Markidou Eliza	emarkidou@mphs.moh.gov.cy
29.	Michaelides Michalis	kaek-koa@cytanet.com.cy
30.	Michaelidou Nikoleta	nikoletam@cytanet.com.cy
31.	Nicolaides Andrew	anicolaides1@gmail.com
32.	Ntorzi Nicoletta	n_ntorzi@hotmail.com
33.	Pahita Anna	anna.pahita@gmail.com
34.	Panayiotou Andrie	andrie.panayiotou@cut.ac.cy
35.	Papakonstantinou Aimilia	apapakonstantinou@gmail.com
36.	Papalazarou Anastasios	anpapalazarou@gmail.com
37.	Papandreou Dimitrios	papandreoudimitrios@yahoo.gr
38.	Petrou Panayiota	petroupanayiota@gmail.com
39.	Philippou Christiana	evelina@cytanet.com.cy
40.	Pieri Myrtani	pieri.m@unic.ac.cy
41.	Poulia Kalliopi Anna	lpoulia@aua.gr
42.	Preventi Fani	fpreventi@gmail.com
43.	Risvas Grigoris	grigoris.risvas@efad.org
44.	Sarigiannis Yiannis	sarigiannis.i@unic.ac.cy
45.	Vassilopoulou Emilia	vassilopoulouemilia@gmail.com
46.	Vlahoyiannis Angelos	vlahoyiannis.a@unic.ac.cy
47.	Vlassopoulos Antonis	antonisvlass@gmail.com
48.	Wakil Elie	elie.wakil@ewhumandev.com
49.	Yamasaki Patrikiou Edna	yamasaki.e@unic.ac.cy
50.	Zampelas Antonis	azampelas@aua.gr



### **CONFERENCE PARTNER**



Charalambides Christis, the largest and most long-standing dairy company in Cyprus, is a leader in the production and distribution of food. The company consistently offers high-quality, nutritionally valuable products that adhere to international standards, showing care throughout the supply chain by collaborating with local producers. The company's vision is to provide high-quality products while maintaining the authenticity of flavors through diverse choices of quality nutritional enjoyment, with free and equal access for all Cypriot citizens and consumers.

https://en.cydadietcharalambideschristis.com.cy/recipes

### **GOLD SPONSORS**









### SILVER SPONSORS





### CLASSIC SPONSORS

































### SUPPORTERS











































