

Transforming Global Nutrition and Dietetics: Evidence-Based Practices for Innovation, Sustainability, and Health Equity

7 - 9 NOVEMBER 2025 | HILTON NICOSIA, CYPRUS

# PROCEEDINGS & BOOK OF ABSTRACTS





UNDER THE AUSPICES OF:





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### Message from the Conference Chair, CyDNA President

Dear Colleagues, Students, Esteemed Guests, Great Supporters,

It is with great pleasure and immense pride that I welcome you to the 13<sup>th</sup> Cyprus Dietetic and Nutrition Association Conference, themed "Transforming Global Nutrition and Dietetics: Evidence-Based Practices for Innovation, Sustainability, and Health Equity". This event marks a pivotal moment as we convene to share groundbreaking insights and foster collaborations that aim to reshape the future of our field. The Conference is under the auspices of the Cyprus Ministry of Health and CPEs will be applied to be granted by the Commission of Dietetic Registration (CDR).

### Dates: 7-9 November 2025, Location: Hilton Nicosia Hotel, Nicosia Cyprus

This year's conference is enriched with a variety of engaging highlights, including:

- 1. **Innovative Workshops:** Dive into hands-on sessions led by industry pioneers, designed to equip you with cutting-edge skills and knowledge.
- 2. **Global Collaboration:** Engage with leading international associations to broaden our horizons and forge significant partnerships.
- 3. **Expert Panels:** Gain from the wisdom of global experts discussing critical topics such as sustainable nutrition practices and health equity.
- 4. **Research Presentations:** Explore the latest research from bright minds that are setting the trends in nutrition and dietetics.
- 5. **Policy Discussions:** Participate in discussions that aim to influence health policies and advocate for nutritional advancements globally.
- 6. Technology in Dietetics, Educational Competitions and Interactive TEDtalks:

  Discover how technology can be harnessed to innovate and streamline our practices in dietetics.
- 7. **Cultural Nutrition Practices:** Learn about diverse dietary practices and how they contribute to health and sustainability.
- 8. **Nutritional Equity:** Address the disparities in nutritional health with a focus on solutions that promote equity.
- 9. **Sustainable Diet Initiatives:** Engage with initiatives that promote environmental sustainability in our dietary recommendations.
- 10. **Networking Opportunities:** Connect with peers, mentors, and industry leaders to enhance your professional network and collaborative opportunities.



The exhibition hall will also showcase the latest products, technologies, and services that are driving our profession forward, providing you with insights into the tools and resources available to enhance your practice.

As we gather here, let us be inspired by the shared commitment to improve health outcomes and make a lasting impact on our communities through innovative, evidence-based practices. Your participation is not just appreciated; it is essential for the success of this conference and the advancement of our collective goals.

As we explore the vast potential of our field, let us draw inspiration from the insightful words of Ann Wigmore: "The food you eat can be either the safest and most powerful form of medicine or the slowest form of poison." Our commitment at this conference is to illuminate the path toward safe and powerful nutritional practices that support health, well-being, and longevity. We stand at the forefront of a global movement, determined to demonstrate that informed, strategic dietary choices are key to sustainable health improvements.

Thank you for joining us on this transformative journey. I look forward to the productive discussions, meaningful insights, and the forging of lasting collaborations over the next few days.

Together, let us make a positive impact on the lives of individuals and communities by harnessing the power of nutrition.

Should you have any questions or require further assistance, please do not hesitate to contact our dedicated conference secretariat TOPKINISIS.

Thank you for your attention, and we look forward to welcoming you to the Dietetic and Nutrition Conference - "Transforming Global Nutrition and Dietetics: Evidence-Based Practices for Innovation, Sustainability, and Health Equity".

Best regards,

Prof Eleni Andreou, RDN Chair of the Organizing/Scientific Committee President of CyDNA



### **COMMITTEES**

Chair of Organizing Committee

Andreou Eleni

Organizing Committee

Andreou Eleni (Chair)

Angastinioti Elina

Angelidou Angela (Social Media)

Alexiadou Maria Christoudia Thecla Koutras Yiannis Lazaros Lazarou Michael Anna Ntaflos Nikolaos Ntorzi Nicoletta

Pahita Anna (Secretary)
Papamichael Dimitris
Philippou Christiana
Savva Andreas
Tsokkou Yiota
Tziortzi Maria
Theodorou Pavlina
Zisimou Constantinos

Scientific Committee

Andreou Eleni (Chair)

Angastinioti Elina Michael Anna Ntaflos Nikolaos

Ntorzi Nicoletta (Secretary)

Pahita Anna

Papamichael Dimitris Philippou Christiana Tsokkou Yiota Koutras Yiannis

Financial/Exhibition Committee Philippou Christiana (Chair)

Andreou Eleni Ntorzi Nicoletta Papamichael Dimitris Angelidou Angela

CyDNA Board

Prof Andreou Eleni - President

Dr Philippou Christiana – Vice President

Pahita Anna – Secretary

Papamichael Dimitris - Treasurer

Dr Ntorzi Nicoletta – Assistant Secretary

Ntaflos Nikolaos – Member Savvas Andreas – Member





# PROGRAMME

January 2026 Post Conference Open for the Public (TBC)		
18:00 - 18:30	Registrations	
18:30 - 20:30	Panel open for the public (session in Greek) (@ UNIC)	
	Chairs/Συντονιστές: Eleni Andreou, Christiana Philippou	
(collaboration with Charalambides Christis)		
	CPElevel: III CPEcredit: I	

FRIDAY, 7 November 2025		
ROOM: DIONYSUS		
08:30 - 12:30	LLL - Topic 41: Nutrition in Cancer: Focus on Tumor Types	
08:30 - 09:00	<ul> <li>Module 41.1: Nutrition Support in Gastrointestinal Tract Cancer.</li> <li>Foregut Tumors - Head and Neck, Esophagus</li> <li>Alessandro Laviano (TLLL)</li> </ul>	
09:00 - 09:30	Module 41.2: Nutrition in Breast Cancer     Giagkos Lavranos (TLLL)	
09:30 - 10:00	Module 41.3: Nutrition in Colorectal Cancer     Stalo Kountouri (TLLL)	
10:00 - 10:30	Coffee Break	
10:30 - 11:00	Module 41.4: Nutrition in Gastric and Pancreatic Cancer Elina Ioannou (TLLL)	
11:00 - 11:45	Q & A, Case discussion     Alessandro Laviano (TLLL)	
11:45 - 12:30	Feedback & Test	
	Director of the course: Stalo Kountouri  CYPRUS SOCIETY FOR CLINICAL NUTRITION AND	
	With Cooperation of CySPEN  METABOLISM	
	CPE level: II CPE credit: 4	



11:30 - 12:00

Registrations

### ROOM: LEDRA A

### 12:00 - 13:00

### Panel: Personalized Fueling: How Genes and Timing Shape Metabolic Health

- Can our Epigenome Store Metabolites?
   Evelina Charidemou
- Carbohydrate Periodization Across the Day: Implications for Body Composition, Fitness, and Gut Microbiome Health
   Angelos Vlahoyiannis
- The Role of the Immune System in Allergies: Friend or Foe?
   Stella A. Nicolaou

Chairs: Anna Pahita, Yiota Tsokkou

### CPE level: II CPE credit: 1

#### 13:00 - 14:00

### Panel: Nutrition and Dietetics around the Globe, Discussion with Q & A

- From Education to Innovation: Empowering Dietitians in Cyprus for Sustainable and Equitable Nutrition Practice
   Eleni Andreou
- Profession of Nutrition and Dietetics in Greece Fani Preventi
- Professional Policies of Nutrition and Dietetics in Europe: The EFAD Perspective Grigoris Risvas
- Building Trust through Regulation: The Cypriot Model for Dietetic Professionalism and Excellence
   Zoe Kyriakidou

Chairs: Panayiota Theofilou, Nikolaos Ntaflos, Christiana Philippou

CPE level: II CPE credit: 1



### **PROGRAMME**

### 14:00 - 15:00 Panel: Workshop - Nutritional Psychology: The Mind-Food Connection for Better Mental Health • Mental Health, the Brain, and the Role of Diet in Psychiatry **Dimitris Efthymiou** Eating Behaviors, Emotional Eating, and the Psychology of Food Choices Emilia Vassilopoulou • What to Eat for a Healthy Mind: Practical Nutritional Strategies Anastasios Papalazarou Chairs: Eleni Andreou, Nicoletta Ntorzi NUTRITIONAL PSYCHOLOGY GREECE In collaboration with Nutritional Psychology Greece Sponsored by: 15:00 - 15:30 Coffee Break (Exhibition area) 15:30 - 16:30 Panel: All about Obesity • The Dietetic Approach in Individuals Receiving GLP-1 and/or GIP Agonists: **Key Considerations Charilaos Dimosthenopoulos** • Diagnostic Assessment of the Patient with Obesity: Beyond BMI Haris Constantinou Food-Related Behavioral Disorders and Their Role in Obesity Maria Koushiou Chairs: Elina Angastinioti, Angela Angelidou, Anastasios Theodorou CPE level: II CPE credit: 1 16:30 - 17:30 Satellite Symposium (NUTRICIA life pharma by Nutricia, Lifepharma Malnutrition and Cachexia in Patients with Cancer Alessandro Laviano What Makes a Successful Company with Great Nutrition Input Frank Tomholt

Chairs: Nicoletta Ntorzi (from Lifepharma), Eleni Andreou, Dimitris Papamichael

CPE level: II CPE credit: 1



#### 17:30 - 18:30

#### Panel: ONE HEALTH

- Eating for Health, Eating for Earth: The Power of Nutrition in Sustainability
   Antonis Zampelas, President of EFET
- Updating the Mediterranean Diet Pyramid towards Sustainability: Focus on Environmental Concerns

Lluís Serra-Majem

• HEALTHY TEENS: Designing an Evidence-informed Lifestyle Intervention in adolescents to reduce future cancer risk

Constantina Constantinou

 The Future of Food: Challenges and Opportunities of the Planetary Health Diet Nikolaos Lysigakis, Senior Consultant - Corporate Affairs, Lidl Greece and Cyprus



Chairs: Yiannis Koutras, Dimitris Papamichael

#### CPE level: II CPE credit: 1

#### 18:30 - 19:30

### **Opening Ceremony with Motivational Speaker and Song**

Addresses by:

- Prof Eleni P. Andreou, President of Cyprus Dietetic and Nutrition Association & CyRBFSTD
- Mrs Fani Preventi, President of HAD
- Dr Grigoris Risvas, President of EFAD
- Dr Petros Agathangelou, President of the Cyprus Medical Association
- Prof Antonis Zampelas, President of EFET
- Dr Athena Michaelidou, Minister of Education, Sport and Youth
- Mr Michael Damianos, Minister of Health
- Motivational/Inspiration Talk: Success Mind Set
   Christina O'Neill, Executive Trainer/Coach

,

Song By Ioannis Livanos

Chairs: Nicoletta Ntorzi, Anna Pahita

### CPE level: | CPE credit: 1

### 19:30 - 20:30

- Opening of the Exhibition
- Poster Session (in the Exhibition Room and Conference Room)
- Cocktail: Eis ygeia "εις υγεία" Το your health!

### CPE level: I CPE credit: 1



# PROGRAMME

SATURDAY, 8 November 2025		
ROOM: DIONYSUS		
08:00 - 12:00	LLL - Topic 42: Clinical Sports: Nutrition in Sport-Related Health Problems	
08:00 - 08:30	<ul> <li>Module 42.1 Dehydration and Electrolyte Disturbance - Silent Killer of Exercise Performance Dimitrios Papandreou (TLLL)</li> </ul>	
08:30 - 09:00	Module 42.2 Malnutrition in Physical Activity - Etiopathogenesis,     Diagnostics and Treatment of RED-Syndrome     Giagkos Lavranos (TLLL)	
09:00 - 09:30	<ul> <li>Module 42.3 Gut Training and Gastrointestinal Issues in Physical Activity Nikolaos Ntaflos</li> </ul>	
09:30 - 10:00	Module 42.4 Nutrition for Optimising Immune Function and Recovery from Injury in Sports     Stalo Kountouri (TLLL)	
10:00 - 10:30	Coffee Break (Exhibition area)	
10:30 - 11:15	Q & A, Case discussion     Giagkos Lavranos	
11:15 - 12:00	Feedback & Test	
	Director of the course: Stalo Kountouri	
	With Cooperation of CySPEN  NUTRITION AND METABOLISM	
	CPE level: I CPE credit: 4	
ROOM: LEDRA	A	
08:00 - 09:30	Oral Presentation	
	Chairs: Yiannis Koutras, Lazaros Lazarou	
	CPE level: III CPE credit: 4	



### 09:30 - 10:30

### Panel: Heart-Strong: The Role of Diet, Supplements, and Biomarkers in Cardiovascular Wellness

- From Folate to Heart Health: Nutrition and Homocysteine in Atherosclerosis Risk Andrie Panayiotou
- Lp(a) and LDL Cholesterol: Clinical Insights and Dietary Implications for Cardiovascular Risk Management
   Aris Angouridis
- Lipid Screening in Children and Adolescents Adamos Hadjipanayis

Chairs: Phivos Symeonides, Eleni Andreou, Andrew Nicolaides

In Collaboration with Cyprus Atherosclerosis Society



### CPE level: III CPE credit: 4

### 10:30 - 11:00

### Coffee break (Exhibition area)

#### 11:00 - 12:00

### Panel: Innovation at the Intersection of Health and Nutrition: Prevention, AI, and System Redesign

- Empowering Health Care Professionals with AI:
   Practical Applications for Modern Care Adapt or be left behind
   Evridiki Georgaki
- Rethinking Nutrition Care Pathways: Insights from Healthcare Operations Management
   Marianna Fragkiskou
- How to Build Your Personal Brand & Attract More Clients: A Marketing Guide for Dietitians
   Angelos lacovides

Chairs: Nicoletta Ntorzi, Dimitris Papamichael

CPE level: II CPE credit: 1



# PROGRAMME

12:00 - 13:15	<ul> <li>Panel: Multidiscipline Management of Diabetes and Metabolic Syndrome</li> <li>Basic Principles for Diabetes Therapy with Insulin Pump Nicos Skordis</li> <li>Triglyceride and Glucose Index as an Optimal Predictor of Metabolic Syndrome - A nutritional approach and dietary management for MtS Dimitrios Papandreou</li> <li>Dietary Timing and Therapeutic Nutrition: Novel Approaches for Glycemic Control and Insulin Sensitivity in Diabetes Aimilia Papakonstantinou</li> <li>Dietary Intervention in Diabetic Nephropathy: A Case-Based Approach Using Carb Counting and Renal Diet Equivalents Charilaos Dimosthenopoulos</li> <li>Chairs: Anna Michael, Elina Angastinioti</li> </ul>	
	CPE level: II CPEcredit: 1	
13:15 - 13:20	Stretch & Refresh Break, Christiana Kyriacou	
13:20 - 14:30	Lunch Break (Exhibition area)	
13:20 - 14:30	Poster Session  Facel Description:	
14:30 - 15:30	Food Demonstration:  Beyond Calcium: Harnessing the Role of Protein  ARALAMBIOS  Vegrs	
	By Chef Giorgos Erotokritou	
	Kleopatra Rousouli, R&D Manager and Head of Quality Control, Charalambides Christis LTD	
	Chairs: Andreas Savva, Angela Angelidou	
	CPE level: I CPE credit: 1	
15:30 - 16:30	Poster/Oral Presentation & 10 minute Message from Supported Companies	
	Oral Presentation	
	Chairs: Yiannis Koutras, Lazaros Lazarou	
	CPE level: III CPE credit: 1	
	10 minute Message from Supported Companies  • Michalis Savva	
	Christina Titsinidou     KypropharmItd	
	Chairs: Maria Alexiadou, Dimitris Papamichael	
16:30 - 17:30	Workshop: Practical Tools & Case Studies	
	<ul> <li>Professional support for services working with Avoidant Restrictive Food Intake Disorder (ARFID)</li> <li>Ursula Philpot</li> </ul>	
	Restricted Intake Self Harm (RISH)     Ursula Philpot	
	Chairs: Eleni Andreou, Christina Aristotelous  In Collaboration with MAZI  MAPINA SANAPERA ZOPTIA IAPYMA ASTRA AUTOSECH SANTANANON	
	CPE level: Il CPEcredit: 1	
17:30 - 18:00	Coffee Break (Exhibition area)	



#### 18:00 - 19:00

### Testimonial Panel: Two Voices: A Novelized Testimony of Living with Anorexia

- The Voice of the Father His Testimony Costas Katsonis
- The Voice of the Daughter Her Testimony Evgenia Katsoni
- Participatory Living Lab: Voices and Journeys of Individuals and Families Facing Eating Disorders
   Nicos Middleton

Chairs: Eleni Andreou( MAZI), Andrea Constantinidou (Cyprus Association for the Support of Individuals with Eating Disorders), Pavlina Theodorou



In Collaboration with MAZI

### CPElevel: III CPE credit: 1

### 19:00 - 20:00

### Panel: Sports Nutrition, Physical Activity and Public Health

- Sports and Nutrition experience by an elite football player Giorgos Efrem
- Evidence-Based Sports Supplements: Supporting Muscle Function, Recovery, and Performance
   Gregory Bogdanis
- Optimizing Exercise Performance and Recovery: The Crucial Role of Sleep Christoforos Giannaki
- Policies and Programmes involving Dietary Modification and Physical Activity for Improving Quality of Life in the Population: The case of Cyprus Alexandros Heraclides

Chairs: Nikolaos Ntaflos, Constantinos Zisimou, Pinelopi Stavrinou

#### CPE level: II CPE credit: 1

20:30

#### **Gala Dinner**



# PROGRAMME

SUNDAY, 9 November 2025		
ROOM: LEDRA A		
08:00 - 09:00	Poster Presentations	
	Chairs: Yiannis Koutras, Lazaros Lazarou	
	CPElevel: III CPEcredit: 1	
09:00 - 10:00	Workshop: Empowering Dietitians with Intrapreneurship	
	Elie Wakil	
	Chairs: Eleni Andreou, Anna Michael, Christos Papaneophytou	
	CPElevel: I CPEcredit: 1	
10:00 - 11:00	Panel: Nutrition and Health Strategies: Health Promotion, Food Security, and Childhood Development	
	<ul> <li>Nutrition Policy: A National Challenge for Health, Food Security, and Primary Production by EFET Antonis Zampelas</li> </ul>	
	Nutrition as a Tool for Prevention: Health Education Strategies to Address Chronic Disease in the General Population     Christiana Philippou	
	Can We Trust Our Plate? Ultra-Processed Foods and Food Fraud     From Science to Health     Panayiota Theofilou	
	Chairs: Yiota Tsokkou, Pavlina Theodorou	
	CPE level:    CPEcredit:1	
11:00 - 11:05	Stretch & Refresh Break, Christiana Kyriacou	
11:05 - 11:30	Coffee Break	



#### 11:30 - 12:30

#### **Panel: Critical Care in Nutrition**

- From ICU Bedside to Nutrition Plan: Practical Applications of Indirect Calorimetry Dimitrios Karagiannis
- New Insights of Enteral Nutrition
   Thalia Avraam
- Correlation Between Teamwork and Patient Safety in ICU Theodoros Kyprianou
- Interdisciplinary Diabetes Education in the ICU: Nursing and Nutrition Approaches Panayiotis Siekkeris

Chairs: Christiana Philippou, Maria Tziortzi, Maria Foka

In collaboration with ΦΟΡΟΥΜ ΕΝΤΑΤΙΚΗΣ ΘΕΡΑΠΕΙΑΣ Intensive Care Forum



#### CPE level: II CPE credit: 1

### 12:30 - 13:30

Debates: Intermittent fasting on Successful Weight Loss and Health Outcomes Examine the science vs. Risks in populations with Diabetes, Metabolic Syndrome, or Eating Disorders

Anastasios Papalazarou (Pro) Aimilia Papakonstantinou (Con)

Chairs: Yiannis Koutras, Thecla Christoudia

### CPE level: I CPE credit: 1

#### 13:30 - 14:30

### **Closing Ceremony and Awards for**

- \* the Best Rated Oral/Poster Presentation for Student Dietitians and
- \* Competition

Speaker: Eleni Andreou

Chairs: Christiana Philippou, Anna Pahita

CPE level: III CPE credit: 1

Simultaneous Translation Greek-English will be offered LLL's sessions will be conducted in English with Greek explanations provided by Greek-speaking speakers where applicable

Session for the sponsors – 10 minutes presentation; Oral/ Poster Presentations – 5 minutes

The Scientific applied for approval by CDR for 36 CPE 21 Conference, 4 Poster/Oral Presentations, 1 Exhibition, 8 LLLs, 2 Open to the Public

		ORAL PRESENTATIONS
OP 001	Aref Abu-Rabia	SUSTAINABLE NUTRITION AMONG PASTORALS IN THE MIDDLEAST
OP 002	Elina Polydorou	NUTRITION DOCUMENTATION PROCESS AND STANDARDISED LANGUAGE, WHAT CAN BE IMPROVED? AN OBSERVATIONAL CROSS-SECTIONAL STUDY
OP 003	Nazal Bardak Percinci	COMPARISON OF NUTRITION AND DIETETICS DEPARTMENT 1ST AND 4TH GRADE STUDENTS' NUTRITION KNOWLEDGE LEVELS, FEEDING HABITS AND ANTHROPOMETRIC MEASUREMENTS
OP 004	Francesco Colelli	THE EFFECT OF TIME-RESTRICTED EATING IN COMBINATION WITH A LOW GLYCAEMIC INDEX DIET ON COGNITIVE FUNCTION, MARKERS OF BIOLOGICAL AGE AND METABOLIC HEALTH IN OVERWEIGHT AND OBESE POSTMENOPAUSAL WOMEN: A RANDOMIZED CONTROLLED TRIAL (THE NUTRIAGE STUDY)
OP 005	Christina Kriticou	FROM DIET TO IDENTITY: THE NUTRITIONAL, BEHAVIOURAL(PSYCHOLOGICAL) AND SOCIOCULTURAL ROOTS OF ADOLESCENT EATING DISORDERS
OP 006	Dimitris Papamichail	ADHERENCE TO MEDITERRANEAN DIET IN COLORECTAL CANCER SURVIVORS AND ITS ASSOCIATION WITH RECURRENCE RISK AND LEVEL OF DISEASE-RELATED FATIGUE: Narrative Review
OP 007	Nicoletta Charalambous	SCHOOL PERSONNEL TRAINING AND DIABETES MANAGEMENT IN SCHOOL SETTINGS: A SYSTEMATIC REVIEW AND META-ANALYSIS
OP 008	Mikaela Sekkidou	A PARTIALLY HYDROLYZED FORMULA REDUCES THE RISK OF FOOD ALLERGY AND ATOPIC DERMATITIS IN HIGH-RISK FOR ALLERGY CHILDREN
OP 009	Anna Michael	UNDERSTANDING PLADO: DEVELOPMENT AND VALIDATION OF A QUESTIONNAIRE TO ASSESS DIET KNOWLEDGE AND MANAGEMENT IN CYPRIOT KIDNEY AND HEALTHY POPULATIONS
OP 010	Nayia Andreou	THE DIAGNOSTIC INTERSECTION OF BODY DYSMORPHIA AND EATING DISORDERS: A SYSTEMATIC REVIEW

		NOTO ELIMINO NEVIEW
		POSTER PRESENTATIONS
PP 001	Pavlina Theodorou	ONGOING STUDY: DEMONSTRATION OF DIETARY TRENDS AND BEHAVIORS OF ADULTS IN FOOD INTAKE USING THE EAT-26 QUESTIONNAIRE TO DETERMINE THE RISK OF EATING DISORDERS OR DISORDERED EATING IN CYPRIOT ADULTS. ASSOCIATION WITH BODY IMAGE (2025)
PP 002	Eleftheria Panagiotou	ADHERENCE TO THE MEDITERRANEAN DIET AND ITS INFLUENCE ON ALLERGIC DISEASES: A SYSTEMATIC REVIEW AND META-ANALYSIS
PP 003	Panayiota Tsokkou	COMPARATIVE ANALYSIS OF GOAT AND COW MILK ON BIOCHEMICAL MARKERS AND GUT MICROBIOTA IN HUMANS: A RANDOMISED CONTROLLED TRIAL
PP 004	Maria-Eleni Makreli	THE IMPACT OF SPACE CONDITIONS ON THE GUT MICROBIOME AND THE MODULATORY ROLE OF NUTRITION: A SYSTEMATIC REVIEW AND META-ANALYSIS
PP 005	Stavrini Charitou	OBSERVATION OF THE USE OF NUTRITIONAL SUPPLEMENTS AND ERGOGENIC AIDS EXERCISING AND NON-EXERCISING ADULTS: A CROSS-SECTIONAL PHASE OF A LONGITUDINAL STUDY
PP 006	Eleni Koupepia	EXPLORING ASSOCIATIONS BETWEEN CHRONONUTRITION AND MENTAL HEALTH: THE LIFEMIND STUDY
PP 007	Evdokia Aristeidou	ASSOCIATIONS BETWEEN FOOD INSECURITY, CHRONONUTRITION, AND BODY MASS INDEX (BMI)
PP 008	Chrystalla Myriantheos	EXPLORING DIETARY PATTERNS AND NUTRITION LABEL USE AMONG ADULTS IN CYPRUS: INSIGHTS AND ASSOCIATIONS. A CROSS-SECTIONAL STUDY
PP 009	Ioanna Georgiou	ONGOING STUDY: INVESTIGATION OF DIETARY TRENDS AND EATING BEHAVIORS AMONG ADULTS USING THE EAT-26 QUESTIONNAIRE TO ASSESS THE RISK OF EATING DISORDERS OR DISORDERED EATING IN CYPRIOT ADULTS. CORRELATION WITH BODY DYSMORPHIC DISORDER (2025)
PP 010	Persa Korfiati	A MIXED-METHOD EXPLORATION OF MINDFUL EATING INTERVENTIONS AND THE TRANSTHEORETICAL MODEL IN THE TREATMENT OF EMOTIONAL AND BINGE EATING DISORDERS IN GREEK CYPRIOT ADULTS
PP 011	Eleni Hadjioannou	ASSESSING UNIVERSITY STUDENTS' KNOWLEDGE AND INTERPRETATION OF FOOD LABELS AND THEIR RELATIONSHIP WITH FOOD CHOICES AND MEDITERRANEAN DIET ADHERENCE: A QUANTITATIVE CROSS-SECTIONAL ANALYSIS
PP 012	Georgia Spyrou	ADHERENCE TO MEDITERRANEAN DIET AND ITS IMPACT TO PEOPLE WITH BREAST CANCER, A NARRATIVE REVIEW
PP 013	Ntorzi Nicoletta	IMPACT OF MILITARY SERVICE ON EATING BEHAVIORS, BODY WEIGHT, AND BODY FAT: A CROSS-SECTIONAL OBSERVATIONAL STUDY OF SOLDIERS IN THE CYPRUS MILITARY
PP 014	Anna Stephanou	A SYSTEMATIC REVIEW ON HYPOGLYCAEMIC RISKS IN EATING DISORDERS





# SPEAKERS DETAILS in alphabetical order



Andreou Eleni, RDN,CPD, DProf, FHEA

Professor of Clinical Dietetics and Nutrition, University of Nicosia President of Cyprus Dietetic and Nutrition Association (CyDNA), Cy Reg. Board of Food Sciententists, Tech. & Dietitians (CyRBFSTD), MAZI-Eating Disorder and Ob Foundation, CySPEN Cyprus

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Giannaki Christoforos, BSc in Physical Education and Sports Science, MSc in Sports Physiology, PhD in Clinical Exercise Physiology

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Ioannou Elina, RD, MSc Clinical Dietetitian, Head of the Nutrition & Dietetics, Departments at Limassol and Paphos General Hospitals Cyprus ioannou\_elina@hotmail.com



# SPEAKERS DETAILS in alphabetical order



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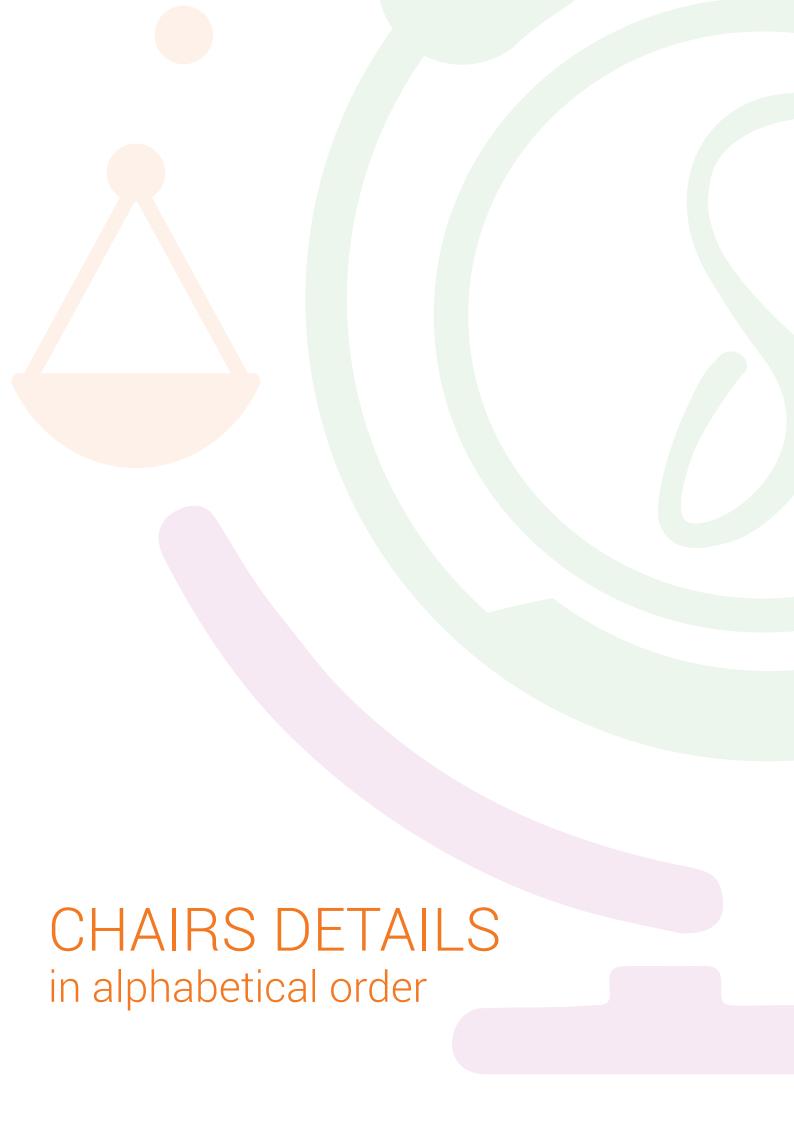
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#### Title of Presentation

## From Education to Innovation: Empowering Dietitians in Cyprus for Sustainable and Equitable Nutrition 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

Highlight the evolving role of education in empowering Cypriot dietitians to adopt evidence-based practices and strengthen professional identity.

Explore innovative tools, technologies, and approaches that can enhance dietetic practice and improve access to equitable nutrition care in Cyprus.

Promote strategies for sustainable nutrition practices that support public health, environmental responsibility, and long-term professional growth.

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

Dietitians in Cyprus stand at the forefront of shaping a healthier and more sustainable future. This session will inspire and empower professionals to harness education and innovation as tools for advancing equitable nutrition practice, strengthening leadership, and driving meaningful change in public health.

### **Learning Outcomes Assessment**

Achievement of the session objectives will be assessed through participant engagement in reflective discussion, case-based examples, and interactive polling. Attendees will demonstrate understanding by identifying practical strategies they can apply in their own practice to promote innovation, sustainability, and equity in dietetics.

### **Abstract**

The profession of dietetics in Cyprus is at a pivotal moment, shaped by the intersection of education, innovation, and the urgent need for sustainable and equitable nutrition solutions. As the challenges of non-communicable diseases, climate change, and widening health inequalities intensify, dietitians must be equipped not only with evidence-based knowledge but also with the skills and confidence to lead systemic change. This presentation explores how education and innovation can serve as transformative tools in empowering dietitians to meet the evolving demands of society and to drive meaningful progress in public health and nutrition practice.

### Education as a Foundation for Empowerment

The journey toward professional empowerment begins with education. In Cyprus, dietetic education has made significant strides in aligning with international standards, yet opportunities remain to strengthen the integration of emerging science, interprofessional learning, and leadership development into training curricula. Continuous professional development is equally essential, ensuring that practicing dietitians



### **ABSTRACTS**

remain agile and responsive to evolving evidence and health priorities. Education that emphasizes not only technical expertise but also advocacy, communication, and cultural competence creates practitioners who can lead conversations beyond the clinic and into the community, policy, and environmental domains. By positioning education as a lifelong, dynamic process, dietitians in Cyprus can be prepared to advance both professional excellence and public trust.

### Innovation as a Catalyst for Practice Transformation

Innovation is reshaping the nutrition landscape globally, offering both opportunities and challenges for dietitians. Digital health technologies, such as mobile nutrition applications, artificial intelligence in dietary assessment, and telehealth services, provide powerful tools to expand the reach of dietetic care. Innovative approaches also extend to personalized nutrition informed by genetics, microbiome science, and data-driven insights. At the same time, innovation is not limited to technology: it includes creative models of care delivery, community-based interventions, and interdisciplinary collaborations. For Cypriot dietitians, embracing innovation means not only adopting new tools but also cultivating a mindset that welcomes change, adapts evidence into practice, and ensures inclusivity in the benefits of technological and scientific advancement.

### Sustainability and Equity as Guiding Principles

While education and innovation provide the foundation and catalyst for transformation, the ultimate goals of dietetic practice must be sustainability and equity. Sustainable nutrition recognizes the interconnectedness of human health, environmental stewardship, and food system resilience. For Cyprus, a country with a rich Mediterranean food culture, dietitians are uniquely positioned to champion dietary patterns that are both health-pro.

#### References

Academy of Nutrition and Dietetics. Revised 2022 Standards of Practice and Standards of Professional Performance for Registered Dietitian Nutritionists. Journal of the Academy of Nutrition and Dietetics. 2022;122(12):2221-2237. https://doi.org/10.1016/j.jand.2022.09.010

Chen J, Gemming L, Hanning R, Allman-Farinelli M. Digital Health Interventions for Weight Management and Obesity: A Systematic Review and Meta-Analysis. Obesity Reviews. 2020;21(1):e12956. https://doi.org/10.1111/obr.12956

Willett W, Rockström J, Loken B, et al. Food in the Anthropocene: the EAT-Lancet Commission on Healthy Diets from Sustainable Food Systems. The Lancet. 2019;393(10170):447-492. https://doi.org/10.1016/S0140-6736(18)31788-4



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#### Title of Presentation

### Lp(a) and LDL Cholesterol: Clinical Insights and Dietary Implications for Cardiovascular Risk 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:

- 1. Explain the role of Lp(a) and LDL cholesterol in atherosclerotic cardiovascular disease and their implications for risk assessment.
- 2. Identify appropriate diagnostic thresholds and treatment strategies for managing elevated Lp(a) and LDL-C based on current clinical guidelines.
- 3. Recommend evidence-based dietary and therapeutic interventions to lower LDL-C and understand the limited influence of diet on Lp(a) levels.

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

This session will explore the distinct roles of Lp(a) and LDL cholesterol in cardiovascular disease risk, highlighting recent clinical insights, diagnostic strategies, and treatment approaches.

Emphasis will be placed on the impact of diet and lifestyle on LDL-C, and the challenges in managing elevated Lp(a), which is largely genetically determined. Understanding these factors is critical for healthcare professionals aiming to implement personalized, evidence-based strategies for cardiovascular disease prevention and management.

### **Learning Outcomes Assessment**

- 1. Understand the clinical significance of Lipoprotein(a) and LDL-Cholesterol in the context of cardiovascular disease risk.
- 2. Interpret current clinical guidelines and evidence regarding the assessment, screening, and management of elevated Lp(a) and LDL-C levels in low, moderate, high, and very high risk patient groups.
- 3. Evaluate the effectiveness and limitations of dietary and lifestyle interventions on LDL-C levels, and understand the minimal impact of diet on genetically determined Lp(a) concentrations.

#### References

- 1. Mach F, Koskinas KC, Roeters van Lennep JE, Tokgözoğlu L, Badimon L, Baigent C, Benn M, Binder CJ, Catapano AL, De Backer GG, Delgado V, Fabin N, Ference BA, Graham IM, Landmesser U, Laufs U, Mihaylova B, Nordestgaard BG, Richter DJ, Sabatine MS; ESC/EAS Scientific Document Group. 2025 Focused Update of the 2019 ESC/EAS Guidelines for the management of dyslipidaemias. Atherosclerosis. 2025 Aug 28:120479. doi: 10.1016/j.atherosclerosis.2025.120479.
- 2. Visseren FLJ, Mach F, Smulders YM, Carballo D, Koskinas KC, Bäck M, Benetos A, Biffi A, Boavida JM, Capodanno D, Cosyns B, Crawford C, Davos CH, Desormais I, Di Angelantonio E, Franco OH, Halvorsen S, Hobbs FDR, Hollander M, Jankowska EA, Michal M, Sacco S, Sattar N, Tokgozoglu L, Tonstad S, Tsioufis KP, van Dis Ivan Gelder IC, Wanner C, Williams B; ESC National Cardiac Societies; ESC Scientific Document Group. 2021 ESC Guidelines on cardiovascular disease prevention in clinical practice. Eur Heart J. 2021 Sep 7;42(34):3227-3337. doi:10.1093/eurheartj/ehab484. Erratum in: Eur Heart J. 2022 Nov 7;43(42):4468. doi: 10.1093/eurheartj/ehac458.
- 3. Mach F, Baigent C, Catapano AL, Koskinas KC, Casula M, Badimon L, Chapman MJ, De Backer GG, Delgado V, Ference BA, Graham IM, Halliday A, Landmesser U, Mihaylova B, Pedersen TR, Riccardi G, Richter DJ, Sabatine MS, Taskinen MR, Tokgozoglu L, Wiklund O; ESC Scientific Document Group. 2019 ESC/EAS Guidelines for the management of dyslipidaemias: lipid modification to reduce cardiovascular risk. Eur Heart J. 2020 Jan 1;41(1):111-188. doi: 10.1093/eurheartj/ehz455.



### **ABSTRACTS**

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#### Title of Presentation

### **New Insights of Enteral Nutrition**

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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 the key updates in enteral nutrition recommendations compared to previous guidelines.
- 2. Explain the rationale behind the avoidance of early aggressive feeding of critically ill patients, including the supporting evidence.
- 3. Be aware of best practices of feeding critically ill patients and intergrade the updated recommendations into institutional protocols and interdisciplinary care plans.

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

Incorporate new evidence based strategies for nutritional therapy in critically ill patients with a focus on enteral nutrition in the ICU setting.

Differentiate between traditional practices and current best practices in ICU nutritional management including timing, route and composition of feeding.

Update their clinical knowledge based on the latest international guidelines and recommendations for enteral nutrition.

### **Learning Outcomes Assessment**

Learning Outcomes Assessment are assessed by realistic ICU cases scenarios that illustrate the application of new enteral nutrition recommendations. An evaluation question will be provided to assess participants' comprehension and retention of key concepts.

### **Abstract**

Enteral nutrition (EN) remains a cornerstone of nutritional support for patients unable to meet their nutritional needs orally but who maintain a functional gastrointestinal tract. Over the past decade, growing clinical evidence and expert consensus have led to significant updates in international guidelines. This presentation provides an overview of recent recommendations from key authorities and national regulatory bodies. These updates emphasize a more individualized, evidence-based approach to enhance outcomes and minimize risks. One major change involves the timing of EN initiation. For critically ill patients without contraindications, early EN-within 24 to 48 hours of ICU admission-is recommended. Early initiation has been associated with preserved gut integrity, reduced infectious complications, and lower mortality. However, early aggressive feeding is discouraged. During the initial phase of critical illness, endogenous energy production is high, and the body is often resistant to anabolic signals. Overfeeding and high protein intake during this phase have been linked to worse outcomes. Therefore, hypocaloric feeding is advised early on, with gradual advancement in the recovery phase. Personalized nutrition is a central theme in the updated recommendations. Enteral formulas should be selected based on individual metabolic needs, underlying disease and gastrointestinal tolerance. For instance, patients with renal failure may require fluid-restricted or protein-adjusted formulas, while those with hepatic encephalopathy may benefit from modified amino acid profiles.



Similarly, trauma and burn patients may need higher protein intakes, and patients with obesity may require protein targets based on adjusted body weight. Monitoring is essential to guide therapy and prevent complications. Kidney function, fluid balance, and markers such as BUN and urea/creatinine ratio must be closely monitored. Tolerance to EN should be assessed through signs like gastric residuals, abdominal distention, diarrhea, and risk of aspiration. Early identification of intolerance can help modify interventions and prevent further deterioration. Updated protocols also stress the need for proactive micronutrient assessment, especially in patients at risk of refeeding syndrome.

Thiamine, phosphorus, potassium, and magnesium should be supplemented if needed to prevent metabolic disturbances.

Furthermore, functional outcomes and patient-centered goals, such as improved mobility and quality of life, are increasingly recognized as key endpoints in nutritional care. Long-term EN management includes protocols for feeding tube site care, prevention of infections, and timely transition to oral feeding or home enteral nutrition (HEN). Collaboration among dietitians, physicians, pharmacists, physiotherapists and nurses is critical to ensure ongoing reassessment and adaptation of nutrition plans. In conclusion, EN must be individualized and phase-specific: start with cautious hypocaloric feeding, avoid

In conclusion, EN must be individualized and phase-specific: start with cautious hypocaloric feeding, avoid overfeeding during early critical illness, and advance as the patient stabilizes. By applying updated, patient-specific strategies outcomes are improved and complications are reduced in both acute and long-term care settings.

#### References

- 1. Lee et al (2024) The effects of higher versus lower protein delivery in critically ill patients: an updated systematic review and meta-analysis of randomized controlled trials with trial sequential analysis Critical Care 28:15
- 2. Wischmeyer et al (2021) Point-counterpoint: Indirect calorimetry is essential for optimal nutrition therapy in the intensive care unit Nutr Clin Pract; 35(2): 275-281
- 3. Singer et al (2019) ESPEN practical and partially revised guideline: Clinica nutrition in intensive care unit Clinical Nutrition 38 48-79
- 4. Paulus et al (2025) The urea-to-creatinine ratio as an emerging biomarker in critical care: a scoping review and meta-analysis Critical Care 29:175



### **ABSTRACTS**

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#### Title of Presentation

# **Evidence-Based Sports Supplements: Supporting Muscle Function, Recovery, 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. Define the role of sports supplements in supporting muscle function, recovery, and athletic performance.
- 2. Identify key supplements commonly used in sports (e.g., protein, creatine, beta-alanine, caffeine, electrolytes).
- 3. Explain the mechanisms by which selected supplements influence muscle repair, energy metabolism, and performance.
- 4. Differentiate between evidence-based supplements and those with limited or no proven effectiveness.
- 5. Discuss potential benefits and risks (including side effects and regulatory considerations) of common sports supplements.
- 6. Apply knowledge to case examples by selecting appropriate supplements for specific athletic goals (e.g., endurance vs. strength sports).
- 7. Evaluate the importance of timing, dosage, and interaction of supplements with overall nutrition and training.

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

This session explores the role of sports supplements in enhancing muscle function, supporting recovery, and improving overall athletic performance. Learners will gain an understanding of evidence-based supplements, their mechanisms of action, and their practical applications in different sporting contexts.

Emphasis will be placed on distinguishing between beneficial supplements and those lacking scientific support, while also considering safety and ethical aspects of use.

### **Abstract**

Sports supplements are used by athletes and physically active individuals to maximize training adaptations, enhance performance, and accelerate recovery. The primary goals of this presentation are to summarize the scientific consensus regarding the efficacy of key performance-enhancing supplements and to provide evidence-based guidance for their use. Supplementation is only effective as an adjunct to meeting core nutritional needs, particularly achieving appropriate energy intake which is the cornerstone of the athlete's diet, as it supports optimal body function and capacity for macronutrient and micronutrient intake.

However, relatively few supplements claiming ergogenic benefits are supported by high-quality scientific evidence, and athletes must be keenly aware of the significant risk of unintentional doping, as some commercial products may contain undeclared prohibited substances (e.g. sibutramine and anabolic-androgenic steroids), which are the most frequently found undeclared substances. Creatine monohydrate (Cr) stands out as one of the most effective supplements, deemed safe and effective for improving aspects of sport, including upper- and lower-body strength and anaerobic capacity, even exhibiting benefits without an exercise intervention in populations with low baseline levels like vegetarians. Long term (>6 months) Cr consumption at moderate does not seem to negatively affect health, while timing does not appear to be a limiting factor on the ergogenic effects of exercise training adaptations. Beyond muscle, Cr increases total



brain creatine content, and this effect may positively influence cognitive function and memory, especially during periods of high stress, such as sleep deprivation or experimental hypoxia. Cr may play a neuroprotective role against traumatic brain injury severity and post-injury symptoms and may be useful as a neuroprotective aid in cases of elective surgery involving the nervous system.

Protein intake is vital for muscle adaptation, with optimal consumption achieved through high-guality sources supplying approximately 0.25-0.30 g/kg of body weight every few hours to maximize muscle protein synthesis. The amino acid L-Carnitine shows inconsistent evidence for improving performance in distance athletes, but doses of 2 g/d are suggested for recovery from strenuous exercise, whereas taurine levels decrease with aging, but 7 days of supplementation does not necessarily increase muscle content due to tight regulation of the skeletal muscle taurine pool. Other ergogenic supplements include beta-alanine (BA), which chronically increases muscle carnosine, serving as an intramuscular pH buffer to enhance performance during high-itensity exercise lasting 60-240 seconds. BA may elevate muscle carnosine and improve physiological performance and cognitive function without detectable changes in brain carnosine. Similarly, sodium bicarbonate acts as an extracellular buffer for efforts between 1 and 10 minutes. Dietary nitrate, typically delivered via beetroot juice (BRJ), is established to reduce the oxygen cost of submaximal exercise and improve performance, such as 100-m swim times in university-level swimmers, Preliminary data also suggests it may increase upper body weightlifting performance (repetitions to failure in bench press/squat). For recovery, supplemental antioxidants and anti-inflammatory agents are gaining attention. Anthocyanin-rich supplements (e.g., Montmorency tart cherry) can accelerate the recovery of functional performance following exercise-induced muscle damage, and chronic Omega-3 fatty acid supplementation may mitigate muscle damage markers (CK, LDH) and reduce inflammatory response (IL-6, CRP) following exercise. High doses of omega-3 and omega-6 PUFAs combined with high-intensity functional training resulted in a small but significant increase in muscle mass and fat reduction in healthy young adults, although performance parameters were unaffected. High doses of antioxidant supplements may impair positive training adaptations, as the ROS produced during exercise are necessary signals for physiological processes, demanding that athletes prioritize antioxidant intake through a balanced diet rather than high-dose capsules. A structured, evidence-based approach is essential for supplement use. Effective ergogenic aids (Creatine, Buffers, Nitrates, Caffeine) should be employed to target specific physiological bottlenecks, while foundational nutrition (Energy, CHO, Protein) must first be maximized to support adaptation, recovery, and overall health. Dietitians should use their expertise to conduct comprehensive nutritional assessments, identify deficiencies, and guide athletes away from unnecessary or high-risk supplements. Prioritize educating athletes about the significant safety risk of untested products, emphasizing the selection of certified supplements to minimize the risk of unintentional doping.

### References

- 1. Kozhuharov, V. R., Ivanov, K., & Petkova-Gueorguieva, E. S. (2022). Dietary Supplements as Source of Unintentional Doping. BioMed Research International, 2022, 8387271. doi: 10.1155/2022/8387271
- 2. Thomas, D. T., Erdman, K. A., & Burke, L. M. (2016). Position of the Academy of Nutrition and Dietetics, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and Athletic Performance. Medicine & Science in Sports & Exercise, 48(3), 543-568. doi: 10.1249/MSS.00000000000000852
- 3. Kreider, R. B., Kalman, D. S., Antonio, J., Ziegenfuss, T. N., Wildman, R., Collins, R., Candow, D. G., Kleiner, S. M., Almada, A. L., & Lopez, H. L. (2017). International Society of Sports Nutrition position stand: safety and efficacy of creatine supplementation in exercise, sport, and medicine. Journal of the International Society of Sports Nutrition, 14(18). doi: 10.1186/s12970-017-0173-z
- 4. Dolan, E., Gualano, B., & Rawson, E. S. (2019). Beyond muscle: The effects of creatine supplementation on brain creatine, cognitive processing, and traumatic brain injury. European Journal of Sport Science, 19(1), 1-14. doi: 10.1080/17461391.2018.1500644
- 5. Stellingwerff, T., Anwander, H., Egger, A., Buehler, T., Kreis, R., Decombaz, J., & Boesch, C. (2012). Effect of two beta-alanine dosing protocols on muscle carnosine synthesis and washout. Amino Acids, 42(6), 2461-2472. doi: 10.1007/s00726-011-0855-9
- 6. Barquilha, G., Miguel, C., Dos, M., Caçula, K. G., Polotow, T. G., Vasconcellos, C. V., Fernandes, A., Rodrigues, L. E., Lambertucci, R. H., & Duarte, T. (2023). Fish Oil Supplementation Improves the Repeated-Bout Effect Strength Training. Nutrients, 15(7), 1708. doi: 10.3390/nu15071708
- 7. Posnakidis, G., Giannaki, C. D., Mougios, V., Pantzaris, M., Patrikios, I., Calder, P. C., Sari, D. K., Bogdanis, G. C., & Aphamis, G. (2024). Effects of Supplementation with Omega-3 and Omega-6 Polyunsaturated Fatty Acids and Antioxidant Vitamins, Combined with High-Intensity Functional Training, on Exercise Performance and Body Composition: A Randomized, Double-Blind, Placebo-Controlled Trial. Nutrients, 16(17), 2914. doi: 10.3390/nu16172914



#### Dr Charidemou Evelina

PhD, Assistant Prof. Nutritional Biochemistry and Metabolism, University of Nicosia, Cyprus

#### Title of Presentation

### Can our Epigenome Store Metabolites?

#### **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

Explain how metabolites act as substrates and cofactors for epigenetic enzymes (e.g., acetyl-CoA, SAM, NAD $^+$ ,  $\alpha$ -KG). Identify key histone modifications events influenced by metabolic states.

Discuss whether chromatin can function as a "reservoir" for metabolites through histone modifications.

Evaluate the implications for chronic diseases (e.g., diabetes, cancer).

Consider future directions: epigenome as a therapeutic target and storage system for metabolic information.

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

This session will explore the emerging concept of the epigenome as a dynamic interface between metabolism and gene regulation.

We will discuss how metabolites such as acetyl-CoA, SAM, and NAD+not only fuel epigenetic enzymes but may also be "stored" in chromatin modifications, shaping long-term cellular memory.

By highlighting implications for chronic diseases and therapeutic innovation, the session will provide attendees with new perspectives on how metabolic states leave lasting epigenetic imprints.

#### Learning Outcomes Assessment

The stated objectives will be assessed through active audience engagement, including targeted discussion questions during the presentation, visual case examples linking metabolites to specific epigenetic marks, and a short post-session Q&A. By inviting participants to explain mechanisms, interpret experimental findings, and reflect on disease implications, we will gauge their ability to describe, identify, and evaluate the role of metabolites in shaping the epigenome.

#### **Abstract**

The interplay between metabolism and epigenetics has long been recognized, with intracellular metabolites such as acetyl-CoA, S-adenosylmethionine, NAD $^+$ , and  $\alpha$ -ketoglutarate serving as essential cofactors for chromatin-modifying enzymes. In this way, metabolism exerts a powerful influence on the epigenome, regulating transcription, replication, and DNA repair.

Recent evidence, however, reveals that this relationship is bidirectional. Histones, due to their abundance and extensive post-translational modification, can store substantial amounts of metabolites. Histone acetylation, in particular, has emerged as an acetate reservoir with the capacity to influence cellular metabolism directly. Deacetylation of hyperacetylated histones can release acetate, which is recaptured by acetyl-CoA synthetase 2 (ACSS2) and used to sustain acetyl-CoA pools, fueling lipogenesis or reallocating acetyl groups to transcriptionally active loci. Estimates suggest that histone acetylation may sequester levels of acetate that exceed free acetyl-CoA concentrations, highlighting chromatin's role as a metabolite buffer.



This presentation will explore this two-way relationship between histone acetylation and metabolism. In one direction, metabolic fluctuations in acetyl-CoA availability shape chromatin states and gene expression. In the opposite direction, histone acetylation functions as a reservoir that can be mobilized to meet metabolic demands. We will discuss the implications of this reciprocal crosstalk in health and disease, including aging, diabetes, and cancer, where disruption of this balance impacts both epigenetic regulation and metabolic homeostasis.

By integrating recent mechanistic insights and experimental evidence, this session will provide attendees with a novel perspective on how the epigenome not only senses but also stores metabolites, acting as a dynamic interface between gene regulation and cellular metabolism.

#### References

Charidemou, E., Pampalona, J., Constantinou, C., Anastasiou, E., Loizides, C., Bonaldi, T., & Kirmizis, A. (2024). Histone H4 hyperacetylation functions as a carbon reservoir for lipid synthesis in hepatocytes. The EMBO Journal, 43(18), e120876. https://doi.org/10.1038/s44318-024-00053-0

Charidemou, E., & Kirmizis, A. (2024). A two-way relationship between histone acetylation and metabolism. Trends in Biochemical Sciences.

https://doi.org/10.1016/j.tibs.2024.10.005

Sink into the epigenome: Histones as repositories that influence cellular metabolism. Trends in Endocrinology & Metabolism, 29(9), 626-637.

https://doi.org/10.1016/j.tem.2018.06.004

Does chromatin function as a metabolite reservoir? Trends in Biochemical Sciences, 47(9), 732-735. https://doi.org/10.1016/j.tibs.2022.06.003



#### **Dr Constantinou Haris**

MD, BSc (Nutritional Science & Dietetics), SCOPE Certified in Obesity Management, World Obesity Federation Consultant in Internal Medicine, Director of Obesity Centre, Department of Internal Medicine, Larnaca General Hospital, Cyprus

#### Title of Presentation

### Diagnostic Assessment of the Patient with Obesity: Beyond BMI

#### **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:

- Taking an individualized approach to the assessment of the patient living with obesity.
- Familiarization with the methods of diagnostic approach for patients living with obesity.
- Understanding how the diagnosis of the disease is established.
- Understanding the process of disease staging.
- Introduction to the new clinical obesity guidelines.

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

This session will provide an individualized approach to assessing patients living with obesity, highlighting current diagnostic methods and the process of establishing a diagnosis. Participants will gain an understanding of disease staging and its clinical implications, along with an introduction to the latest clinical obesity guidelines. The session aims to equip attendees with practical, evidence-based strategies to improve patient-centered care and outcomes.

#### **Learning Outcomes Assessment**

- Knowledge checks: Multiple-choice questions to assess understanding of diagnostic approaches, staging, and new clinical guidelines.
- Case-based discussions: Participants apply individualized assessment principles and staging frameworks to patient scenarios, demonstrating diagnostic reasoning.
- Interactive polling or Q&A: Real-time engagement during the session to confirm comprehension of key points.

#### **Abstract**

Obesity is now recognized as a complex, chronic, relapsing disease rather than a mere lifestyle choice. While body mass index (BMI) remains a common tool, it fails to reflect disease heterogeneity or health impact at the individual level. A broader diagnostic approach must include biological, psychological, and social determinants as well as individualized, patient-centered care.

According to the WHO, obesity is defined as excess fat accumulation that impairs health, yet this is only part of its complexity. Pathophysiology involves genetics, neuroendocrine factors, gut microbiota, environment, and psychosocial influences. Dysregulated appetite, altered metabolism, chronic inflammation, and hormonal imbalances drive progression. Complications are diverse: metabolic (type 2 diabetes, dyslipidemia, fatty liver), mechanical (sleep apnea, osteoarthritis), cardiovascular, and psychosocial (depression, stigma, impaired quality of life).

Patient-centered care requires respectful communication, avoidance of stigma, and a comprehensive history including weight trajectory, comorbidities, lifestyle, sleep, and psychosocial context. Anthropometric tools



beyond BMI-such as waist circumference, waist-to-hip and waist-to-height ratios-are valuable markers of visceral adiposity and cardiometabolic risk. Body composition analysis (bioimpedance, DEXA) adds further precision.

Clinical and laboratory tests identify comorbidities: glucose, HbA1c, lipid profile, liver enzymes, thyroid function, and blood pressure. Sleep studies may confirm sleep apnea, while imaging helps detect fatty liver. Mental health, quality of life, and social determinants must also be assessed.

Diagnosis should be established when excess adiposity impairs health. The Edmonton Obesity Staging System (EOSS) provides a more meaningful framework than BMI alone:

- Stage 0: No risk factors or impairment.
- Stage 1: Mild risk factors, minimal impairment.
- Stage 2: Established comorbidities (e.g., diabetes, hypertension).
- Stage 3: End-organ damage or significant limitations.
- Stage 4: Severe disability or end-stage disease.

This highlights that patients with the same BMI may have very different clinical needs.

Given the disease's complexity, a multidisciplinary team (MDT) is essential. Physicians, dietitians, psychologists, physiotherapists, exercise specialists, and bariatric surgeons address nutrition, physical activity, behavioral therapy, pharmacotherapy, and surgery. Nurses, social workers, and advocacy groups play key roles in adherence and stigma reduction.

In conclusion, effective diagnostic evaluation must move beyond BMI. By integrating anthropometric and metabolic measures, comorbidity screening, and staging systems such as EOSS, clinicians can better define disease burden and personalize care. The MDT ensures holistic and sustainable management, ultimately improving outcomes and guality of life for people living with obesity.

#### References

- 1) Luca Busetto et al, A new framework for the diagnosis, staging and management of obesity in adults, Nature Medicine, 2024
- 2) F. Rubino et al, Definition and diagnostic criteria of clinical obesity, The Lancet Diabetes & Endocrinology, 2025
- 3) Sue D. Pedersen et al, Pharmacotherapy for obesity management in adults: 2025 clinical practice guideline update, Canadian Medical Association Journal, 2025



#### **Prof Dr Constantinou Constantina**

BA, MSc, PgCertHE, PhD, Professor of Molecular Cancer Biology, University of Nicosia Medical School, Cyprus

#### Title of Presentation

# HEALTHY TEENS: Designing an Evidence-informed Lifestyle Intervention in adolescents to reduce future cancer risk

#### **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

- Explain how modifiable adolescent behaviours influence cancer risk, and how aligning the pillars of Lifestyle Medicine with the World Cancer Research Fund/ American Institute for Cancer Research (WCRF/AICR) cancer prevention recommendations identifies seven priority behaviours for adolescents which include healthy eating, regular physical activity, weight management, avoidance of risky substances, stress management, restorative sleep, and positive social connection.
- Characterise the current profile of unhealthy behaviours and mental health concerns among adolescents in Cyprus and relate these patterns to long-term cancer risk.
- Describe priority focus areas for risk reduction adolescents, and outline how the HEALTHY TEENS research project aims to co-design with policy makers, educators, parents, and students a feasible and scalable school-based intervention that will target effective components for each healthy behaviour, integrate interactive multi-component elements and age-appropriate technology, embed family and peer involvement and cultural tailoring, and address implementation challenges including resources, scalability, and cost.

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

This session synthesises current evidence on how modifiable adolescent behaviours shape lifetime cancer risk, introducing the Lifestyle Medicine framework aligned with World Cancer Research Fund/ American Institute for Cancer Research (WCRF/AICR) guidance to define seven priority behaviours for prevention.

Drawing on recent Cyprus surveillance data, we motivate urgent action and present the HEALTHY TEENS research project which is aiming to co-design with policy makers, educators, parents, and students a feasible and scalable school-based intervention that will target effective components for each healthy behaviour, integrate interactive multi-component elements and age-appropriate technology, embed family and peer involvement and cultural tailoring, and address implementation challenges including resources, scalability, and cost.

#### **Learning Outcomes Assessment**

The objectives will be assessed by a summary question for the audience.

#### **Abstract**

Cancer remains a leading cause of morbidity and mortality worldwide, with a substantial proportion of risk attributable to modifiable lifestyle factors that begin early in life. In Cyprus, the cancer burden underscores the urgency of early prevention: In 2022 there were 4,658 new cancer cases and 1,496, and regional and international analyses project further increases in incidence and mortality through 2045 without focused action. The World Cancer Research Fund (WCRF) and the American Institute for Cancer Research (AICR) indicate that 30 - 50% of common cancers could be prevented through healthy behaviours including healthy dietary patterns, maintenance of a healthy body weight, and regular physical activity. This prevention opportunity is particularly salient during adolescence, when lifelong habits form, peers and families shape choices, and small, sustained changes can shift long-term risk trajectories. Lifestyle Medicine (LM) is a



clinical discipline that uses evidence-based lifestyle changes to prevent, treat, and sometimes reverse chronic disease. Aligning the six pillars of LM with the WCRF/AICR cancer prevention recommendations identifies seven priority behaviours for adolescents: healthy eating, regular physical activity, weight management, avoidance of risky substances, stress management, restorative sleep, and positive social connection. Health behaviour surveillance among Cypriot adolescents highlights multiple targets for intervention. Evidence from the literature supports that in Cyprus only 56% of adolescents consume fruit and vegetables regularly and 53% share daily family meals, alongside a rising trend of adolescent obesity. Physical activity declines after age 13, while 53.5% spend 2 or more hours per day on screens. Experimentation of adolescents with substances begins early, with 46.4% having tried alcohol, 28.9% reporting having been drunk at least once, 5% smoking regularly, 38.1% having used e cigarettes, and 7.1% reporting cannabis use. Mental health indicators are also concerning, including low mood in 12.8%, irritability in 21.1%, nervousness in 22.6%, and feelings of loneliness in 24%. HEALTHY TEENS is national research project with partners in education, health, and civil society that aims to design, implement, and evaluate a school based psychoeducational intervention to reduce future cancer risk by promoting seven priority behaviours including healthy eating, regular physical activity, weight management, avoidance of risky substances, stress management, restorative sleep, and positive social connection. Work Package 1 reviewed scientific literature from 2014 to 2024 on school-based programs for healthy adolescents aged focused on stress management, diet and physical activity, smoking and alcohol. Findings were analysed from 47 studies (comprising 11 stress-management studies, 19 diet and physical activity studies, and 17 smoking and alcohol studies across non-randomised and randomised trials, systematic reviews, and meta-analyses). Findings indicate that cognitive behavioural therapy and mindfulness-based interventions reduce anxiety and stress, although benefits attenuate without booster sessions; interactive, curriculum-embedded, culturally tailored, and technology-supported approaches improve diet and physical activity; and school psychoeducational programmes reduce smoking and alcohol use, with social and life skills training that builds self-efficacy, self-esteem, and resilience outperforming knowledge-only education. External support from family, peers, and the school environment emerged as a protective factor across domains. Guided by this evidence, Work Package 2 will co-design with policy makers, educators, parents, and students a feasible and scalable school-based intervention that targets effective components for each behaviour, integrates interactive multi-component elements and ageappropriate technology, embeds family and peer involvement and cultural tailoring, and addresses implementation challenges including resources, scalability, and cost.

#### References

- 1. American College of Lifestyle Medicine (ACLM) (2023). https://lifestylemedicine.org/
- 2. Berisha A, Shutkind K, Borniger JC (2022). Sleep Disruption and Cancer: Chicken or the Egg? Front Neurosci. 16:856235. doi: 10.3389/fnins.2022.856235.
- 3. Boen et al., (2018). Social Relationships, Inflammation, and Cancer Survival. Cancer Epidemiol Biomarkers Prev. 27(5):541-549. doi: 10.1158/1055-9965.EPI-17-0836.
- 4. Chen X et al., (2019). Physical Activity and Risk of Breast Cancer: A Meta-Analysis of 38 Cohort Studies in 45 Study Reports. Value Health. 22(1):104-128. doi: 10.1016/j.jval.2018.06.020.
- 5. Cyprus Cancer Registry. All Cancer Types 1998-2022.
- Available from: https://www.gov.cy/media/sites/24/2024/05/Περιστατικά-καρκίνο υ\_όλα-τα-είδη\_1998-2022.pdf
- 6. Eurostat. Causes of Death deaths by country of residence and occurrence. https://doi.org/10.2908/HLTH\_CD\_ARO
- 7. Grammatikopoulou et al., (2014). A systematic review and meta-analysis of weight status among adolescents in Cyprus: scrutinizing the data for the years 2000-2010. Hormones 13(4):543-551.
- 8. Health Behaviour in School aged children (HBSC Study). Cyprus Report (2023). https://hbsc.org/
- 9. International Agency for Research in Cancer (IARC) (2024). Cancer Today. https://gco.iarc.fr/today/
- 10. Lempesis et al. (2023). Role of stress in the pathogenesis of cancer (Review). Int J Oncol. 63(5):124. doi: 10.3892/ijo.2023.5572.
- 11. OECD/European Commission (2025), EU Country Cancer Profile: Cyprus 2025, EU Country Cancer Profiles, OECD Publishing, Paris. <a href="https://doi.org/10.1787/c5a3f19e-en.">https://doi.org/10.1787/c5a3f19e-en.</a>
- 12. Savva et al., (2002). Obesity in children and adolescents in Cyprus. Prevalence and predisposing factors. Int J Obes 26, 1036-1045. doi: 10.1038/si.ijo.0802042.
- 13. Savva et al., (2014). Overweight and obesity prevalence and trends in children and adolescents in Cyprus 2000-2010. Obes Res Clin Pract. 8(5):e426-34. doi: 10.1016/j.orcp.2013.11.005
- 14. Schwingshackl et al., (2017). Adherence to Mediterranean Diet and Risk of Cancer: An Updated Systematic Review and Meta-Analysis. Nutrients 9(10):1063. doi: 10.3390/nu9101063.
- 15. Shi et al., (2023). Barriers and facilitators for adopting healthy lifestyles in breast cancer survivors: a scoping review protocol. JBI Evid Synth. 21(11):2218-2226. doi: 10.11124/JBIES-22-00395
- 16. World Cancer Research Foundation (WCRF) (2024). <a href="https://www.wcrf.org/">https://www.wcrf.org/</a> World Health Organisation (WHO) European Regional Obesity Report (2022). <a href="https://www.who.int/europe/publications/i/item/9789289057738">https://www.who.int/europe/publications/i/item/9789289057738</a>.



#### **Dr Dimosthenopoulos Charilaos**

PhD, MMedSci, BSc, Head of the Dietetics Department, General Hospital of Athens "Laiko" Dietetic Department, General Hospital of Athens "Laiko, Medical School, National and Kapodistrian University of Athens Greece

#### Title of Presentation

# The Dietetic Approach in Individuals Receiving GLP-1 and/or GIP Agonists: Key Considerations

#### **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 understand the dietary implications of taking this class of anti-obesity medications and to be able to develop a better nutritional plan in order to achieve a more lasting result, as well as to address any potential deficiencies.

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

The most common nutritional deficiencies reported in the literature will be highlighted, emphasis will be placed on the content of the prescribed diet and on the management and prevention of sarcopenia, and, most importantly, recommendations will be provided on how to address nutritional issues that may arise during the use of the medication, such as constipation, tendency to vomit, and gastrointestinal discomfort.

#### **Learning Outcomes Assessment**

The dietitian monitoring an individual receiving GLP agonists should be able to prevent the occurrence of deficiencies through the provision of necessary nutritional supplements, assess body composition and monitor the reduction or maintenance of muscle mass, and achieve a qualitative weight loss.

#### Abstract

Glucagon-like peptide-1 (GLP-1) receptor agonists and dual GLP-1/glucose-dependent insulinotropic polypeptide (GIP) agonists are pharmacological agents increasingly used in the management of obesity and type 2 diabetes mellitus. Their primary mechanisms include enhancing glucose-dependent insulin secretion, delaying gastric emptying, and reducing appetite, leading to decreased energy intake and clinically significant weight loss. Glucagon-like peptide 1 receptor agonists and combination medications (GLP-1s) are shifting the treatment landscape for obesity. While these effects are beneficial, they introduce specific nutritional considerations that require targeted dietetic interventions to optimize outcomes and prevent adverse effects. Common side effects such as nausea, vomiting, constipation, and gastrointestinal discomfort can further impair dietary adequacy. Additionally, the rapid weight loss observed in some patients may lead to a disproportionate loss of lean body mass, increasing the risk of sarcopenia and functional decline, particularly in older adults or those with low baseline muscle mass. This is the reason why an individualized dietary approach is essential to ensure the effectiveness of therapy while minimizing nutritional risks. Energy requirements should be reassessed periodically, accounting for changes in body weight, physical activity, and metabolic adaptations. Protein intake should be emphasized, with a target of 1.0-1.5 g/kg body weight/ day, to preserve lean mass and support satiety. High-quality protein sources, fiber intake (25-35 g/day), mono- and polyunsaturated fats can provide cardiometabolic benefits. Adequate hydration-typically 1.5-2.5 liters per day-is critical, especially for individuals experiencing delayed gastric emptying or constipation. Patients should be counseled to sip fluids between meals rather than with food to minimize early satiety. Dietary strategies to mitigate gastrointestinal discomfort include small, frequent meals, avoidance of high-fat and heavily processed foods, and gradual progression of dietary fiber intake. A multidisciplinary



approach, including dietary and psychological assessment, can serve as a useful guide for effective management. The dietitian's role is crucial-within the framework of a multidisciplinary team-in individualized management, in preventing sarcopenia, and in avoiding nutritional deficiencies. Also, psychological support may be necessary to address changes in eating behavior, disordered eating patterns, or unrealistic weight expectations. Finally, exercise professionals play a key role in prescribing resistance and aerobic training to preserve muscle mass and promote functional capacity.

#### Conclusion

Dietitians have a central role in the care of individuals receiving GLP-1 and GIP agonists, ensuring nutritional adequacy, preserving lean mass, and enhancing the sustainability of weight loss. Through individualized assessment and targeted dietary strategies.

#### References

- 1. Huber H, Schieren A, Holst JJ, Simon MC. Dietary impact on fasting and stimulated GLP-1 secretion in different metabolic conditions a narrative review. Am J Clin Nutr. 2024 Mar;119(3):599-627.
- 2. Balantekin KN, Kretz MJ, Mietlicki-Baase EG. The emerging role of glucagon-like peptide 1 in binge eating. J Endocrinol. 2024 May 9;262(1):e230405.
- 3. Neeland IJ, Linge J, Birkenfeld AL. Changes in lean body mass with glucagon-like peptide-1-based therapies and mitigation strategies. Diabetes Obes Metab. 2024 Sep;26 Suppl 4:16-27.
- 4. Christensen S, Robinson K, Thomas S, Williams DR. Dietary intake by patients taking GLP-1 and dual GIP/GLP-1 receptor agonists: A narrative review and discussion of research needs. Obes Pillars. 2024 Jul 25;11:100121.
- 5. Mozaffarian D, Agarwal M, Aggarwal M, Alexander L, Apovian CM, Bindlish S, Bonnet J, Butsch WS, Christensen S, Gianos E, Gulati M, Gupta A, Horn D, Kane RM, Saluja J, Sannidhi D, Stanford FC, Callahan EA. Nutritional priorities to support GLP-1 therapy for obesity: A joint Advisory from the American College of Lifestyle Medicine, the American Society for Nutrition, the Obesity Medicine Association, and The Obesity Society. Obesity (Silver Spring). 2025 Aug;33(8):1475-1503.



#### **Dr Dimosthenopoulos Charilaos**

PhD, MMedSci in Human Nutrition, PGDipDiet in Nutrition and Dietetics, BSc in Biology Chief Dietitian, Dietetic Department, Laiko General Hopsital of Athens, National and Kapodistrian University of Athens, Greece

#### Title of Presentation

# Dietary Intervention in Diabetic Nephropathy: A Case-Based Approach Using Carb Counting and Renal Diet Equivalents

#### **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

After the presentation, 1) the design of the diet plan for individuals with diabetic nephropathy and the use of food exchanges will be more comprehensible, 2) ensuring that the energy and nutritional needs for all macronutrients and micronutrients are met, 3) while also achieving proper glycemic control

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

Through a clinical case from the hospital, and by following the process of diet design, the calculation of energy requirements, and the use of food exchanges specific to diabetic nephropathy, the process of dietary support for a patient with this clinical condition will become even more comprehensible. This condition is perhaps one of the most challenging and demanding cases in terms of diet planning.

#### **Learning Outcomes Assessment**

Through an interactive process with questions directed to the audience, it will be possible to assess the understanding of the presentation and to identify the most demanding processes, thereby facilitating the comprehension of the dietary approach.

#### **Abstract**

Diabetic nephropathy (DN), or diabetic kidney disease (DKD), is a major microvascular complication of diabetes and a leading cause of end-stage renal disease worldwide. Nutritional intervention remains a cornerstone of management, complementing pharmacological therapy to slow disease progression, reduce proteinuria, and optimize metabolic control. The American Diabetes Association (ADA) Standards of Care 2025 and the Kidney Disease Outcomes Quality Initiative (KDOQI) 2024 guidelines provide updated recommendations on dietary therapy, focusing primarily on protein, sodium, energy intake, and the integration of individualized approaches through medical nutrition therapy. A structured method of dietary planning, such as the food exchange system, further facilitates practical application in clinical practice. In DN medical nutrition therapy must be individualized, considering stage of CKD, glycemic targets, comorbidities, and patient preferences. Regular reassessment is necessary to prevent malnutrition, micronutrient deficiencies, and to adjust to changing renal function. The involvement of a registered dietitian nutritionist with expertise in diabetes and kidney disease is critical for optimal outcomes.

The food exchange system, originally developed for diabetes management, remains highly applicable in DN when modified for renal considerations. Each exchange represents a portion of food with consistent energy and macronutrient values, allowing substitutions without altering the overall nutritional profile. In DN, exchanges must be adapted to integrate renal-specific restrictions. Dietary education is based on protein, carbohydrate and fat exchanges but also a special renal exchange list. This system not only supports nutritional adequacy but also enhances patient autonomy by offering flexibility and variety within a



structured framework. Carbohydrate counting ensures predictable postprandial glucose responses, while renal diet equivalents maintain protein, mineral, and energy targets. Together, they provide a structured, flexible, and individualized dietary strategy for patients with diabetic nephropathy, improving metabolic control, nutritional adequacy, and clinical outcomes. Nutritional intervention is fundamental to slowing progression and improving outcomes in diabetic nephropathy. When implemented under professional supervision, these strategies provide a comprehensive framework for dietary management of DN, bridging evidence-based recommendations with practical, patient-centered care.

#### References

- 1. Cai L, Huang Y, Li X, Cao D, Liu F. Effects of dietary intervention on diabetic nephropathy: an umbrella review of systematic reviews and meta-analyses of randomized controlled trials. Front Endocrinol (Lausanne). 2024 Apr 29;15:1385872.
- 2. Peride I, Anastasiu M, Serban SA, Tiglis M, Ene R, Nechita AM, Neagu TP, Checherita IA, Niculae A. The Key Role of Nutritional Intervention in Delaying Disease Progression and the Therapeutic Management of Diabetic Kidney Disease-A Challenge for Physicians and Patients. J Pers Med. 2024 Jul 23;14(8):778.
- 3. Ko GJ, Kalantar-Zadeh K, Goldstein-Fuchs J, Rhee CM. Dietary Approaches in the Management of Diabetic Patients with Kidney Disease. Nutrients. 2017 Jul 31;9(8):824.
- 4.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.
- 5. American Diabetes Association Professional Practice Committee. 11. Chronic Kidney Disease and Risk Management: Standards of Care in Diabetes-2025. Diabetes Care. 2025 Jan 1;48(1 Suppl 1):S239-S251.
- 6. Kidney Disease: Improving Global Outcomes (KDIGO) CKD Work Group. KDIGO 2024 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease. Kidney Int. 2024 Apr;105(4S):S117-S314.



#### **Dr Efthymiou Dimitris**

MSc, MD, Psychiatrist-Psychotherapist, Greece

#### Title of Presentation

### Mental Health, the Brain, and the Role of Diet in Psychiatry

#### 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. To explore the link between nutrition and mental health, highlighting how specific nutrients and dietary patterns influence brain structure, neurotransmission, and emotional regulation.
- 2. To examine the biological mechanisms through which diet affects psychiatric conditions such as depression, anxiety, and cognitive decline, focusing on inflammation, gut—brain communication, and neuroplasticity.
- 3. To discuss the clinical applications of nutritional psychiatry, emphasizing evidence-based dietary interventions that support mental well-being and complement conventional psychiatric treatments.

#### **Abstract**

This presentation delves into the emerging field of nutritional psychiatry, exploring the intricate relationship between what we eat and how our brain functions. It will present current scientific evidence linking diet quality and nutrient status with mood, cognition, and mental health outcomes. By examining the roles of omega-3 fatty acids, B vitamins, antioxidants, and the gut microbiome, the talk will illuminate how nutrition can modulate brain function and mental resilience. Finally, practical insights will be offered on how dietitians and mental health professionals can integrate nutritional strategies into psychiatric care to enhance patient outcomes and promote holistic well-being.



#### **Efrem Giorgos**

Development Footbtball Coach Cyprus

#### Title of Presentation

### Sports and Nutrition experience by an elite football player

#### **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. To provide a real-world perspective on the impact of nutrition in professional sports performance and recovery.
- 2. To highlight the collaboration between athletes and dietitians/nutritionists in optimizing training outcomes and long-term health.
- 3. To inspire young athletes and professionals by sharing practical experiences, challenges, and lessons from elite sport.

#### **Abstract**

In this testimonial session, professional footballer Giorgos Efrem shares his personal journey and insights into the vital role of nutrition in achieving and maintaining elite athletic performance. Through his experiences on and off the field, he will discuss how dietary strategies, recovery routines, and collaboration with sports nutrition professionals have shaped his performance, endurance, and overall well-being. This session offers an authentic perspective on the practical application of sports nutrition principles, the challenges athletes face, and the mindset required to sustain excellence at the highest level of competition.



#### **Erotokritou Giorgos**

Chef De Cuisine Cyprus

#### Title of Presentation

### **Beyond Calcium: Harnessing the Role of Protein**

#### **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.

#### **Objectives**

By the end of the session, attendees will:

- Understand how protein supports bone health and overall wellbeing, complementing calcium's role.
- Learn practical cooking skills for creating protein-rich dishes that are both nutritious and appealing.
- Explore innovative culinary approaches that connect gastronomy with health and dietetics.

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

This session moves beyond calcium to spotlight protein's vital role in bone health and overall wellbeing. Through a live cooking demonstration, Chef Erotokritou will show protein-rich dishes, giving dietitians practical tools to inspire healthier eating in everyday life.

#### **Abstract**

Calcium has long been the focus of conversations about bone health, but protein is just as important for maintaining strong bones and overall wellbeing. Protein helps to build and repair tissues, supports muscle strength, and plays a direct role in bone structure. Yet, many people still think of protein only in the context of athletes or bodybuilders, overlooking its everyday importance for all ages.

This interactive session, led by Chef Erotokritou, will highlight how protein complements calcium and why it deserves more attention in discussions of nutrition and health. The session will show practical, handson ways to bring protein to the table. Through live cooking demonstration, participants will see how a variety of protein-rich foods—can be prepared into simple, nutritious, and appealing dishes.

Attendees will learn how to cook in ways that preserve nutrients, enhance flavour, and make protein-rich meals enjoyable. By the end of the session, participants will have both the knowledge and the practical skills to explain protein's role in bone health and to confidently promote protein-rich meals in their own dietetic practice.



#### Dr Frangiskou Marianna

Phd, Assistant Professor in the School of Business and Law, Frederick University, Cyprus

#### Title of Presentation

# Rethinking Nutrition Care Pathways: Insights from Healthcare Operations Management

#### **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 relevance of Operations Management (OM) principles in improving the quality, efficiency, and coordination of clinical nutrition services.

Recognize the value of process thinking, viewing nutrition care as a series of interconnected activities that can be measured, standardized, and continuously improved.

Familiarize themselves with basic Lean tools, including process mapping, Kanban, and PDCA (Plan-Do-Check-Act) cycles, as methods for improving workflow and communication within clinical nutrition settings.

Reflect on examples and potential applications of OM approaches that enhance patient experience, reduce inefficiencies, and support multidisciplinary collaboration.

Appreciate how adopting OM thinking can contribute to evidence-based practice, professional development, and the sustainability of healthcare systems.

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

This session introduces how principles and tools from Operations Management-including process thinking, Lean methods, and continuous improvement-can enhance the effectiveness and efficiency of clinical nutrition practice. Participants will explore practical ways to streamline workflows, reduce waste, and improve patient-centered care. By applying these approaches, clinical nutritionists and dietitians can strengthen service quality, teamwork, and sustainability in their professional settings.

#### **Learning Outcomes Assessment**

#### Real-time audience reflection and polling:

Short reflective questions or polls (e.g., "Which process in your daily work could benefit from standardization?") can help participants connect OM concepts-such as Lean or waste reduction-to their own clinical practice.

#### Mini case or scenario discussion:

Presenting a brief example of a nutrition workflow (e.g., patient intake or menu planning) allows attendees to identify sources of waste, inefficiency, or improvement opportunities-demonstrating understanding of process thinking and Lean tools.

#### Self-assessment prompts:

At the end of the session, participants can be invited to note one concept or tool they plan to apply in their practice, reinforcing transfer of learning and reflection on relevance.



#### **Abstract**

Operations Management (OM) offers a structured approach to improving the effectiveness and efficiency of professional practice across sectors, including healthcare and clinical nutrition. As clinical nutritionists and dietitians increasingly operate in complex and multidisciplinary environments, adopting operations management principles can help optimize the flow of work, improve service quality, and ensure better outcomes for patients and organizations.

At its core, OM focuses on how processes are designed, delivered, and improved. By viewing clinical nutrition services as a set of interconnected processes-from patient assessment and meal planning to monitoring and follow-up-professionals can identify inefficiencies and variations that limit performance. Applying well-established OM frameworks, such as Lean thinking, enables practitioners to focus on value from the patient's perspective while systematically reducing waste, duplication, and delays. Tools such as process mapping, standardized work, visual management (e.g., Kanban boards), and continuous improvement cycles (PDCA) can support more coordinated care, clearer communication, and better resource utilization.

Moreover, OM principles promote a culture of reflection, teamwork, and evidence-based problem solving. In clinical nutrition settings, these practices can translate into more consistent patient experiences, reduced waiting times, and greater alignment with broader healthcare quality and sustainability goals. By integrating OM thinking into daily routines, clinical nutritionists can enhance both the effectiveness (doing the right things for the right patients) and efficiency (doing things right with minimal waste) of their work.

This presentation will introduce the foundational ideas of operations management, highlight relevant Lean tools, and discuss practical examples of how these approaches can support the evolving role of clinical nutritionists in delivering high-quality, patient-centered, and sustainable care.

#### References

- 1. Kc, D. S., Scholtes, S., & Terwiesch, C. (2020). Empirical research in healthcare operations: Past research, present understanding, and future opportunities. Manufacturing & Service Operations Management, 22(1), 73-83.
- 2. McLaughlin, D. B., Olson, J. R., & Sharma, L. (2022). Healthcare operations management. ACHE Learn.



#### Dr Georgaki Evridiki

MBBS in Medicine and Surgery, Queen Mary University of London, iBSc (Sports and Exercise Medicine, First Class, Barts and London Medical School); MSc Health Data Science &AI, Distinction, UCL), GP trainee (GPST1) Royal Free NHS Foundation Trust IIK

#### Title of Presentation

# **Empowering Health Care Professionals with AI: Practical Applications for Modern Care-Adapt or be left behind**

#### **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:

#### Identify Emerging AI Technologies Shaping Healthcare Delivery

Participants will be able to recognize current and emerging AI applications relevant to clinical nutrition and dietetics, including tools for dietary tracking, patient behavior modeling, and outcome prediction.

#### Demonstrate the Practical Use of AI in Nutrition and Dietetic Workflows

Participants will acquire the ability to integrate AI solutions-such as clinical decision support systems and personalized meal planning software-into evidence-based nutrition care plans.

#### Critically Assess the Role of AI in Professional Development and Future Practice

Participants will evaluate how AI is reshaping the role of dietitians and nutritionists and formulate strategies to remain professionally relevant in an AI-augmented healthcare environment.

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

This session explores how artificial intelligence (AI) is transforming healthcare delivery, with a specific focus on its impact in dietetics and nutrition. Attendees will discover practical AI applications that enhance clinical decision-making, personalize nutrition care, and streamline workflows-empowering dietitians and nutritionists to adapt and lead in the age of digital health.

#### **Learning Outcomes Assessment**

Participants' understanding will be assessed through interactive case discussions, real-world application scenarios, and live polling using Al-based tools. Engagement will be evaluated based on the ability to identify relevant Al technologies, demonstrate integration into clinical nutrition workflows, and critically reflect on the evolving professional role of dietitians in an Al-driven healthcare system.

#### **Abstract**

Artificial Intelligence (AI) is rapidly reshaping healthcare, offering tools that improve precision, efficiency, and personalization of care. Dietitians and nutritionists are at a pivotal point in this transformation, as AI technologies increasingly influence the way nutrition assessment, intervention, and monitoring are conducted. This session explores the practical applications of AI in dietetic practice and issues a clear call to action: adapt and lead, or risk being left behind.

Al is no longer a futuristic concept-it is already embedded in the tools many healthcare professionals use daily. From mobile apps that analyze food intake using image recognition, to machine learning models predicting disease risk, Al is enhancing clinical decisions and streamlining workflows. Rather than replacing dietitians, Al is no longer a futuristic concept-it is already embedded in the tools many healthcare professionals use daily.



From mobile apps that analyze food intake using image recognition, to machine learning models predicting disease risk, AI is enhancing clinical decisions and streamlining workflows. Rather than replacing dietitians, these technologies support them by processing complex health data-such as medical records, biometric trends, wearable outputs, and even genomic profiles-to generate insights that improve patient care.

The session will showcase how AI can be seamlessly integrated into a dietitian's workflow without compromising the essential human aspect of care. Real-world examples will highlight how AI tools are being used in clinical, community, and private practice settings to increase efficiency, improve dietary adherence, and personalize nutrition interventions. Technologies discussed will include decision support systems, AI - enhanced meal planning software, and conversational agents for patient education and follow-up.

A key part of the discussion focuses on the ethical and professional responsibilities that come with adopting AI in healthcare. Critical topics such as data privacy, algorithmic bias, informed consent, and the potential for over-reliance on automation will be addressed. Dietitians will be encouraged to balance innovation with the need for professional judgment, empathy, and personalized care.

Furthermore, the session emphasizes the importance of digital literacy and continuous professional development. In an environment where AI is advancing rapidly, staying current is essential. Attendees will be introduced to strategies for upskilling, collaborating with interdisciplinary teams, and critically evaluating AI tools for safe, effective use. Practical steps will be shared to help dietitians advocate for the ethical integration of AI in their workplaces and to position themselves as leaders in tech-enhanced care.

In summary, AI presents a significant opportunity for the field of dietetics-but it also requires a proactive mindset and strategic adaptation. This presentation offers a roadmap for how nutrition professionals can confidently engage with AI technologies to enhance patient care, improve outcomes, and future-proof their practice. Dietitians who embrace this evolution will not only strengthen their role in healthcare but help shape a more intelligent, responsive, and inclusive nutrition landscape.

#### References

Atwal K. Artificial intelligence in clinical nutrition and dietetics: A brief overview of current evidence. Nutr Clin Pract. 2024;39(4):736-742. doi:10.1002/ncp.11150

Artificial intelligence & clinical nutrition: What the future might have in store.

Bond A, Mccay K, Lal S.

Clin Nutr ESPEN. 2023 Oct;57:542-549. doi: 10.1016/j.clnesp.2023.07.082. Epub 2023 Jul 22.

PMID: 37739704 Review.

Position of the Academy of Nutrition and Dietetics and the Society for Nutrition Education and Behavior: Food and Nutrition Programs for Community-Residing Older Adults.

Saffel-Shrier S, Johnson MA, Francis SL.

J Nutr Educ Behav. 2019 Jul-Aug;51(7):781-797. doi: 10.1016/j.jneb.2019.03.007. Epub 2019 May 16.

PMID: 31103435

Clinical Leadership and Innovation Help Achieve Malnutrition Quality Improvement Initiative Success.

Arensberg MB, D'Andrea C, Khan M.

J Acad Nutr Diet. 2019 Sep;119(9 Suppl 2):S49-S55. doi: 10.1016/j.jand.2019.05.021.

PMID: 31446945

Artificial Intelligence Chatbot Behavior Change Model for Designing Artificial Intelligence Chatbots to Promote Physical Activity and a Healthy Diet: Viewpoint.

Skipper A, Coltman A, Tomesko J, Charney P, Porcari J, Piemonte TA, Handu D, Cheng FW.

J Acad Nutr Diet. 2022 Oct;122(10S):S50-S54. doi: 10.1016/j.jand.2022.07.013.

PMID: 36122959



#### **Prof Dr Giannaki Christoforos**

BSc in Physical Education and Sports Science
MSc in Sports Physiology
PhD in Clinical Exercise Physiology
Professor of Exercise Physiology, Department of life Sciences, University of Nicosia
President of Exercise is Medicine in Cyprus
Cyprus

#### Title of Presentation

# Optimizing Exercise Performance and Recovery: The Crucial Role of Sleep

#### 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 the important role of sleep in athletes' recovery and performance, and how nutrition can support better sleep.

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

Sleep is perhaps the most important factor in athletes' recovery, and, as with all individuals, it is closely linked to overall health as well as physical and mental well-being. Many athletes experience sleep problems for various reasons, which will be discussed in this presentation. Poor sleep can negatively affect an athlete's performance in both training and competition. Recent research shows that nutrition can be a key factor in improving sleep in athletes-an aspect that sports dietitians should carefully consider in their practice.

#### **Learning Outcomes Assessment**

This presentation focuses on the role of sleep in athletes' recovery, which is crucial for enabling them to train effectively and achieve optimal performance in competitions. Nutrition can play a significant role in improving sleep, as recent research findings have shown.

#### Abstract

In recent years, research interest in athletes' sleep has grown substantially. Sleep is probably the most important factor in athletes' recovery, so it is understandable that scientists, coaches, and athletes themselves are highly interested in ways to improve sleep in this specific population. Interestingly, a significant proportion of athletes-up to 50%-experience major sleep issues and often sleep fewer hours than the recommendations for the general population.

The reasons athletes do not sleep well are varied and complex, ranging from training schedules and competition-related stress to travel and lifestyle factors. Poor sleep can also impair athletic performance, as recent data from athletes across different sports have shown. Furthermore, it negatively impacts mental health, immune function, and cognitive performance.

There are various strategies to help athletes improve their sleep, and nutrition is one of them. This presentation will focus on how dietary choices can contribute to better sleep in athletes, drawing on the latest scientific evidence.



#### References

- 1. Walsh NP, Halson SL, Sargent C, et al. Sleep and the athlete: narrative review and 2021 expert consensus recommendations. Br J Sports Med. 2021;1(55 (7)):356-68.
- 2. Vlahoyiannis A, Aphamis G, Bogdanis GC, Sakkas GK, Andreou E, Giannaki CD. Deconstructing athletes' sleep: A systematic review of the influence of age, sex, athletic expertise, sport type, and season on sleep characteristics. J Sport Health Sci. 2021;10(4):387-402.
- 3. Vlahoyiannis A, Aphamis G, Andreou E, Samoutis G, Sakkas GK, Giannaki CD. Effects of High vs. Low Glycemic Index of Post-Exercise Meals on Sleep and Exercise Performance: A Randomized, Double-Blind, Counterbalanced Polysomnographic Study. Nutrients. 2018;10(11)



#### **Prof Dr Hadjipanayis Adamos**

MD, PhD, Professor of Paediatrics, European University Cyprus Cyprus

#### Title of Presentation

### **Lipid Screening in Children and Adolescents**

#### **CPE Leve**

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 the pathophysiological basis for early cholesterol screening in children.
- 2. List the major risk factors that indicate selective cholesterol screening.
- 3. Differentiate between universal and targeted screening strategies recommended by current guidelines.
- 4. Determine the appropriate age and intervals for cholesterol testing in children.

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

This session will examine current approaches to cholesterol screening in children, highlighting both universal and selective strategies recommended by guidelines. Participants will gain practical insights into when and why screening is indicated, how to recognize at-risk populations, and the long-term benefits of early detection for cardiovascular health. The presentation is designed to equip health care professionals with evidence-based tools to integrate cholesterol screening effectively into everyday clinical practice.

#### Learning Outcomes Assessment

Attendees' learning will be assessed through case examples, interactive questions, and discussion. These activities will confirm understanding of when and why to screen children for cholesterol and how to apply current guidelines in practice.

#### **Abstract**

Childhood dyslipidemia is recognized as a risk factor for the early development of atherosclerosis and subsequent cardiovascular disease in adulthood. This has fueled debate over whether lipid screening should be performed universally in all children or selectively in those with identified risk factors. Proponents of universal screening argue that it can detect familial hypercholesterolemia and other lipid disorders in children without a positive family history or obvious comorbidities, conditions that might otherwise go unnoticed until later in life. In contrast, selective screening, focused on children with a family history of premature cardiovascular disease, known dyslipidemia, or the presence of risk factors such as obesity, diabetes, or hypertension, is more resource-efficient and minimizes unnecessary testing and potential harms.

However, despite the theoretical benefits of universal screening, robust evidence demonstrating improved long-term cardiovascular outcomes is lacking. Most available data are indirect, relying on surrogate endpoints such as lipid levels, and studies show that lifestyle interventions in children with multifactorial dyslipidemia often result in modest and transient improvements. Concerns also remain regarding overdiagnosis, psychological labeling, cost, and the uncertain safety of prolonged pharmacologic treatment in children without severe dyslipidemia. In light of these limitations, the U.S. Preventive Services Task Force recently reaffirmed that evidence is insufficient to recommend universal lipid screening in asymptomatic children and adolescents.



Overall, while identifying high-risk children remains important, especially those with familial hypercholesterolemia, the current balance of evidence supports selective rather than universal screening. Further research is needed to clarify the long-term benefits, harms, and optimal strategies for lipid screening in pediatric populations.

#### References

 $\frac{\text{https://www.uptodate.com/contents/dyslipidemia-in-children-and-adolescents-definition-screening-and-diagnosis?search=cholesterol%20in%20children&source=search\_result&selectedTitle=1~150&usage\_type=default&display\_rank=1\#H435121285$ 

Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents, National Heart, Lung, and Blood Institute. Expert panel on integrated guidelines for cardiovascular health and risk reduction in children and adolescents: summary report. Pediatrics 2011; 128 Suppl 5:S213.

American Academy of Pediatrics, Statement of endorsement, Expert Panel on Integrated Pediatric Guideline for Cardio-vascular Health and Risk Reduction. Pediatrics Vol 129/Issue 4, April 2012. Available at: http://pediatrics.aappublications.org/content/129/4/e1111 (Accessed on May 04, 2012).



#### Dr Heraclides Alexandros

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

#### Title of Presentation

# Policies and Programmes involving Dietary Modification and Physical Activity for Improving Quality of Life in the Population: The case of Cyprus

#### **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. Define health-related quality of life and describe its key dimensions in relation to population health.
- 2. Evaluate the evidence linking dietary modification and physical activity with improvements in health-related quality of life
- 3. Understand the main scope of the Cyprus National Strategy on Improving the Quality of Life of the Population through Healthy Diet and Physical Activity, in the context of international strategies aiming to promote healthier lifestyles.

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

This session will explore the multidimensional concept of health-related quality of life and its relationship to diet and physical activity. The session will provide an overview of the fundamental principles of Health Promotion and introduce international Strategies and programmes aiming to improve diet and increase physical activity at the population level. The session will also provide an overview of the health status of the Cypriot population, including information on quality of life and briefly describe the main scope of the Cyprus National Strategy on Improving the Quality of Life of the Population through Healthy Diet and Physical Activity.

#### Learning Outcomes Assessment

**Knowledge recall:** Assessed through the post-presentation multiple-choice question. **Application:** Attendees will be able to connect evidence-based principles with Cyprus' health context during Q&A.

#### Abstract

Health-related quality of life (HRQoL) is a multidimensional construct encompassing physical, psychological, and social well-being. Tools such as the EQ-5D framework highlight dimensions including mobility, self-care, usual activities, pain/discomfort, and anxiety/depression. Improving HRQoL is increasingly recognized as a central goal of public health policy, extending beyond disease prevention to encompass holistic well-being.

A growing body of evidence demonstrates that dietary modification and physical activity are associated with higher diet quality and regular physical activity are linked to reduced risk of chronic disease, enhanced mental health, and greater life satisfaction, and consequently improved HRQoL.

The Shanghai Declaration on promoting health in the 2030 Agenda for Sustainable Development established three pillars for health promotion, namely good governance for health, healthy settings, and health literacy. Good governance creates supportive policies, healthy settings provide supportive environments, and health literacy empowers individuals with the knowledge and skills to make healthy choices. This approach emphasizes intersectoral action and collective responsibility to promote health equity and well-being.



The World Health Organization has issued different Reports on lifestyle modification for improving health and quality of life at the population level, such as the 'Global Strategy on Diet, Physical Activity and Health (2004)', the 'Global Action Plan on Physical Activity 2018-2030', and the 'WHO European Food and Nutrition Action Plan 2015-2020. These provide frameworks for reducing noncommunicable disease risk factors and call for integrated policies that promote active transport, healthy food environments, and community-based interventions. Many countries have adopted national action plans aligned with these frameworks, demonstrating measurable improvements in physical activity levels and dietary behaviours.

Cyprus faces unique public health challenges, including high rates of overweight and obesity, particularly among children. According to the OECD Country Health Profile (2023), life expectancy in Cyprus is above the EU average, yet lifestyle-related risk factors, as well as an increasing burden of poor mental health, pose major public health threats. Europe-wide surveys indicate that dietary patterns are shifting toward higher consumption of processed foods, while sedentary lifestyles persist, especially among younger populations.

To address these challenges, the National Strategy for Improving the Quality of Life of the Population through Healthy Diet and Physical Activity was recently approved by the Council of Ministers. The strategy has the following strategic goals:

- 1. Put forward actions for improving health literacy and consciousness in the Cypriot population, empowering all people to make healthier food choices and dietary habits and increase their physical activity, throughout life, as a means of improving their quality of life.
- 2. Modify and improve the settings where people live, work, and have recreational activities (the natural and build environment), providing supportive environments for enabling healthy diets and physical activity for the whole Cypriot population, as a means of improving its quality of life.
- 3. Promote good governance for the development of the necessary health policies, for enabling the whole Cypriot population, without any distinctions, to have a healthier diet and adequate physical activity, as a means of improving its quality of life.

#### References

World Health Organization. (2004). Global strategy on diet, physical activity and health. Geneva: World Health Organization.

World Health Organization. (2018). Global action plan on physical activity 2018-2030: More active people for a healthier world. Geneva: World Health Organization.

World Health Organization Regional Office for Europe. (2015). European food and nutrition action plan 2015-2020. Copenhagen: WHO Regional Office for Europe.

World Health Organization Regional Office for Europe. (2016). Physical activity strategy for the WHO European Region 2016-2025. Copenhagen: WHO Regional Office for Europe.

Carson, T. L., Hidalgo, B., Ard, J. D., & Affuso, O. (2014). Dietary interventions and quality of life: A systematic review of the literature. Journal of Nutrition Education and Behavior, 46(2), 90-101. https://doi.org/10.1016/j.ineb.2013.09.005

Marquez, D. X., Aguinaga, S., Vásquez, P. M., Conroy, D. E., Erickson, K. I., Hillman, C., Stillman, C. M., Ballard, R. M., Sheppard, B. B., Petruzzello, S. J., & Powell, K. E. (2020). A systematic review of physical activity and quality of life and well-being. Translational Behavioral Medicine, 10(5), 1098-1109. https://doi.org/10.1093/tbm/ibz198



#### **lacovides Angelos**

BA(Hons), MA, PhD(c), Head of Marketing & Communications / Special Teaching Faculty, Intercollege Cyprus Maritime Academy, University of Nicosia, Training and Development Unit, KLIK FM Radio Producer and Presenter, Capital TV, PIK TV Presenter, Cyprus

#### Title of Presentation

# How to Build Your Personal Brand & Attract More Clients: A Marketing Guide for Dietitians

#### **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:

Define and communicate their unique personal brand as a dietitian in a clear, consistent, and compelling way. Identify their ideal client and craft targeted messages that resonate with their audience.

Use practical marketing tools and platforms (e.g., Instagram, email marketing, Google My Business) to grow their visibility.

Create content that builds trust and authority, including educational posts, client testimonials, and value-driven tips. Build a client acquisition strategy, including lead generation, follow-ups, and retention techniques.

Differentiate themselves from competitors by focusing on their story, values, and niche expertise.

Develop an actionable 30-day marketing plan tailored to their practice goals.

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

This presentation equips dietitians with the essential tools and strategies to build a strong personal brand and attract more clients in a competitive market. By blending practical marketing techniques with a values-driven approach, attendees will learn how to stand out, connect with their ideal audience, and grow a sustainable practice with confidence and clarity.

#### **Learning Outcomes Assessment**

Participants' learning will be assessed through:

Interactive discussions and reflection exercises to evaluate understanding of personal branding concepts.

Short practical activities, such as identifying their target audience and drafting a sample marketing message.

A final 30-day marketing action plan, developed during the session, to apply strategies learned and demonstrate real-world implementation.

Optional follow-up self-assessment or peer feedback to evaluate progress in visibility, engagement, and client acquisition.

#### **Abstract**

In today's competitive wellness industry, technical knowledge and clinical expertise alone are no longer enough to guarantee success. Dietitians must now also position themselves as trusted authorities and create meaningful, lasting connections with their ideal clients. Whether you're a new practitioner or an experienced professional looking to grow your practice, building a strong personal brand is key to standing out and attracting the right audience. This presentation is designed to help dietitians navigate the evolving landscape of marketing with confidence and strategy.



"How to Build Your Personal Brand & Attract More Clients" is a practical and interactive guide for dietitians who want to grow their visibility, impact, and client base by establishing a unique, authentic presence both online and offline. Rooted in fundamental marketing principles and adapted to the realities of the health and wellness field, this session empowers attendees to stop blending in-and start standing out.

We begin by exploring the foundation of personal branding: understanding what makes you different, and how to communicate that difference clearly. Attendees will be guided through a self-reflective framework to identify their values, niche, and brand voice. This exercise will help them craft a compelling brand narrative that goes beyond degrees and certifications-highlighting their approach, personality, and the transformation they offer their clients.

Next, we move into audience clarity: who are you trying to reach, and what problems are you helping them solve? Without a clearly defined target audience, even the best content or advertising can fall flat. Through practical examples and step-by-step tools, attendees will learn how to identify their ideal client profiles, the platforms these audiences use, and the messaging that resonates with them.

The session then introduces modern marketing strategies tailored to dietitians. From social media content pillars and engagement strategies to email marketing and online reviews, participants will gain insight into which channels to focus on-and how to use them effectively without becoming overwhelmed. We'll also explore ways to build trust and authority, such as using client testimonials, offering educational content, and creating a consistent visual and verbal brand presence.

Special emphasis will be placed on how to create content that converts, turning likes and follows into real bookings. Attendees will learn the basics of copywriting, call-to-actions, and how to build a content calendar that aligns with their services and seasonal trends in the wellness industry.

Finally, the presentation will guide participants in creating their own 30-day marketing plan. This actionable roadmap will help translate ideas into concrete steps-whether that's optimizing a Google Business profile, launching an Instagram campaign, or hosting a free webinar. The plan will include simple KPIs for tracking progress without getting I

#### References

Kotler, P., & Keller, K. L. (2016). Marketing Management (15th ed.). Pearson Education.

A foundational text on marketing principles, including branding, consumer behavior, and value communication.

Neumeier, M. (2006). The Brand Gap: How to Bridge the Distance Between Business Strategy and Design. New Riders.

A concise, practical book on how to build a unique and memorable brand that connects emotionally with clients.

Academy of Nutrition and Dietetics. (2020). Marketing and Communications Guide for Nutrition Professionals. <a href="https://www.eatrightpro.org">https://www.eatrightpro.org</a>

Offers specific marketing strategies tailored to dietitians and nutritionists, including client outreach, ethics, and branding considerations.



#### **Dr Karagiannis Dimitrios**

PhD, Director, Department of Clinical Nutrition, Evaggelismos General Hospital , Athens Greece

#### Title of Presentation

# From ICU Bedside to Nutrition Plan: Practical Applications of Indirect Calorimetry

#### **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. Explain the principles and methodology of indirect calorimetry in critically ill patients.
- 2. Interpret metabolic data obtained from indirect calorimetry and apply it to individualized nutrition planning.
- 3. Identify common challenges and limitations in the use of indirect calorimetry at the ICU bedside.

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

This presentation will explore the clinical utility of indirect calorimetry in critically ill patients, emphasizing its role in accurately assessing energy expenditure and guiding evidence-based nutrition therapy. Through case-based examples and practical guidance, attendees will learn how to translate metabolic measurements from the ICU bedside into individualized nutrition plans that support recovery and improve outcomes.

#### **Learning Outcomes Assessment**

To evaluate whether the attendees have achieved the intended learning outcomes, the following assessment methods will be used:

Case-Based Questions - Attendees will analyze brief clinical scenarios and select appropriate nutrition interventions based on indirect calorimetry data.

Example: Given a patient's measured resting energy expenditure (REE), identify the correct caloric and protein targets.

Multiple-Choice Questions (MCQs) - A short quiz will test understanding of key concepts such as the principles of indirect calorimetry, limitations, and comparison with predictive equations.

Audience Response Polling - During the session, live polling will gauge comprehension of key decision-making steps in applying calorimetry data to ICU nutrition planning.

#### **Abstract**

Precision in nutrition support is a cornerstone of evidence-based care in the intensive care unit (ICU), where metabolic demands can be highly variable and unpredictable. Traditional reliance on predictive equations for estimating energy requirements often fails to reflect the true energy expenditure of critically ill patients. These formulas-such as Harris-Benedict, Mifflin-St Jeor, or Penn State-are static, population-based estimates that do not account for the dynamic physiologic changes associated with critical illness, such as sepsis, trauma, inflammation, sedation, mechanical ventilation, or the use of extracorporeal therapies.



Indirect calorimetry (IC), the gold standard for measuring resting energy expenditure (REE), offers a patient-specific, real-time alternative. By directly assessing oxygen consumption (VO<sub>2</sub>) and carbon dioxide production (VCO<sub>2</sub>), IC provides a more accurate reflection of a patient's metabolic state. This data, when appropriately interpreted, enables clinicians to tailor energy and protein delivery to individual needs, thereby minimizing the risks of overfeeding and underfeeding-both of which are associated with negative clinical outcomes such as delayed recovery, increased infection risk, and prolonged ventilator dependence.

Despite its clinical value and strong endorsement from major guidelines including ASPEN, ESPEN, and SCCM, the use of IC in routine ICU practice remains limited. Barriers include equipment availability, technical training, measurement complexity, and concerns over patient instability. This presentation aims to equip healthcare professionals with the foundational knowledge and practical tools to integrate indirect calorimetry into daily clinical decision-making and individualized nutrition care planning.

The session will begin with a review of the physiologic principles underpinning indirect calorimetry, the mechanics of measurement, and criteria for obtaining reliable REE values. Emphasis will be placed on key operational considerations-such as achieving a steady state, addressing ventilator settings, avoiding technical pitfalls, and ensuring proper calibration. Participants will learn how to evaluate IC data in the context of evolving clinical status and metabolic variability.

Building upon this foundation, the session will shift toward application, using real-world clinical scenarios to demonstrate how IC results inform energy prescriptions, protein goals, feeding modalities, and timing of reassessment. Case comparisons will highlight discrepancies between measured and predicted energy needs, and illustrate the clinical implications of tailoring nutrition therapy based on objective metabolic measurements.

Recent evidence on the impact of IC-guided nutrition on patient outcomes-including ventilator-free days, ICU length of stay, and infection rates-will be presented.

#### References

Stephens KR, Busch RA. Practical implications of "personalized nutrition therapy". Curr Opin Crit Care. 2025 Aug 1;31(4):393-400



#### **Dr Katsonis Costas**

PhD, Author, Academician, Cyprus

#### Dr Katsoni Evgenia

MBBS, GP, GP at East Sussex Healthcare NHS Trust, EASTBOURNE, United Kingdom

#### Title of Presentation

# The Voice of the Father and The Voice of the Daughter – Their Testimonies

#### **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.

#### **Objectives**

- 1. **To give voice to both the personal and familial dimensions of anorexia nervosa**, highlighting the emotional, psychological, and relational impact on both the individual and the parent.
- 2. **To foster empathy, understanding, and awareness among professionals and the public**, by presenting a dual narrative of struggle, resilience, and recovery.
- 3. **To emphasize the importance of communication, multidisciplinary support, and hope** in the journey toward healing from an eating disorder.

#### **Abstract**

Drawing from the book «Οι Δύο Φωνές – Μυθιστορηματική Μαρτυρία για την Ανορεξία", this presentation brings to life two interwoven testimonies — that of a father and a daughter — as they navigate the painful and transformative journey through anorexia.

Costas Katsonis, through "The Voice of the Father," reveals the emotional turmoil, helplessness, and deep love of a parent witnessing his child's descent into the disorder and her gradual return to life. His perspective captures the fear, guilt, and persistence of a father's fight to understand and support his daughter beyond medical and social barriers.

Evgenia Katsoni, through "The Voice of the Daughter," offers an intimate and courageous narrative of her own lived experience — from denial and control to self-awareness, vulnerability, and recovery. Her testimony sheds light on the inner world of anorexia and the transformative power of compassion, family connection, and self-discovery.

The 'Two Voices' has a deeper meaning and this is going to be revealed during the session.

Together, their voices create a deeply human dialogue that transcends stigma and inspires a collective understanding: that recovery is not only possible but is strengthened by love, openness, and shared humanity.



#### Dr Koushiou Maria

PhD, Assistant Professor, Department of Social Sciences, School of Humanities and Social Sciences, University of Nicosia, Cyprus

#### Title of Presentation

### Food-Related Behavioral Disorders and Their Role in Obesity

#### **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 the core clinical features of Anorexia Nervosa, Bulimia Nervosa, and Binge Eating Disorder as defined in the DSM-5 and discuss their role in obesity
- 2. Describe how emotion dysregulation contributes to both obesity and disordered eating patterns.
- 3. Explain the role of interoceptive awareness in maladaptive eating behaviors.
- 4. Discuss the influence of sociocultural factors, such as body image dissatisfaction and weight stigma, on eating behavior and health outcomes.

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

This presentation aims to discuss the shared psychological mechanisms underlying obesity and eating disorders, including emotion dysregulation, impaired interoception, and body image concerns. Understanding these mechanisms can help dietitians and other health professionals better recognize disordered eating behaviors and support more effective, integrative care strategies.

#### **Learning Outcomes Assessment**

The conference presentation objectives will not be formally assessed. However, participants will have the opportunity to test some of their knowledge through a multiple-choice question provided by the presenter at the end of the session. Additionally, attendees are encouraged to take part in the Q&A segment, where they can ask questions, seek clarifications, and engage in discussion to deepen their understanding of the material presented.

#### **Abstract**

Obesity continues to affect a growing number of individuals worldwide and is closely associated with numerous non-communicable diseases. While traditional approaches to prevention and treatment have largely emphasized dietary modification and increased physical activity, the psychological dimensions of eating are not sufficiently addressed in many health contexts. This gap is particularly concerning given that a significant proportion of individuals living with obesity demonstrate symptoms of, or meet criteria for, food-related behavioral disorders. According to the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5-TR), such disorders include Anorexia Nervosa (AN), Bulimia Nervosa (BN), and Binge Eating Disorder (BED). Importantly, individuals with obesity may exhibit features of these disorders, particularly BED, characterized by episodes of consuming large quantities of food, accompanied by distress and a sense of loss of control, even in the absence of full diagnostic criteria. Obesity and disordered eating often co-occur and are mutually reinforcing, with both linked to heightened physical and psychological morbidity. These conditions also share underlying psychological processes that contribute to the development and maintenance of dysfunctional eating behaviors and problems with weight regulation. This presentation explores these shared mechanisms, focusing on emotion regulation difficulties, interoceptive dysfunction, and body image dissatisfaction, drawing on recent literature and empirical data, including findings from Greek-speaking populations. Emotion regulation has emerged as a central factor in understanding dysregulated eating patterns. Individuals who



struggle to identify, express, and manage their emotions are more likely to engage in emotional or binge eating as a coping mechanism. While such behaviors may provide short-term emotional relief, they are associated with long-term health risks and poorer psychological outcomes. Stress and depressive symptoms further contribute to these behaviors, often increasing the frequency and speed of eating episodes and influencing preferences toward calorie-dense, palatable options. Closely related is interoception-the ability to perceive and interpret internal bodily cues such as hunger, satiety, and emotional arousal. Impaired interoceptive awareness can lead individuals to confuse emotional discomfort with physical hunger, increasing susceptibility to external or emotional eating triggers. In addition, sociocultural factors, including body dissatisfaction, weight stigma, and appearance-related teasing, exert significant pressure on individuals, shaping body image concerns and eating behavior. These influences are amplified by media portrayals and social comparisons promoting thinness and marginalizing body diversity. By highlighting these psychological mechanisms, professionals can promote more effective, compassionate and integrative care.

#### References

Camacho-Barcia, L., Giel, K. E., Jiménez-Murcia, S., Pitti, J. Á., Micali, N., Lucas, I., ... & Fernández-Aranda, F. (2024). Eating disorders and obesity: bridging clinical, neurobiological, and therapeutic perspectives. Trends in molecular medicine, 30(4), 361-379

Herbert, B. M. (2021). Interoception and its role for eating, obesity, and eating disorders. European Journal of Health Psychology.

Robinson, E., Foote, G., Smith, J., Higgs, S., & Jones, A. (2021). Interoception and obesity: a systematic review and meta-analysis of the relationship between interoception and BMI. International Journal of Obesity, 45(12), 2515-2526.

Koushiou, M., Kapatais, A., Iasonidou, E., Adonis, M., & Ferreira, N. (2021). The moderating role of body image inflexibility in the relation between weight concerns and symptoms of eating disorders in Cypriot University students. Mediterranean Journal of Clinical Psychology, 9(2).

Koushiou, M., Merwin, R. M., Anderson, D., & Karekla, M. (2019). An investigation of the affective experience of females at high risk for eating disorders in general and pathology-specific contexts. Appetite, 141, 104306.

Koushiou, M., Nikolaou, P., & Karekla, M. (2020). Prevalence and correlates of eating disorders in greek-cypriot adolescents and young adults. The European Journal of Counselling Psychology, 8(1), 3-18.

Moradi, M., Mozaffari, H., Askari, M., & Azadbakht, L. (2021). Association between overweight/obesity with depression, anxiety, low self-esteem, and body dissatisfaction in children and adolescents: a systematic review and meta-analysis of observational studies. Critical reviews in food science and nutrition, 62(2), 555-570.



#### **Dr Kyprianou Theodoros**

MD, PhD, EDIC, Professor of Medicine, University of Nicosia Medical School, Cyprus

#### Title of Presentation

### **Correlation Between Teamwork and Patient Safety in ICU**

#### **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. Recognise the value of inter-professional cooperation in acute and critical care areas
- 2. Understand the principles and underpinnings of such cooperation
- 3. Be able to ask for and participate in teamwork to achieve better results in patient care

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

Teamwork in healthcare is of paramount importance for better patient outcomes and professional satisfaction. Recognising the value of inter-professional cooperation in acute and critical care areas, especially in the field of nutrition as well as understanding the principles and underpinnings of such cooperation is crucial for involved healthcare professionals. It is therefore the knowledge of the above that would change attitude and their catholic demand that would enable change.

#### **Learning Outcomes Assessment**

MCQs at the end of presentation using Kahoot app.

#### **Abstract**

#### Background

Inter-professional teamwork is a core determinant of quality and safety in acute and critical care, where time-sensitive decisions, physiological instability, and complex care pathways demand coordinated input from physicians, nurses, pharmacists, dietitians, and allied professionals. Global frameworks and ICU-specific literature consistently associate collaborative practice with improved patient outcomes and workforce satisfaction, positioning teamwork as a strategic lever for high-reliability care.

#### Objectives

After this presentation, attendees will be able to: (1) recognise the value of inter-professional cooperation in acute and critical care areas; (2) understand the principles and underpinnings of such cooperation; and (3) ask for and participate in teamwork to achieve better results in patient care.

Content & approach. We synthesise evidence and practical guidance across three layers.

- (1) Why teamwork matters: Empirical studies in ICUs link effective inter-professional collaboration with lower morbidity/mortality, better goal-concordant care, and enhanced safety culture. Team training programmes such as TeamSTEPPS demonstrate gains in communication behaviours, teamwork climate, and, in several studies, reductions in adverse events.
- (2) How teamwork works: Foundational principles include shared mental models, explicit role clarity, closed-loop communication, standardised handovers, and structured inter-professional rounds. These mechanisms are operationalised through tools (SBAR, check-backs), briefings/debriefings, and visual task boards; the TeamSTEPPS framework offers a well-evaluated toolkit adaptable to ICU workflows and emergencies.



(3) Where teamwork is decisive-clinical nutrition as a case study: In critical care, timely nutrition assessment, early appropriate enteral feeding, and ongoing metabolic stewardship require tight coordination among intensivists, nurses, and dietitians. The 2023 ESPEN practical ICU guideline consolidates 56 recommendations, emphasising systematic risk recognition (≥48h ICU stay as at-risk), multidisciplinary assessment, and protocolised delivery/monitoring-activities that depend on inter-professional processes (e.g., daily goal setting, feeding protocol checkpoints, escalation pathways).

#### Educational strategy

The session blends (a) evidence snapshots, (b) concise frameworks (WHO inter-professional collaboration; TeamSTEPPS), and (c) scenario-based application (e.g., a hemodynamically unstable patient requiring ventilatory adjustments, antimicrobial optimisation, and nutrition initiation). Attendees practice micro-skills-structured requests for help, anticipatory planning, and "two-challenge" advocacy-mapped to common ICU situations (airway crisis, feeding intolerance, insulin titration).

#### **Expected outcomes**

Participants will be able to (i) articulate the measurable benefits of inter-professional practice for patients (e.g., fewer complications, improved alignment with goals of care) and teams (reduced burnout, clearer accountability); (ii) identify the behaviours and structures that enable high-functioning ICU teams; and (iii) initiate or strengthen local practices-daily inter-professional rounds with explicit nutrition goals; team briefs/debriefs; adoption of TeamSTEPPS tools; and simple audit-feedback loops to monitor adherence and outcomes.

#### Conclusion

Inter-professional cooperation is not an optional cultural attribute but a clinical intervention with demonstrable impact. By coupling evidence-informed team behaviours with protocolised domains such as ICU nutrition, acute and critical care teams can reliably translate expertise into safer, more effective, and more satisfying care.

#### References

WHO. Framework for Action on Interprofessional Education & Collaborative Practice (2010). World Health Organization

Ervin JN, et al. Teamwork in the Intensive Care Unit (2018).

Xyrichis A, et al. Interprofessional collaboration in the ICU (2024). ScienceDirect

Singer P, et al. ESPEN practical and partially revised guideline: Clinical nutrition in the ICU (2023). espen.org

Hassan AE, et al. Evaluating the Effect of TeamSTEPPS on Teamwork (Systematic Review, 2024). PMC

Haugstetter M. The Evolution of Patient Safety Teamwork Training (PSNet). PSNet

AnnalsATS. Interprofessional Teamwork and Goal-Aligned Care in ICU (2022). ATS Journals



#### Kyriakidou Zoe

Councel of the Republic, Law Office of the Republic of Cyprus, Cyprus

#### Title of Presentation

# **Building Trust through Regulation: The Cypriot Model for Dietetic Professionalism and Excellence**

#### **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. **To outline the legal and regulatory framework** governing the dietetics profession in Cyprus and its role in safeguarding public health and professional integrity.
- 2. **To demonstrate how effective regulation fosters trus**t, accountability, and excellence within the dietetic community and among the public.
- 3. **To discuss future directions and challenges** in strengthening professional standards, ethical practice, and international recognition of Cypriot dietitians.

#### **Abstract**

This presentation explores how robust regulation underpins professionalism and public confidence in the field of dietetics. Drawing from the Cypriot legal framework, Zoe Kyriakidou will examine the principles, structures, and enforcement mechanisms that ensure competence, eth ics, and transparency among registered dietitians. Emphasis will be placed on how the Cypriot model promotes continuous professional development and aligns with European standards for health professions. The session will highlight the broader societal value of regulation in building trust, ensuring quality of care, and elevating the credibility and global standing of the dietetic profession.

#### Dr Laviano Alessandro

MD, Associate Professor of Medicine, Sapienza University, Rome, Italy

#### Title of Presentation

### **Malnutrition and Cachexia in Patients with Cancer**

#### **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

Screen and assess cachexia as well as prescribing the correct nutritional plan

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

The ongoing change in the epidemiology and clinical outcome of patients with cancer, malnutrition and cachexia are becoming key issues in the management of the patients. The pathogenesis of malnutrition and cachexia extends beyond poor nutritional intake and involves a number of factors, either environmental and internal.

#### **Learning Outcomes Assessment**

The quality of the answers received during the Q&A session

#### Abstract

Cancer cachexia differs from malnutrition since the former is associated with inflammatory response which exacerbates catabolism and reduces the efficacy of anticancer therapies.

#### References

Bargetzi L et al. Ann Oncol 2021 Depotte L et al. J Immunotherapy Cancer 2025 Assenat E et al. J Clin Oncol 2025



#### **Dr Lysigakis Nikolaos**

PhD, Senior Consultant - Corporate Affairs, Lidl Greece and Cyprus, Greece

#### Title of Presentation

# The Future of Food: Challenges and Opportunities of the Planetary Health 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:

Be familiar with Lidl's commitment to Planetary Health Diet.

Understand the approach and the biggest challenges of a global retail leader.

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

Our session will outline how Lidl is integrating the principles of the Planetary Health Diet (PHD into our business operations. We will present our strategies for promoting more sustainable food choices to consumers-focusing on increasing the availability and affordability of plant-based options and sustainably sourced products-to showcase our role in supporting both public health and environmental sustainability. This presentation offers practical insights into how a major retailer is actively addressing the dual challenges of malnutrition and climate change through tangible, market-based initiatives.

#### **Learning Outcomes Assessment**

To assess Lidl's commitment to the Planetary Health Diet (PHD), we rely on quantitative data across three areas:

- 1. Product Integration tracking the sales volume, count, and affordability of plant-based options and sustainably certified products.
- 2. Public Health Impact: Analyzing shifts in customer purchasing.
- 3. Environmental Performance: Monitoring operational efficiency through metrics.

#### **Abstract**

The global food system faces a critical, dual challenge: ensuring nutritious diets for a growing population while simultaneously operating within planetary boundaries, particularly concerning climate change, biodiversity loss, and water scarcity. The Planetary Health Diet, outlined by the EAT-Lancet Commission, provides a scientific framework for achieving this balance, advocating for a significant shift towards plant-rich, whole-food consumption and away from high-impact foods. As a major retailer in the Eastern Mediterranean, Lidl Greece and Cyprus recognizes its pivotal responsibility in bridging the gap between scientific recommendations and consumer purchasing behaviour. This presentation analyzes our strategic commitment to embedding Planetary Health Diet principles into our commercial operations.

Lidl's commitment is implemented through three interconnected strategic pillars designed to make sustainable eating the default choice for our customers:

1. Plant-Forward Portfolio Transformation: We are actively enhancing our product mix in Greece and Cyprus to increase the accessibility and appeal of foods central to the Planetary Health Diet-specifically legumes, whole grains, fruits, vegetables, and nuts. This includes a rapid expansion of our plant-based private label offerings, aiming not just for substitutes but for culinary inspiration that supports reduced intake of red and processed meats.



- 2. Radical Affordability and Accessibility: For the Planetary Health Diet to be effective, it must be equitable. Our strategy focuses intensely on eliminating the perception that sustainable or healthy food is a premium product. We are leveraging our efficient supply chain and purchasing power to ensure that key Planetary Health Diet-aligned products are priced competitively, often undercutting less sustainable alternatives. This is assessed by tracking the affordability index between conventional and plant-based staples, a crucial step in supporting public health across all socioeconomic demographics.
- 3. Sustainable Sourcing and Supply Chain Integrity: Beyond the consumer basket, we are deepening our commitment to environmental integrity in our sourcing. This involves increasing the volume of products holding strong external certifications, reducing food waste throughout our supply chain, and engaging directly with our key suppliers to set targets for Greenhouse Gas (GHG) emission reductions, particularly those linked to agricultural practices.

Operationalizing the Planetary Health Diet is not without hurdles. Key challenges include overcoming deeply ingrained cultural dietary habits in the region, managing the complexity of diverse international and local supply chains, and communicating the often-nuanced link between planetary health and human health to the average shopper.

These challenges, however, present significant opportunities for retail leadership. By actively promoting the Planetary Health Diet, Lidl Greece and Cyprus positions itself as a market leader driving positive change, enhancing consumer trust, and demonstrating a business model that is resilient against future climate-related risks. Our ability to scale demand for sustainable ingredients can stimulate local agricultural investment in practices that are better for the soil and water.

The success of this commitment is assessed through quantitative, data-driven metrics. We continuously monitor shifts in customer purchasing data-looking for a verifiable increase in the proportion of Planetary Health Diet-aligned products in the average shopping basket. Furthermore, environmental success is measured by our progress toward internal food waste reduction goals and reported Planetary Health Diet emission cuts.

In conclusion, this session provides dietetic and nutrition professionals with a practical case study demonstrating how a large-scale retailer is translating global sustainability science into actionable, local market strategies. The ultimate success of the Planetary Health Diet requires not only retail leadership but deep collaboration with the public health community. We look forward to exploring how nutritionists and dietitians can partner with retailers to accelerate this vital dietary shift in Greece and Cyprus.



#### Dr Middleton Nicos

BSc, MSc, PhD, Associate Professor, Health Research Methodology - President-elect CyEPHA
Dept. Nursing, School of Health Sciences, Cyprus University of Technology - Cyprus Epidemiology and Public Health
Association (CyEPHA), Limassol, Cyprus

#### Title of Presentation

Participatory Living Lab: Voices and journeys of individuals and families facing eating disorders, as part of Testimonial panel; - Two Voices: A novelized testimony of living with anorexia.

#### **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:

- familiarise with key aspects of anorexia, including epidemiology, clinical management, and the complementary roles of members of the multidisciplinary team.
- appreciate the psychological and social impact of anorexia on patients and families, developing greater empathy and understanding through shared lived experiences.
- reflect on current challenges in the healthcare response to eating disorders in Cyprus and consider ways towards evidence-based, compassionate and dignified patient-centred care.

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

This Living Lab invites participants to explore anorexia and eating disorders from multiple perspectives, combining evidence with lived experience. The first part will feature an interactive Mentimeter quiz addressing key themes including epidemiology, diagnosis and clinical management by a multidisciplinary team. In the second part, a father and daughter will share their personal journey with anorexia, as captured in the memoir Two Voices. Their testimony will set the stage for a panel discussion where they will reflect on the gaps and shortcomings of the current healthcare response to anorexia and eating disorders in Cyprus and put forward recommendations for evidence-based, compassionate, and dignified care.

#### Learning Outcomes Assessment

The interactive Mentimeter quiz naturally lends itself to outcome assessment, as participants receive immediate feedback on their knowledge and awareness of the epidemiology, and clinical management in anorexia care. Following the lived experience panel, reflective prompts delivered via Mentimeter will invite attendees to share key insights and priorities (e.g., healthcare gaps they became more aware of, or changes they would prioritise in their practice). This dual approach enables assessment of both factual knowledge and reflective awareness.

#### Abstract

Anorexia nervosa (AN) is a complex mental health disorder with significant medical, psychological, and social consequences. Effective management requires not only evidence-based clinical interventions but also an understanding of the lived experiences of patients and families. This Living Lab session explores anorexia through a participatory approach that integrates scientific knowledge with experiential insights, highlighting the value of listening to the Voices of "Experts by Experience."

The session is structured in two parts. The first part engages participants through an interactive Mentimeter quiz covering key themes: epidemiology, diagnosis, clinical management and the importance of multidisciplinary



teamwork. This activity allows attendees to assess their own familiarity with the topic, compare responses with peers, and receive feedback, reinforcing both factual understanding and awareness of professional roles in anorexia care.

The second part features a panel discussion with a father and daughter sharing their lived experience, as documented in their memoir Two Voices [1]. Selected extracts from the book serve as prompts to stimulate discussion on the impact of anorexia on individuals and families and promote reflection on gaps and challenges within the healthcare system in Cyprus. Participants are invited to reflect on how current practice aligns with best-practice recommendations for patient-centered care [2], to reflect on the role of registered dietitians-nutritionists as members of a multi-disciplinary team [3], and to consider strategies for improving the quality, dignity and effectiveness of care for people with anorexia and other eating disorders.

This Living Lab approach demonstrates how interactive, participatory methods can enhance professional learning by combining clinical knowledge with insights from lived experience. Overall, the aim of the session is to highlight the importance of interdisciplinary collaboration and the integration of patient and family voices to enhance understanding and empathy in the delivery of evidence-based, compassionate and dignified care in eating disorders.

- Π Κατσώνης Κώστας. Οι δυο φωνές-μυθιστορηματική μαρτυρία για την ανορεξία, Έκδοση Ιδρύματος "ΜΑΖΙ" και Παγκύπριου Συνδέσμου Στήριξης Ατόμων με Διατροφικές Διαταραχές. Λευκωσία 2025
- <sup>[2]</sup> National Institute for Health and Care Excellence. Eating disorders: recognition and treatment. NICE; 2017 (Last updated: 16 December 2020). Available at: <a href="https://www.nice.org.uk/guidance/ng69">www.nice.org.uk/guidance/ng69</a>.
- <sup>3</sup> Hackert AN, Kniskern MA, Beasley TM. Academy of Nutrition and Dietetics: revised 2020 standards of practice and standards of professional performance for registered dietitian nutritionists (competent, proficient, and expert) in eating disorders. Journal of the Academy of Nutrition and Dietetics. 2020; 120(11): 1902-19.



#### Dr Nicolaou A. Stella

BS, ASCP(MT), PhD, PgCert HBE, Associate Professor, Immunology, Department of Life Science, University of Nicosia, Cyprus

#### Title of Presentation

### The Role of the Immune System in Allergies: Friend or Foe?

#### **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 basic immunological mechanisms in allergies.
- 2. Critically evaluate the dual role of the immune system.
- 3. Explore the interplay between nutrition and immune sensitization

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

This session will explore the relationship between the immune system and allergic responses, delving into both protective and disease mechanisms. It will also provide an overview of how dietary strategies can influence immune sensitization.

#### **Learning Outcomes Assessment**

MCQs

#### **Abstract**

The immune system is a cornerstone of human health. It protects the body against harmful pathogens and supports tissue repair under normal conditions. However, immune system dysregulation may contribute to allergic disorders, which are a growing global health concern. Allergies are characterized by hypersensitivity to typically harmless antigens, such as pollen, foods, or environmental particles, affecting millions of individuals worldwide. The mechanism behind allergy development is multifactorial, often involving genetics, environmental exposures, and lifestyle factors. Genetics play an important role in allergic disorders, with susceptibility loci, such as those influencing IgE production or cytokine imbalances, predisposing individuals to immune hyperreactivity. In addition, nutrition is a crucial driver of immune system function, particularly during pregnancy, where maternal nutrition provides the substrate for fetal immune system development. This process continues after birth, as breastfeeding, dietary diversity, and the timing of allergen introduction significantly shape a child's immune learning and propensity toward allergies. Thus, allergic responses can be seen as both a result of immune dysfunction and an intricate interface between genetic predispositions and modifiable environmental factors such as nutrition. Understanding the interplay between these variables offers new opportunities for early interventions that can guide immune tolerance, reduce sensitization, and lower the risk of allergies. This presentation examines the pivotal role of the immune system in allergy pathogenesis, emphasizing a multidisciplinary focus by integrating immunology, dietary science, and genetics.

- 1. Wang, J., Zhou, Y., Zhang, H. et al. Pathogenesis of allergic diseases and implications for therapeutic interventions. Sig Transduct Target Ther 8, 138 (2023). https://doi.org/10.1038/s41392-023-01344-4
- 2. Panagiotou E, Andreou E, Nicolaou SA. The Effect of Dietary Components of the Mediterranean Diet on Food Allergies: A Systematic Review. Nutrients. 2023 Jul 25;15(15):3295. doi: 10.3390/nu15153295. PMID: 37571232; PMCID: PMC10420808.
- 3. Zhang P. The Role of Diet and Nutrition in Allergic Diseases. Nutrients. 2023 Aug 22;15(17):3683. doi:10.3390/nu15173683. PMID: 37686715; PMCID: PMC10490368.



#### Christina O'Neill

Executive Trainer/Coach, Cyprus

#### Title of Presentation

### **Success Mind Set**

#### **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.

#### **Objectives**

- 1. **Inspire Personal Growth:** To motivate participants to cultivate a positive and resilient mindset that supports both personal and professional success.
- 2. **Empower Change:** To provide practical tools and mental strategies that help individuals overcome self-doubt, fear of failure, and limiting beliefs.
- 3. **Promote a Culture of Excellence:** To encourage continuous learning, self-reflection, and goal-setting as key drivers for achievement and well-being.

#### Abstract

The "Success Mind Set" motivational session explores the power of thoughts, attitudes, and habits in shaping success. It highlights how mental resilience, self-belief, and adaptability can transform challenges into opportunities for growth. Participants will learn how to reframe setbacks, set meaningful goals, and align their mindset with their values and aspirations. Through inspiring insights and real-world examples, this talk aims to empower attendees to unlock their full potential and cultivate a mindset that fosters both achievement and fulfillment.



### **Dr Panayiotou Andrie**

BSc, MSc, PhD, Associate Professor in Public Health, Cyprus University of Technology, Cyprus

#### Title of Presentation

# From Folate to Heart Health: Nutrition and Homocysteine in Atherosclerosis Risk

#### **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. Discuss the current literature on the epidemiology of homocysteine and cardiovascular risk, including recent advances and future directions
- 2. Understand the original epidemiological data from the Cyprus population studied (CESA cohort) and how they relate to other populations
- 3. Shape their professional practice and application based on findings from their own Cypriot population

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

Explore and delineate the relationship between folate and homocysteine in cardiovascular risk with an emphasis on atherosclerosis, moving beyond the current literature and presenting original research findings from Cyprus. The data originate from the long-standing Cyprus Epidemiological Study on Atherosclerosis (CESA) cohort and demonstrate the potential role of homocysteine and folate levels in assessing and managing atherosclerosis and CVD risk.

#### **Abstract**

Elevated levels of homocysteine (Hcy) have been associated with increased risk of atherosclerotic cardiovascular disease (ASCVD), especially in regions without grain fortification with folic acid such as Asia. Our objective was to study the relationship between baseline Hcy and folate levels and MTHFR C>T genotype and the 10-year event rate for ASCVD, in the Cyprus Epidemiological Study on Atherosclerosis (CESA).

Atherosclerotic plaque assessment from all four major bifurcations using ultrasound and 10-year event rate (composite of first time fatal or non-fatal ASCVD event) were used from 771 community dwelling individuals from the CESA study (46% male; mean age:  $60.1 \pm 9.8$ ) with baseline data on Hcy and MTHFR C>T genotype. Mean baseline levels of Hcywere  $12.8 \pm 5.8 \, \mu \text{mol/L}$ , with 33% of the study population having levels >13 $\mu$ mol/L. The MTHFR TT genotype, which has been associated with higher Hcylevels, was found in 20.9% of the study population and the MTHFR CC genotype in 30.1% (vs 13% and 40.4% respectively in other reported European populations). The 10-year event rate in relation to Hcyquartiles was 6%, 8%, 12% and 26% from lowest to highest quartile respectively (p<0.001). When taking folate blood levels into account, the 10-year ASCVD rate for individuals carrying the MTHFR T allele (CT/TT) was 10% in those in the upper 3 quartiles of folate levels vs 18% in those in the lowest quartile (p=0.02).

We report an association between baseline Hcy levels and 10-year ASCVD rate in this cohort from Cyprus, which is more evident in carriers of the MTHFR T allele with folate deficiency. These results could further guide risk assessment and mitigation by considering both Hcy and folate levels, especially in populations with no folic acid fortification such as the Cypriot one.



- 1. Wang W, Lu H, Pu P, Yin H, Huang L. A PLoS One. 2025 Aug 12;20(8):e0330267. doi: 10.1371/journal.pone.0330267. PMID: 40794648;
- 2. Panayiotou A, Nicolaides A et al. Expert Opin Ther Targets 2009;13(1):1-11;
- 3. Huo Y, Li J, Qin X et al. JAMA 2015;313(13):1325-1335.
- 4. Spence JD. JACC 2024;4(8):621-623.
- 5. Wang X, Qin X, Demirtas H et al. Lancet 2007;369:1876-82.
- 6. Unadkat SV, Padhi BK, Bhongir AV et al. The Egyptian Heart Journal 2024;76:29



### Dr Papakonstantinou Aimilia

PhD, Associate Professor in Nutrition and Metabolis, Agricultural University of Athens, Greece

#### Title of Presentation

# Dietary Timing and Therapeutic Nutrition: Novel Approaches for Glycemic Control and Insulin Sensitivity in Diabetes

#### **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:

- Identify the physiological mechanisms through which dietary timing affects glycemic control and insulin sensitivity.
- Evaluate current evidence on time-restricted feeding and intermittent fasting in diabetes management.
- Apply evidence-based strategies of therapeutic nutrition for the prevention and management of metabolic disorders.

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

The presentation titled "Dietary Timing and Therapeutic Nutrition: Novel Approaches for Glycemic Control and Insulin Sensitivity in Diabetes" will explore cutting-edge nutritional strategies focused on when we eat, not just what we eat. Drawing on recent evidence, this session will examine how dietary timing and therapeutic nutrition can be integrated into personalized diabetes care plans, particularly to enhance insulin sensitivity and glycemic outcomes. Attendees will gain insight into how these approaches may support innovation, sustainability, and equity in managing metabolic health.

#### **Learning Outcomes Assessment**

Assessment of the learning objectives will be performed through:

Audience engagement during the Q&A session to clarify conceptual understanding and application in clinical practice.

Evaluation forms completed post-session to measure perceived knowledge gains aligned with stated objectives.

#### **Abstract**

Emerging evidence suggests that when we eat may be just as important as what we eat, especially in the context of metabolic diseases such as type 2 diabetes. Dietary timing, including approaches such as time-restricted feeding (TRF) and intermittent fasting (IF), has gained attention for its potential to modulate metabolic processes that influence glycemic control and insulin sensitivity.

This session will provide a comprehensive overview of the physiological rationale behind dietary timing strategies, emphasizing their effects on circadian rhythms, glucose metabolism, and insulin action. Special focus will be given to how alignment of food intake with the body's internal clock can lead to reductions in postprandial glucose excursions, improvements in insulin signaling pathways, and decreases in hepatic glucose output. We will review recent clinical studies, including randomized controlled trials and mechanistic studies, which support the incorporation of these dietary approaches in the management of diabetes and metabolic syndrome.



In parallel, therapeutic nutrition interventions-rooted in the use of specific dietary patterns and functional foods-will be discussed as complementary strategies to dietary timing. Together, these approaches offer a novel, integrated model for improving metabolic outcomes in both clinical and community settings.

The session will conclude with a practical discussion on how healthcare professionals can apply evidence-based timing strategies in personalized treatment plans, while considering cultural, behavioral, and socioeconomic factors that may influence adherence and effectiveness. Through this lens, dietary timing and therapeutic nutrition are positioned not only as tools for metabolic management, but also as agents of innovation and health equity in global nutrition practice.

#### References

Tsitsou, S., Bali, T., Adamantou, M., Saridaki, A., Poulia, K.-A., Karagiannakis, D.S., Papakonstantinou, E. and Cholongitas, E. Effects of a 12-Week Mediterranean-Type Time-Restricted Feeding Protocol in Patients With Metabolic Dysfunction-Associated Steatotic Liver Disease: A Randomised Controlled Trial-The 'CHRONO-NAFLD Project'. Aliment Pharmacol Ther, 2025;61: 1290-1309. https://doi.org/10.1111/apt.70044

Tsitsou S, Zacharodimos N, Poulia KA, Karatzi K, Dimitriadis G, Papakonstantinou E. Effects of Time-Restricted Feeding and Ramadan Fasting on Body Weight, Body Composition, Glucose Responses, and Insulin Resistance: A Systematic Review of Randomized Controlled Trials. Nutrients. 2022;14(22):4778. doi: 10.3390/nu14224778.

Sutton EF, Beyl R, Early KS, Cefalu WT, Ravussin E, Peterson CM. Early Time-Restricted Feeding Improves Insulin Sensitivity, Blood Pressure, and Oxidative Stress Even Without Weight Loss in Men with Prediabetes. Cell Metab. 2018;27(6):1212-1221.e3.

Chaix A, Manoogian ENC, Melkani GC, Panda S. Time-Restricted Eating to Prevent and Manage Chronic Metabolic Diseases. Annu Rev Nutr. 2019;39:291-315.

Longo VD, Panda S. Fasting, Circadian Rhythms, and Time-Restricted Feeding in Healthy Lifespan. Cell Metab. 2016;23(6):1048-1059.



### **Dr Papalazarou Anastasios**

MSc, PhD , Dietitian - Nutritionist, Scientific Associate of Harokopio University, Athens, Greece

#### Title of Presentation

### What to Eat for a Healthy Mind: Practical Nutritional Strategies

#### **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 understand the basic mechanisms behind the effect of microbiome to mental health.
- 2. To provide practical nutritional advice to improve healthy mind

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

Many studies have revealed the effect of human microbiome to mental health. The aim of this presentation is to inform about the biochemical and metabolic pathways connecting gut-brain and provide with practical dietetic strategies in order to improve mind health.

#### **Learning Outcomes Assessment**

Explain the connection between dietary patterns and common mental health conditions (e.g., depression, anxiety, burnout).

Identify protective diets (e.g., Mediterranean, anti-inflammatory, traditional dietary patterns) and those associated with increased risk (e.g., ultra-processed, high-sugar diets).

Understand the gut-brain axis and its role in linking nutrition, microbiota, and mental health.

Critically appraise scientific evidence (observational studies, RCTs, meta-analyses) on diet-mental health interactions

#### Abstract

Diet has a significant impact on mental health, and one of the key mechanisms involved is the gut-brain axis, which includes the gut microbiome-the trillions of microbes (bacteria, fungi, viruses) living in your intestines. It is well known that the microbiome plays a central role in this communication. Changes in gut bacteria can influence mood, cognition, and behavior that certain gut bacteria produce neurotransmitters like: Serotonin (up to 90% is made in the gut) GABA, dopamine, and acetylcholine. All these chemicals seems to play an important role in regulating mood, sleep, and stress response.

Another crucial parameter is related with immune system regulation. Recent studies have also revealed that a healthy microbiome reduces inflammation and helps prevent overactivation of the immune system-linked to depression and other disorders.

In terms of practical strategies to improve mental health, Mediterranean Diet has been shown to exert a beneficial role. The diet, rich in fruits, vegetables, legumes, whole grains, fish, olive oil, has been shown to reduce risk of depression and improve gut microbiome diversity. Besides, fermented Foods like Yogurt, kefir, sauerkraut, kimchi contain probiotics that has been shown to support gut health/ Also, prebiotic-Rich Food like fiber from foods like garlic, onions, bananas, oats feed beneficial bacteria improving mental health too On the other hand, highly processed foods, artificial sweeteners, excessive alcohol, and refined sugar-they harm the microbiome and increase mental health risks.



#### References

L Clerisi et al Gut Microbiome, Diet and Depression: Literature Review of Microbiological, Nutritional and Neuroscientific Aspects. Curr Nutr Rep 2025 Feb 10;14(1):30. doi: 10.1007/s13668-025-00619-2.

Staudacher HM et al Diet interventions for depression: Review and recommendations for practice. Aust N Z J Psychiatry. 2025 Feb;59(2):115-127. doi: 10.1177/00048674241289010.

S. Patil et al/ The Gut-Brain Axis and Mental Health: How Diet Shapes Our Cognitive and Emotional Well-Being Cureus 2025 Jul 21;17(7):e88420. doi: 10.7759/cureus.88420. eCollection 2025 Jul



### **Prof Dr Papandreou Dimitrios**

Dr (Medicine), Professor of Nutrition, Department of Clinical Nutrition and Dietetics, University of Sharjah, United Arab Emirates

#### Title of Presentation

# Triglyceride and Glucose Index as an Optimal Predictor of Metabolic Syndrome - A nutritional approach and dietary management for MtS

#### **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 evaluate the predictive performance of the Triglyceride and Glucose (TyG) index in identifying metabolic syndrome among Lebanese adults, and compare it with other biochemical indices such as HOMA-IR, TG/HDL-C ratio, Atherogenic Index of Plasma (AIP), and Visceral Adiposity Index (VAI).
- 2. To interpret the study's statistical findings, including sensitivity, specificity, and area under the ROC curve (AUC), in order to determine the most clinically applicable index for metabolic syndrome screening in primary care and research settings.
- 3. To discuss evidence-based nutritional strategies for the management of metabolic syndrome, integrating dietary patterns and lifestyle modifications into clinical practice to improve patient outcomes.

#### Acknowledgement:

The presenter would like to acknowledge and sincerely thank the co-authors of the paper "Triglyceride and Glucose Index as an Optimal Predictor of Metabolic Syndrome in Lebanese Adults", Haidar S, Mahboub N., Abboud M, and Rizk R, for their valuable contributions to the study's conception, methodology, data collection, statistical analysis, and manuscript preparation. Their collaborative efforts and dedication were essential in producing the high-quality research upon which this presentation is based.

#### Description (Focus Statement)

This study investigates the predictive value of the Triglyceride-glucose (TyG) index compared to other biochemical indices for identifying metabolic syndrome. Over the next 10 minutes, I'll walk through the background and rationale, the study's methods, its key results - including statistical performance measures like sensitivity, specificity, and AUC - and discuss why the TyG index is clinically significant and what nutritional strategies can be used to prevent MS.

#### **Learning Outcomes Assessment**

- 1. Participants will be able to describe the relative diagnostic accuracy of TyG, HOMA-IR, TG/HDL-C, AIP, and VAI, and identify the most effective index for early detection of metabolic syndrome in Lebanese adults.
- 2. Participants will be able to interpret ROC curves, sensitivity, specificity, and optimal cut-off values for different indices, and explain their clinical implications.
- 3. Participants will be able to recommend dietary patterns (e.g., Mediterranean, DASH) and lifestyle modifications tailored to patients with MetS, integrating these into comprehensive management plans.



#### **Abstract**

#### Background:

Metabolic syndrome (MetS) is a multifactorial cluster of interrelated metabolic abnormalities, including central obesity, dyslipidemia, insulin resistance, and hypertension, which collectively elevate the risk for type 2 diabetes mellitus (T2DM) and cardiovascular disease. Its prevalence is increasing worldwide, with estimates in Lebanon reaching approximately 42%. Early identification of MetS is a critical public health and clinical priority, particularly in primary care settings where cost-effective and easily applicable diagnostic tools are essential. Traditional diagnostic indices such as the Homeostatic Model Assessment for Insulin Resistance (HOMA-IR) and lipid ratios have been widely studied; however, emerging evidence suggests the Triglyceride and Glucose (TyG) index may offer superior predictive performance.

#### Objective:

This presentation aims to evaluate the diagnostic accuracy of the TyG index in predicting MetS in Lebanese adults compared with other indices-HOMA-IR, triglyceride-to-HDL cholesterol ratio (TG/HDL-C), Atherogenic Index of Plasma (AIP), and Visceral Adiposity Index (VAI)-and to discuss evidence-based nutritional interventions for the management of MetS.

#### Methods:

A cross-sectional study was conducted among 221 Lebanese adults aged 18-65 years, free from major chronic diseases and recruited from community and university settings. Data collection included anthropometric measures, blood pressure, and fasting biochemical analyses. Indices were calculated using standardized formulas: HOMA-IR (glucose × insulin / 405), TyG [In(TG × glucose / 2)], TG/HDL-C ratio, AIP (log TG/HDL-C), and sex-specific VAI. MetS was diagnosed according to International Diabetes Federation (IDF) criteria. Diagnostic performance was evaluated using receiver operating characteristic (ROC) curves, sensitivity, specificity, and area under the curve (AUC).

#### Results:

MetS prevalence in the sample was 44.3%, higher in males (60%) than females (35%). All indices were significantly elevated in participants with MetS (p < 0.001), with TyG demonstrating the greatest mean difference between MetS and non-MetS groups. TyG exhibited the highest diagnostic performance across all groups (AUC = 0.87 in total sample, 0.84 in females, 0.91 in males), with optimal cut-off values around 8.4 yielding sensitivities of 80-85% and specificities of 76-82%. HOMA-IR consistently showed the lowest AUC (~0.71-0.75). The ROC curve analysis reinforced TyG's superior discrimination capability.

#### Conclusions:

The TyG index outperformed HOMA-IR, TG/HDL-C, AIP, and VAI in predicting MetS in Lebanese adults. Its reliance on routine laboratory tests (fasting glucose and triglycerides) makes it a cost-effective, accessible, and reliable tool for large-scale screening and risk stratification, particularly in resource-limited settings. Implementing TyG in clinical practice, alongside sex-specific cut-offs, could enhance early detection and preventive strategies for MetS.

- 1.Sabbah, N., et al. Triglyceride and Glucose Index as an Optimal Predictor of Metabolic Syndrome in Lebanese Adults. Nutrients. 2023; 15(4):891. doi:10.3390/nu15040891.
- 2.Guerrero-Romero, F., et al. The product of triglycerides and glucose, a simple measure of insulin sensitivity. Comparison with the euglycemic-hyperinsulinemic clamp. J Clin Endocrinol Metab. 2010;95(7):3347-3351. doi:10.1210/jc.2010-0288.
- 3. Esposito, K., et al. Effect of a Mediterranean-style diet on endothelial dysfunction and markers of vascular inflammation in the metabolic syndrome: a randomized trial. JAMA. 2004;292(12):1440-1446. doi:10.1001/jama.292.12.1440.
- 4. Simental-Mendía, L.E., et al. The triglyceride and glucose index is a useful marker for identifying insulin resistance in apparently healthy subjects. Metab Syndr Relat Disord. 2008;6(4):299-304. doi:10.1089/met.2008.0034.
- 5.Reaven, G.M. The metabolic syndrome: time to get off the merry-go-round? J Intern Med. 2011;269(2):127-136. doi:10.1111/j.1365-2796.2010.02325.x.



### **Dr Philippou Christiana**

RDN, DProf, PhD, Health Education Inspector, Ministry of Education, Sports and Youth V.President of Cyprus Dietetic and Nutrition Association Clinical and Sports Dietitian, Nutritionist Cyprus

#### Title of Presentation

# Nutrition as a Tool for Prevention: Health Education Strategies to Address Chronic Disease in the General Population

#### **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. Examine how nutrition-focused health education can be leveraged to prevent chronic disease in the general population, with emphasis on school-based, experiential, and multisectoral approaches in Cyprus.
- 2. Explain why schools are a strategic setting for nutrition education.
- 3. Evaluate the role of cross-sector collaboration in sustaining dietary behaviour change.

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

Schools are a critical setting for nutrition education because they reach nearly all children at a formative stage when dietary behaviours are established and resistant to change later in life. Embedding health education within school policies, supported by cross-sector collaboration between education, public health, and media, maximizes the long-term effectiveness of interventions in preventing chronic disease.

#### **Learning Outcomes Assessment**

Knowledge / Recall: Multiple-choice questions (e.g., identifying key facts about NCDs and diet).

**Understanding / Application:** Case studies (e.g., "A Cyprus school sees rising obesity. Which strategy aligns best with evidence-based practice?").

**Creation:** Ask Health Educator participants (work for Ministry of Education, Sport & Youth) to design a brief intervention (e.g., a school-based nutrition program outline).

#### **Abstract**

#### Background:

Noncommunicable diseases (NCDs) such as cardiovascular disease, type 2 diabetes, and obesity account for 70-80% of deaths in Europe and represent a growing public health challenge in Cyprus. Unhealthy dietary patterns are among the leading modifiable risk factors. Nutrition education, particularly when implemented in school and community settings, offers a cost-effective, scalable strategy for prevention.

#### Objective:

To examine how nutrition-focused health education can be leveraged to prevent chronic disease in the general population, with emphasis on school-based, experiential, and multisectoral approaches in the Cyprus context.

#### Methods:

This presentation synthesises evidence from peer-reviewed studies, WHO and European Commission reports, and national program evaluations published between 2000 and 2025. Sources were identified through targeted searches in PubMed, Scopus, and institutional databases, focusing on interventions linking nutrition education to chronic disease prevention.

#### Results:

Strong evidence supports the Mediterranean diet as a protective factor against NCDs. In Cyprus, however, rising childhood obesity rates and declining adherence to traditional diets highlight urgent gaps in nutrition literacy and healthy eating behaviors. Effective interventions include integrating nutrition topics into school curricula, implementing national canteen guidelines, introducing experiential programs such as school gardens and cooking classes, and fostering family involvement. Cross-sector partnerships, including public-private collaborations and Erasmus+ initiatives, enhance reach and sustainability.

#### Conclusions:

Embedding nutrition education into formal curricula, complemented by practical, hands-on activities and supported by coordinated policies, can drive long-term, population-wide improvements in diet-related health outcomes. A unified national framework connecting schools, families, and communities is essential for sustained impact.

**Keywords**: Nutrition education, noncommunicable diseases, Mediterranean diet, school-based interventions, public health policy, Cyprus.

- 1. Contento (2011). Nutrition Education: Linking Research, Theory, and Practice
- 2. Dinu et al. (2018). Eur J Clin Nutr, 72(1), 30-43
- 3. European Commission (2022). Health at a Glance: Europe
- 4. Estruch et al. (2018). NEJM, 378(25), e34
- 5. Eurostat (2022). Obesity statistics
- 6. FAO & WHO (2019). School-based food and nutrition education
- 7. Forouzanfar et al. (2015). Lancet, 386(10010), 2287-2323
- 8. Langford et al. (2014). Cochrane Database Syst Rev, (4): CD008958
- 9. Ministry of Education, Sport & Youth Cyprus
- 10. Savva et al. (2020). Public Health Nutr, 23(10), 1804-1812
- 11. Schwingshackl et al. (2017). Eur J Epidemiol, 32(5), 363-375
- 12. WHO Europe (2022) COSI Cyprus data
- 13. WHO (2023). Noncommunicable diseases
- 14. WHO (2016). Health-promoting schools
- 15. WHO Europe (2020) School nutrition policies



### **Philpot Ursula**

MSc Dietetics, Senior Lecturer and Clinical Lead NHS England NEY, Leeds Beckett University, NHS England and Insighteating, England

#### Title of Presentation

### Workshop: Practical Tools and Case Studies. Professional support for ARFID and RISH

#### **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:

Describe best practice and minimally safe team team input for ARFID.

Access a range of professional resources and understand who to use these with.

Outline with role of the dietitian within an ARFID pathway.

Describe how RISH presents and locate the supporting guidance.

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

The workshop will outline best practice for ARFID pathways and the role of the dietitian from assessment to discharge.

It signposts and highlights ARFID resources available to dietitians in supporting patients and families from assessment, to treatment and safe discharge.

In addition it will describe the emerging presentation of a sub-set of disordered eating known as restricted intake self harm (RISH) and professional management guidance.

#### **Learning Outcomes Assessment**

Learners will self assess their increased knowledge and understanding against the learning outcomes

#### Abstract

Presentations of ARFID are increasing, and the role of the dietitian within ARFID pathways has yet to be fully established with the evidence base for dietetic interventions still emerging. The ARFID subgroup of the British Dietetic Association has led in developing resources to help support dietitians in the assessment treatment and safe discharge of patients with ARFID.

The resource page is intended for the use of all clinical staff and/or professionals from all services who are working with children and young people (CYP) and/or adults with ARFID/suspected ARFID. These pages contain resources and signposting to support your clinical work, as well as information to support ARFID service developments in your area and your own continuous professional development (CPD) and professional support needs.

Restricted Intake Self Harm (known as RISH) aims to describe the specific subset of patients who present with restricted intake (both foods and fluids) as a method of self-harm. It is not diagnostic and is an emerging formulation-based understanding of a specific sub-set of the disordered eating presentations. A formulation is an explanation or hypothesis of how an individual comes to present with certain behavioural characteristics.



The evidence base for RISH is new and evolving. Contributing to this field of understanding is an all-age national Consensus Conference piece of work conducted by the NENC CYP Provider Collaborative with expert national partners. This work represents multiprofessional clinical consensus and current best practice. The Clinical Working Group for this piece included 13 authors across 6 multiprofessional disciplines, and 7 contributors across 5 disciplines, together with those with lived experience. It is the product of an 22-month project including 7 virtual conferences, tangent specialist working groups and multiple drafts and reviews leading to a 30-page document titled: Practice considerations for the management of RISH across care settings and age.

bda\_arfidsubgroup @Instagram

https://www.cntw.nhs.uk/resource-library/professional-support-for-services-working-with-avoidant-restrictive-food-intake-disorder-arfid

https://www.cntw.nhs.uk/resource-library/professional-developments-for-disordered-eating/

#### References

Ellison C, Philpot U, Fuller S, Banner A, Falcoski P, Watts M, Greenham A. What is avoidant restrictive food intake disorder? Br J Gen Pract. 2024 Jul 25;74(745):362-363. doi: 10.3399/bjgp24X738957. PMID: 39054097; PMCID: PMC11299672.

Winten CG, Ross LJ, Strodl E, Heruc G, Thomas JJ. Dietetic-Led Cognitive Behavioral Therapy for ARFID: A Novel Approach to Avoidant/Restrictive Food Intake Disorder With Case Studies. J Hum Nutr Diet. 2025 Aug;38(4):e70087. doi: 10.1111/jhn.70087. PMID: 40611447; PMCID: PMC12231925.

https://www.bda.uk.com/specialist-groups-and-branches/mental-health-specialist-group/child-adolescent-mental-health-services-sub-group/arfid-position-statement.

www.cntw.nhs.uk/wp-content/uploads/2025/02/RISH-2025-final-copy.pdf



#### Preventi Fani

MSc, Register Dietitian Nutritionist, President, Hellenic Dietetic Association Vice President, Hellenic Dietitians - Nutritionists Association Greece

#### Title of Presentation

### **Profession of Nutrition and Dietetics in Greece**

#### **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

Describe the current landscape of the nutrition and dietetics profession in Greece, including its legal framework and professional recognition.

Identify the main challenges and opportunities for dietitians in the Greek healthcare system and private practice.

Understand the educational pathways, training requirements, and continuing professional development of dietitians in Greece.

Recognize the role of professional associations and policy initiatives in advancing the profession in Greece.

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

This presentation provides an overview of the nutrition and dietetics profession in Greece, focusing on its educational and regulatory framework. It also addresses key challenges and future opportunities for dietitians in healthcare and society.

#### Learning Outcomes Assessment

Understanding the current status of the profession in Greece.

Reflection on similarities and differences with international practices.

Feedback indicating greater awareness of future opportunities for dietitians.

#### **Abstract**

The establishment of the Hellenic DietitiansNutritionists Association as a public law entity (HDNA) under Law 5194/2025 (Government Gazette A' 66/2-5-2025) represents a historic milestone for the dietetics profession in Greece. This presentation will explore the implications of this legislative development and its impact on the professional and regulatory landscape.

Central to this framework is the official recognition of dietetic and nutrition practice, clearly defining the scope, responsibilities, and legal obligations of dietitians. The Association is tasked with regulating professional membership, ensuring adherence to ethical and practice standards, and safeguarding public health by overseeing service quality and protecting citizens from unqualified practitioners.

The session will also examine how this legal recognition affects day-to-day practice, professional development, and the opportunities for advancing dietetics in Greece. Comparisons with international standards will illustrate the alignment and highlight areas for continued growth.

By the end of the session, attendees will gain a clear understanding of the new legal and professional framework, the opportunities and challenges it introduces, and the future directions for dietetics both nationally and in an international context.



#### References

Hellenic Parliament. (2025). Law 5194/2025: Establishment of the Hellenic Dietetic Association as a Public Law Entity (N.P.D.D.). Government Gazette A' 66/02.05.2025. Retrieved from <a href="https://www.forin.gr/laws/law/4432/nomos-5194-2025">https://www.forin.gr/laws/law/4432/nomos-5194-2025</a>

Greek Ministry of Health. (2025). Announcement of Commencement of Practicing the Profession of Dietitian - Nutritionist. Retrieved from <a href="https://eugo.gov.gr/en/services/739848">https://eugo.gov.gr/en/services/739848</a>

EatRight International. (2019). Greece Information Sheet: Dietetics Profession Overview. Retrieved from https://eatrightinternational.org/wp-content/uploads/2019/08/greece-cis-edited-2019.pdf



### **Dr Risvas Grigoris**

PhD, President of EFAD (European Federation of the Associations of Dietitians), Public Health Dietitian, Greece

#### Title of Presentation

# Professional Policies of Nutrition and Dietetics in Europe: The EFAD 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.

#### **Learning Outcomes Assessment**

- 1. **To present the current landscape of professional policies** governing dietitians and nutritionists across Europe, as shaped and coordinated by EFAD.
- 2. **To highlight EFAD's strategic priorities** in promoting professional recognition, mobility, and excellence in dietetic practice within the European context.
- 3. **To discuss future directions and challenges** in harmonizing standards, advancing education, and ensuring that dietitians play a central role in public health and sustainability policies.

#### **Abstract**

This presentation, led by Grigoris Risvas, President of EFAD, will focus on the evolving professional framework for dietitians and nutritionists across Europe. It will examine EFAD's efforts to enhance professional identity, harmonize qualifications, and influence European health policy to ensure that nutrition and dietetics remain at the forefront of preventive healthcare. The talk will also explore the organization's commitment to sustainability, interdisciplinary collaboration, and continuous professional development—key elements in strengthening the role of dietitians in a changing healthcare landscape



### Prof Dr Serra-Majem Lluís

MD, PhD Chair at University of Las Palmas de Gran Canaria Research Institute of Biomedical and Health Sciences, University of Las Palmas de Gran Canaria and Complejo Hospitalario Universitario Insular-Materno Infantil (CHUIMI), Canarian Health Service, Spain

#### Title of Presentation

# Updating the Mediterranean Diet Pyramid towards Sustainability: Focus on Environmental Concerns

#### **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. **To present the evolution of the Mediterranean Diet Pyramid**, integrating sustainability principles alongside traditional nutritional and cultural dimensions.
- 2. **To analyze the environmental impacts** of dietary patterns, emphasizing the Mediterranean Diet's lower ecological footprint compared to Westernized diets.
- 3. **To highlight strategies for promoting sustainable food systems**, aligning public health nutrition with climate action and resource conservation.

#### Abstract

This presentation addresses the transformation of the Mediterranean Diet Pyramid into a model that not only promotes health and cultural heritage but also environmental sustainability. Professor Serra-Majem will discuss recent updates incorporating ecological and socio-economic factors, illustrating how the Mediterranean Diet supports biodiversity, reduces greenhouse gas emissions, and fosters responsible consumption. The session will emphasize the importance of sustainable dietary guidelines and policies in achieving global nutrition and climate goals, positioning the Mediterranean Diet as a leading example of a holistic and environmentally conscious eating pattern.

#### References

Serra-Majem L, Tomaino L, Dernini S, Berry EM, Lairon D, Ngo de la Cruz J, Bach-Faig A, Donini LM, Medina FX, Belahsen R, Piscopo S, Capone R, Aranceta-Bartrina J, La Vecchia C, Trichopoulou A. Updating the Mediterranean Diet Pyramid towards Sustainability: Focus on Environmental Concerns. Int J Environ Res Public Health. 2020 Nov 25;17(23):8758. doi: 10.3390/ijerph17238758. PMID: 33255721; PMCID: PMC7728084.

Bach-Faig A, Berry EM, Lairon D, Reguant J, Trichopoulou A, Dernini S, Medina FX, Battino M, Belahsen R, Miranda G, Serra-Majem L; Mediterranean Diet Foundation Expert Group. Mediterranean diet pyramid today. Science and cultural updates. Public Health Nutr. 2011 Dec;14(12A):2274-84. doi: 10.1017/S1368980011002515. PMID: 22166184.



### Dr Siekkeris Panagiotis

RGN, MSc, PhD, Diabetes Specialist Nurse, United Kingdom

#### Title of Presentation

# Interdisciplinary Diabetes Education in the ICU: Nursing and Nutrition Approaches

#### **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:

**Understanding Hyperglycaemia in ICU Settings:** Participants will be able to identify the prevalence and causes of hyperglycaemia in critically ill patients, including the impact of systemic stress and pharmacological interventions.

**Importance of Interdisciplinary Collaboration:** Learners will recognise the need for collaboration among diabetes specialists, dietitians, and nursing staff in delivering comprehensive diabetes education in the ICU.

**Patient Education Strategies:** Participants will understand effective educational strategies, such as teachback and digital resources, for empowering patients with diabetes to manage their condition.

**Nutritional Education and Management:** Attendees will grasp the critical role of dietitians in developing personalised dietary plans, managing carbohydrate intake, and educating patients and families about nutrition-related misconceptions.

**Implementation of Best Practices**: Learners will be able to apply best practices and protocols developed by endocrinologists to enhance diabetes management in the ICU.

**Case Study Analysis:** Participants will analyse real-life case studies to appreciate the outcomes of nurse-led education and dietitian involvement in improving patient care and glycaemic control.

**Promotion of Holistic Patient Care**: Learners will appreciate the significance of integrating nutrition-focused care with nursing practices to improve overall diabetes management in critically ill patients.

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

This presentation aims to highlight the critical importance of implementing interdisciplinary diabetes education in the ICU, focusing on nursing and nutritional approaches that can support glycemic control and overall patient outcomes.

#### **Learning Outcomes Assessment**

The presentation will cover the learning outcomes, facilitate a discussion of a case study and include a multiple-choice question at the end



#### **Abstract**

Diabetes management in the Intensive Care Unit (ICU) is recognised as a contributing factor that can significantly impact patient outcomes. Hyperglycaemia is a common complication in critically ill patients, affecting up to 80% of patients in the intensive care setting due to factors such as acute systemic stress, the use of corticosteroids, and nutritional support via parenteral routes (Umpierrez et al., 2002; Joint British Diabetes Societies for Inpatient Care, 2023; Evert et al., 2019). The lack of structured diabetes education contributes to the exacerbation of complications and poor post-ICU recovery (Rayman, 2021).

This presentation aims to highlight the critical importance of implementing interdisciplinary diabetes education in the ICU, focusing on nursing and nutritional approaches that can support glycemic control and overall patient outcomes.

The necessity of collaboration among healthcare disciplines is paramount in providing comprehensive diabetes education (Kolb, 2022). A practical educational approach leverages the expertise of diabetes nurses, dietitians, and endocrinologists. The Diabetes Specialist Nurses take the lead in bedside education, emphasising essential survival skills such as glucose monitoring and insulin administration (Hardee et al., 2015). Dietitians play a vital role in delivering nutritional therapy and facilitating education on carbohydrate counting, as well as developing personalised dietary plans (Hardee et al., 2015). The Diabetes Specialist Nurses prepare curriculum designs and prioritise the teaching of survival skills to patients by using methods such as teach-back and digital resources to reinforce learning. At the same time, endocrinologists provide medical oversight and are involved in developing protocols to ensure best practices are followed (Powers et al., 2020). By achieving effective communication and partnership among the key professional experts in diabetes, as well as following an individualised educational framework that addresses the complex needs of patients with diabetes in the ICU. Diabetes Specialist Nurse- led education strategies. Furthermore, interdisciplinary coordination ensures that nutrition-related education is delivered with nursing care, facilitating a holistic approach to diabetes management (American Diabetes Association, 2022).

Nutrition-focused education is crucial for the early identification of malnutrition and glycaemic instability, which can negatively impact recovery in the ICU. Educating patients and their families about misconceptions surrounding "diabetic diets" and teaching practical skills such as carb counting is essential to empower them both during their stay and for their transition to outpatient care (Franz et al., 2017).

The author discusses a case study to engage and encourage the audience to think together about the answers to a case study involving a 58-year-old male who was recently diagnosed with Type 2 diabetes and benefited from nurse-led insulin education combined with dietitian-led carbohydrate management. The results demonstrated notable improvements in glycaemic control, patient satisfaction, and the process for a safe discharge to outpatient services.

The author also addresses the future directions of ICU diabetes education, including the expansion of digital tools and the integration of AI-driven nutrition tracking systems (MyWay Digital Health, 2025; Health Innovation Network, n.d.; The Lancet Diabetes & Endocrinology, 2023). Establishing nutrition education protocols specific to the ICU and conducting longitudinal studies on post-ICU outcomes are crucial for ongoing improvements in diabetes education. (ADA, 2020).

In conclusion, effective diabetes education in the ICU is essential yet often overlooked. Interdisciplinary collaboration among healthcare professionals improves patient outcomes, and dietitians have a significant role in empowering patients through individualised education. Employing a consistent and structured educational approach improves the management of diabetes in critically ill patients and demonstrates better health outcomes long after their discharge from the ICU. This will allow healthcare professionals across disciplines to recognise the significance of interdisciplinary education and consider its development and implementation in their practice for the benefit of patient care.



#### References

Abdullah Uyaroğlu, O., Ruza, I., Skrha, J., Patoulias, D., Bevc, S., Ivanovska Bojadjiev, B., Gómez-Huelgas, R., Bojunga, J., Lesniak, W., Carretero-Gómez, J., Wacker, J., Pérez-Belmonte, L.M., Dicker, D., Petreski, T. and Marín-León, I. (2024). Treatment of Hospitalized Patient with hyperglycemia: an EFIM Critically Appraised and Adapted Guideline. European Journal of Internal Medicine, 132(132), pp.27-36. doi:https://doi.org/10.1016/j.ejim.2024.11.018.

ADA (2020). Improving Care and Promoting Health in populations: Standards of Medical Care in diabetes-2021. Diabetes Care, 44(Supplement 1), pp.S7-S14. doi:https://doi.org/10.2337/dc21-s001.

Babak, A., Shiva Rouzbahani, Alireza Safaeian and Farzam Poonaki (2023). Diabetes Mellitus Type2 and Popular Misconceptions: a Cross-Sectional Survey. Research Square (Research Square). [online] doi:https://doi.org/10.21203/rs.3.rs-3649866/v1.

Department of Health and Social Care (2025). 10 Year Health Plan for England: Fit for the Future. [online] GOV.UK. Available at: https://www.gov.uk/government/publications/10-year-health-plan-for-england-fit-for-the-future.

Evert, A.B., Dennison, M., Gardner, C.D., Garvey, W.T., Lau, K.H.K., MacLeod, J., Mitri, J., Pereira, R.F., Rawlings, K., Robinson, S., Saslow, L., Uelmen, S., Urbanski, P.B. and Yancy, W.S. (2019). Nutrition Therapy for Adults With Diabetes or Prediabetes: A Consensus Report. Diabetes Care, [online] 42(5), pp.731-754. doi:https://doi.org/10.2337/dci19-0014.

Gianchandani, R., Wei, M. and Demidowich, A. (2024). Management of Hyperglycemia in Hospitalized Patients. Annals of Internal Medicine, 177(12). doi:https://doi.org/10.7326/annals-24-02754.

Hardee, S.G., Osborne, K.C., Njuguna, N., Allis, D., Brewington, D., Patil, S.P., Hofler, L. and Tanenberg, R.J. (2015). Interdisciplinary Diabetes Care: A New Model for Inpatient Diabetes Education. Diabetes Spectrum, [online] 28(4), pp.276-282. doi:https://doi.org/10.2337/diaspect.28.4.276.

Health Innovation Network (n.d.). Structured Education for Type 2 Diabetes a Toolkit for Optimal Delivery. [online] Available at: <a href="https://www.england.nhs.uk/london/wp-content/uploads/sites/8/2022/09/Structured\_Education\_Toolkit\_Final.pdf">https://www.england.nhs.uk/london/wp-content/uploads/sites/8/2022/09/Structured\_Education\_Toolkit\_Final.pdf</a>.

Inzucchi, S. and Honiden, S. (2015). Metabolic Management during Critical Illness: Glycemic Control in the ICU. Seminars in Respiratory and Critical Care Medicine, 36(06), pp.859-869. doi:https://doi.org/10.1055/s-0035-1565253.

JBDS-IP (2024). Glycaemic Management during Enteral Feeding for People with Diabetes in Hospital a Guideline from the Joint British Diabetes Societies for Inpatient Care (JBDS-IP) Group.

[online] Available at: https://abcd.care/sites/default/files/resources/JBDS\_05\_Enteral\_Feeding%20\_Guideline\_April\_2024.pdf.

Joint British Diabetes Societies for Inpatient Care (2023). Management of Hyperglycaemia and Steroid (Glucocorticoid)

Therapy. [online] Available at: <a href="https://www.diabetes.org.uk/sites/default/files/2023-03/JBDS%2008%20Steroids%20">https://www.diabetes.org.uk/sites/default/files/2023-03/JBDS%2008%20Steroids%20</a> and%20DM%20Guideline%20with%20gr%20code.pdf.

Kolb, L. (2022). The Role of the Diabetes Care and Education Specialist in the Hospital Setting. The Science of Diabetes Self-Management and Care, 48(3), p.263501062210943. doi:https://doi.org/10.1177/26350106221094332.

Modzelewski, K.L., Cannavo, A., Fantasia, K.L., Korpaisarn, S. and Alexanian, S.M. (2021). A quality improvement initiative to successfully reduce the frequency of hypoglycemia during treatment of hyperglycemic crises at an academic safety-net hospital: Insights and results. Journal of Clinical & Translational Endocrinology, 26, p.100269. doi:https://doi.org/10.1016/j.jcte.2021.100269.

MyWay Digital Health (2025). My Type 2 Diabetes | MyWay Digital Health eLearning. [online] Mydiabetes.com. Available at: https://elearning.mydiabetes.com/courses/my-type-2-diabetes/ [Accessed 7 Oct. 2025].

Powers, M.A., Bardsley, J., Cypress, M., Duker, P., Funnell, M.M., Hess Fischl, A., Maryniuk, M.D., Siminerio, L. and Vivian, E. (2015). Diabetes Self-management Education and Support in Type 2 Diabetes: a Joint Position Statement of the American Diabetes Association, the American Association of Diabetes Educators, and the Academy of Nutrition and Dietetics. Diabetes Care, [online] 38(7), pp.1372-1382. doi:https://doi.org/10.2337/dc15-0730.

Rayman, G. (2021). Specialist Diabetes Nurses Are Key to Patient safety, Says GIRFT Diabetes National Report. Journal of Diabetes Nursing, [online] 25. Available at: <a href="https://diabetesonthenet.com/wp-content/uploads/pdf/dotn91290c563b-182b1050406ae1ea331db4.pdf">https://diabetesonthenet.com/wp-content/uploads/pdf/dotn91290c563b-182b1050406ae1ea331db4.pdf</a> [Accessed 6 Oct. 2025].

Rayman, G. and Kar, P. (2020). Diabetes GIRFT Programme National Specialty Report. [online] Available at: <a href="https://gettingitrightfirsttime.co.uk/wp-content/uploads/2020/11/GIRFT-diabetes-report.pdf">https://gettingitrightfirsttime.co.uk/wp-content/uploads/2020/11/GIRFT-diabetes-report.pdf</a>.

The Lancet Diabetes & Endocrinology (2023). Diabetes Care and AI: a Looming Threat or a Necessary advancement? The Lancet. Diabetes & Endocrinology, 11(7), pp.441-441. doi:https://doi.org/10.1016/s2213-8587(23)00174-2.

Umpierrez, G.E., Isaacs, S.D., Bazargan, N., You, X., Thaler, L.M. and Kitabchi, A.E. (2002). Hyperglycemia: an independent marker of in-hospital mortality in patients with undiagnosed diabetes. The Journal of Clinical Endocrinology and Metabolism, [online] 87(3), pp.978-982. doi:https://doi.org/10.1210/jcem.87.3.8341.



#### Prof Dr Skordis Nicos

MD, PhD, Paediatric Endocrinologist, Professor of Paediatrics, School of Medicine, University of Nicosia, Cyprus

#### Title of Presentation

### **Basic Principles for Diabetes Therapy with Insulin Pump**

#### **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. Explain the basic principles of insulin pump therapy (CSII) and how it differs from multiple daily injections.
- 2. Apply carbohydrate counting methods and use the insulin-to-carbohydrate ratio (ICR) to estimate mealtime insulin needs.
- 3. Collaborate with the healthcare team (endocrinologists, diabetes educators, nurses) to optimize both insulin pump use and nutrition therapy.

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

This session will provide dieticians with an overview of insulin pump therapy, focusing on the principles of basal-bolus insulin delivery, carbohydrate counting, and nutrition strategies to optimize glycemic control.

The rationale for this presentation is to empower dieticians with the knowledge and skills to effectively collaborate within the diabetes care team, enhancing outcomes for patients using insulin pumps.

#### **Learning Outcomes Assessment**

By the end of the presentation, attendees will be able to:

Explain the basic principles of insulin pump therapy (CSII) and how it differs from multiple daily injections.

Describe the role of basal and bolus insulin delivery and how insulin pumps mimic physiological insulin secretion.

Apply carbohydrate counting methods and use the insulin-to-carbohydrate ratio (ICR) to estimate mealtime insulin needs.

Collaborate with the healthcare team (endocrinologists, diabetes educators, nurses) to optimize both insulin pump use and nutrition therapy.

#### **Abstract**

Insulin pump therapy has become an essential tool in the management of type 1 diabetes. The primary principle behind insulin pump therapy is to mimic the physiological secretion of insulin by the pancreas through continuous delivery of rapid-acting insulin analogs. Unlike multiple daily injection (MDI) regimens that rely on both basal (long-acting) and bolus (short-acting) insulin, pump therapy uses only rapid-acting insulin delivered in a programmable manner to provide both basal coverage and meal-time boluses. This method allows for greater flexibility and precision in achieving optimal glycemic control.

Basal insulin is administered continuously in small amounts to maintain glucose stability during fasting states, accounting for approximately 40-50% of the total daily insulin dose. Importantly, basal rates can be individually programmed for different times of the day to address variations in insulin sensitivity, such as the dawn phenomenon. Bolus doses, on the other hand, are delivered before meals or as correction doses. Meal boluses are calculated using the insulin-to-carbohydrate ratio (ICR), while correction boluses are based on the insulin sensitivity factor (ISF), which estimates how much one unit of insulin will reduce blood glucose levels. Modern pumps often include bolus calculators that facilitate accurate dosing and reduce human error.



Successful use of pump therapy requires frequent self-monitoring of blood glucose (SMBG) or integration with continuous glucose monitoring (CGM). CGM, when linked with insulin pumps, provides real-time glucose data, trend analysis, and alarms for hypo- and hyperglycemia, thereby improving safety and efficacy. Advanced systems, such as hybrid closed-loop pumps, can automatically adjust basal insulin delivery based on CGM input, further enhancing glucose control.

Patient education is a cornerstone of effective insulin pump therapy. Individuals must be proficient in carbohydrate counting, pump operation, infusion set changes, and troubleshooting device malfunctions. As insulin pumps deliver only rapid-acting insulin, any interruption in infusion-due to mechanical failure, kinking of the catheter, or user error-can rapidly precipitate diabetic ketoacidosis (DKA).

The advantages of insulin pump therapy include improved glycemic control, reduced glycemic variability, enhanced flexibility in meal timing and physical activity, and lower risk of severe hypoglycemia compared to traditional regimens. However, pump therapy also carries risks, including technical failure, infusion site infections, and increased cost compared to MDI. Careful patient selection, ongoing education, and close clinical follow-up are therefore essential.

In conclusion, insulin pump therapy represents a highly effective and physiologically sound approach to diabetes management. By delivering insulin in a manner that closely replicates natural pancreatic function, it offers improved quality of life and long-term outcomes for patients.

- A Comprehensive Review of Novel Advances in Type 1 Diabetes Mellitus.
   Ebrahimpour Y, Khatami S, Saffar M, Fereidouni A, Biniaz Z, Erfanian N, Fereidouni M.J Diabetes. 2025 Aug;17(8):e70120. doi: 10.1111/1753-0407.70120.PMID: 40765373
- 2. Registration and Real-Life Studies on Automated Insulin Delivery Systems.

  Akturk HK, Brown SA, Beck RW, Sherr JL, Bergenstal RM, Kovatchev BP, Vigersky R, Breton MD, Hovorka R, Klonoff DC, Garg SK.Diabetes Technol Ther. 2025 Jul;27(S3):S48-S59. doi: 10.1089/dia.2025.0130.PMID: 40590747
- 3. Fully automated insulin delivery systems in type 1 diabetes: A systematic review and meta-analysis. Fan W, Deng C, Xu R, Liu Z, He Y, Zhou Z, Li X.Diabetes Obes Metab. 2025 Aug;27(8):4547-4556. doi: 10.1111/dom.16499. Epub 2025 May 28.PMID: 40432359



### **Theofilou Panayiota**

BSc Chemistry, MSc Food Technology: Quality Assurance, PhD(c) President, Cyprus Association of Food Scientist and Technologist Cyprus

#### Title of Presentation

# Can We Trust Our Plate? Ultra-Processed Foods and Food Fraud - From Science to Health

#### **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. From the standpoint of food chemistry and technology, define ultra-processed foods and set them apart from minimally processed goods.
- 2. Describe the typical methods of food fraud and how they affect consumer confidence, PDO protection, and authenticity.
- 3. Understand how authenticity and consumer health are protected by analytical techniques and quality assurance procedures.

#### Description (Focus Statement)

This session uses food science and technology to examine ultra-processed foods and food fraud. It draws attention to the ways that industrial processes and dishonest or fraudulent business methods undermine customer trust, authenticity, and transparency. The presentation ensures that innovation in the food industry does not compromise safety or authenticity by linking science to the preservation of health and heritage via the use of analytical tools and case studies.

#### **Learning Outcomes Assessment**

- 1. A final multiple-choice question for the audience.
- 2. An assessment of the participants' ability to explain fraud detection and UPF categorisation on the conference evaluation form.
- 3. The participants must be able to distinguish between Halloumi PDO and grilled cheeses or grilled Cyprus cheeses. Will there be any fraud difficulties with the introduction of Halloumi PDO lactose-free? What is the category name for this kind of fraud? is halloumi an UPF? The audience will be able to differentiate and identify the authentic foods.

#### **Abstract**

Concerns over the safety and authenticity of food have grown as global supply chains and industrial processes become increasingly complex. Two major issues dominate this discussion: the rapid growth of ultra-processed foods (UPFs) and the persistence of food fraud. Both are critical for food scientists/technologists and chemists because they directly challenge authenticity, quality control, and consumer trust.

Ultra-processed foods are not simply meals with extra ingredients. They are formulations resulting from several industrial procedures that frequently use protein isolates, emulsifiers, stabilisers, colourants, and other substances not found in home cooking. Their design prioritises shelf life, uniformity, and functionality. From a technological perspective, this raises concerns about the loss of natural food structures, the introduction of novel ingredients, and the difficulty of balancing innovation with authenticity.



Plant-based substitutes are a topic of particular interest. Despite being marketed as sustainable and eco-friendly, many are categorised as UPFs because they rely on fractionated proteins, industrial flavourings, and texturisers. Distinguishing such products from minimally processed plant-based foods like legumes, nuts, or traditional soy derivatives like tofu highlights the need for clarity in scientific and regulatory discourse. Being "plant-based" does not automatically imply authenticity or lower levels of processing.

Food fraud represents a similar but equally serious risk. Defined as the deliberate adulteration, substitution, or misrepresentation of food for economic gain, fraud undermines consumer safety and market confidence. It goes well beyond accidental mislabelling, covering dilution, counterfeiting, and misuse of geographical indications. The PDO Halloumi cheese case demonstrates these impacts: when standards are ignored or misrepresented, unfair competition, cultural loss, and consumer risks follow. Fraudulent practices may also conceal allergens, introduce banned substances, or misrepresent nutritional values, creating direct health dangers in addition to financial harm.

The vital connection between science and health becomes clear in how these challenges are addressed. Advanced analytical techniques such as spectroscopy, chromatography, DNA-based methods, and isotopic fingerprinting are indispensable for detecting adulteration, confirming authenticity, and distinguishing genuine from fraudulent products. When applied within strong quality assurance systems, they directly safeguard consumers by limiting exposure to unsafe or misrepresented goods. At the same time, they reinforce public confidence in both innovative new foods and traditional PDO products.

Case studies illustrate the real-world value of these scientific methods. DNA testing uncovered substitution during the European horse meat scandal. The melamine contamination of milk in China revealed how fraudulent practices can escalate into international health crises. In Cyprus, analytical testing has been essential in verifying the authenticity of PDO Halloumi and preventing misuse of its designation. These examples show that science not only detects fraud but also provides a protective shield for consumers and industries committed to authenticity.

Nevertheless, food fraud continues to make headlines. Several barriers explain this persistence. Advanced testing can be costly, time-consuming, and requires specialised expertise, making routine use difficult for many companies. Regulatory frameworks differ across countries, leading to uneven enforcement. Complex and industrialised supply chains make traceability harder. Above all, fraud remains highly profitable, with perpetrators often adapting faster than authorities can respond. These realities highlight the need for preventive, science-based systems rather than reactive measures after crises.

This presentation will examine ultra-processed foods and food fraud through the combined lens of food technology and chemistry, linking both to their health implications. It will explore the industrial drivers of UPFs, the risks and economic incentives underlying fraudulent practices, and the scientific techniques available to counter them. By drawing on case examples and highlighting analytical tools, the session will show how science protects authenticity and how this, in turn, protects consumer health.

Ultimately, the central question is: Can we trust our plate? This requires an answer grounded in quality control, science, and technology. Trust cannot be achieved by regulation alone; it depends on the continuous application of chemical and technological expertise to verify safety, authenticity, and transparency across the food chain. In this way, science becomes the foundation for consumer confidence, cultural heritage, and public health.

- 1. Monteiro, C. A., et al. (2019). Ultra-processed foods: what they are and how to identify them. Public Health Nutrition, 22(5), 936-941.
- 2.Artificial food additives: hazardous to long-term health? 2024 Oct 18;109(11):882-885. doi: 10.1136/archdischild-2023-326565.
- 3. Spink, J., & Moyer, D. C. (2011). Defining the public health threat of food fraud. Journal of Food Science, 76(9), R157-R163.



- 4. Papademas, P., & Kotsaki, P. (2019). Halloumi cheese: The product and its importance to Cyprus. Journal of Dairy Science, 102(3), 2823-2838.
- 5. Consumer Knowledge about Food Labeling and Fraud. Moreira MJ, García-Díez J, de Almeida JMMM, Saraiva C. Foods. 2021 May 15;10(5):1095. doi: 10.3390/foods1005109
- 6. European Commission (2020). EU Food Fraud Network Annual Report. Brussels: EC.
- 7. https://knowledge4policy.ec.europa.eu/food-fraud-quality\_en



#### **Tomholt Frank**

General Manager Nutricia Worldwide @ Danone, Netherlands

#### Title of Presentation

### What Makes a Successful Company with Great Nutrition Input

#### **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. **To explore how nutrition-driven innovation** can shape the success, credibility, and sustainability of companies in the food and health sector.
- 2. **To highlight the role of corporate responsibility and science-based nutrition** in building consumer trust and advancing public health.
- 3. **To share insights from Danone Nutricia's experience**, demonstrating how integrating nutritional science into business strategy leads to long-term impact and growth.

#### **Abstract**

This presentation will examine the intersection between business success and nutritional excellence through the lens of Frank Tomholt, CEO of Danone Nutricia, a global leader in health-focused nutrition. Drawing from the company's journey, he will discuss how evidence-based innovation, ethical marketing, and a commitment to public health can create value for both consumers and society. The talk will also highlight the importance of collaboration between scientists, dietitians, and industry leaders to deliver products that not only meet market needs but also promote wellness and sustainability.



### Dr Vassilopoulou Emilia

PhD/ RD, Asst Professor of Diet and Nutrition, International Hellenic University, Greece

#### Title of Presentation

# Eating Behaviors, Emotional Eating, and the Psychology of Food Choices

#### **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:

Define Nutritional Psychology and articulate how dietary patterns influence mental health outcomes, such as mood, stress, and cognition.

Explain the Microbiome-Gut-Brain Axis (MGBA) and its pivotal role in mood regulation, emotional well-being, and cognitive function.

Identify key mood-supportive foods and dietary patterns (e.g., Mediterranean diet, prebiotics, probiotics, omega-3 fatty acids) that promote mental health.

Describe the major biological mechanisms linking diet to mental health-such as neurotransmitter synthesis, neuroinflammation, and gut-derived signaling metabolites (e.g., short-chain fatty acids).

Apply practical, evidence-based food-based strategies in clinical or everyday settings to support emotional resilience, reduce stress, and enhance mental well-being.

#### Description (Focus Statement)

This session highlights the science linking diet, the gut-brain axis, and mental health. Attendees will discover practical, evidence-based strategies to use nutrition in promoting resilience, mood balance, and overall well-being.

#### **Learning Outcomes Assessment**

The stated objectives will be assessed through participant self-report on the conference evaluation form, where attendees indicate their ability to define, explain, identify, describe, and apply the presented concepts. In addition, interactive questions during the session (e.g., short polls, case examples, or knowledge checks) will provide immediate feedback on understanding and application of the material.

#### **Abstract**

The emerging field of Nutritional Psychology provides a scientific framework for understanding how dietary patterns influence mood, cognition, and overall mental well-being. Recent evidence demonstrates that the relationship between nutrition and psychological health is mediated by complex biological and behavioral mechanisms, including the microbiome-gut-brain axis (MGBA), neurotransmitter synthesis, inflammation pathways, and the regulation of stress and reward systems. With rates of stress, anxiety, and depression rising globally, it has never been more critical for health professionals to explore and apply evidence-based strategies that integrate nutrition into mental health promotion and clinical practice.



This interactive workshop will introduce participants to the foundations of Nutritional Psychology, beginning with a definition of the field and its six key domains. The presentation will then explore the scientific evidence linking diet and mental health outcomes, with a focus on the MGBA as a central mechanism through which dietary intake affects mood, cognition, and stress resilience. Special emphasis will be placed on how dietary patterns such as the Mediterranean and anti-inflammatory diets, as well as specific nutrients including omega-3 fatty acids, prebiotics, and probiotics, contribute to improved psychological outcomes.

Attendees will also gain insight into the behavioral aspects of food choices and eating patterns, recognizing how hedonic drivers, cravings, and stress-related behaviors influence both diet and mental well-being. By bridging biological mechanisms with behavioral insights, the session will highlight practical strategies for supporting clients, patients, or personal health through dietary adjustments that foster emotional balance, resilience, and improved mental health.

The workshop will adopt an interactive approach, combining evidence-based content with audience engagement. Participants will be encouraged to reflect on their own food-mood experiences through brief activities such as food-mood recall exercises and live polling. Case examples will be presented to illustrate how nutritional psychology principles can be applied in real-world contexts, from everyday lifestyle interventions to clinical and counseling settings. These activities will provide opportunities for attendees to assess dietary patterns, recognize their psychological impacts, and consider strategies for practical implementation.

By the end of the session, participants will be able to: (1) define Nutritional Psychology and describe its relevance to modern health care; (2) explain the role of the microbiome-gut-brain axis in linking diet and mental health; (3) identify key foods, nutrients, and dietary patterns that support mental well-being; (4) describe major mechanisms connecting diet to mood and cognition; and (5) apply food-based strategies to promote resilience and psychological health in professional and personal contexts.

- 1. Horovitz O. Nutritional Psychology: Review the Interplay Between Nutrition and Mental Health. Nutr Rev. 2025 Mar 1;83(3):562-576. doi: 10.1093/nutrit/nuae158. PMID: 39441711.
- 2. Grajek M, Krupa-Kotara K, Białek-Dratwa A, Sobczyk K, Grot M, Kowalski O, Staśkiewicz W. Nutrition and mental health: A review of current knowledge about the impact of diet on mental health. Front Nutr. 2022 Aug 22;9:943998. doi: 10.3389/fnut.2022.943998. PMID: 36071944; PMCID: PMC9441951.
- Sarris J. Nutritional Psychiatry: From Concept to the Clinic. Drugs. 2019 Jun;79(9):929-934. doi: 10.1007/s40265-019-01134-9. PMID: 31114975.
- 4. Suárez-López LM, Bru-Luna LM, Martí-Vilar M. Influence of Nutrition on Mental Health: Scoping Review. Healthcare (Basel). 2023 Aug 1;11(15):2183. doi: 10.3390/healthcare11152183. PMID: 37570422; PMCID: PMC10418505.



### **Dr Vlahoyiannis Angelos**

MSc Sports Nutrition and Dietetics, PhD, Adjunct Lecturer, Department of Life Sciences, University of Nicosia, Sports Dietitian, Nutritionist, Cyprus

#### Title of Presentation

# Carbohydrate Periodization Across the Day: Implications for Body Composition, Fitness and Gut Microbiome Health

#### **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 core chrononutrition concepts (circadian phase, chronotype) and define within-day carbohydrate periodization.
- 2) Critically evaluate evidence on carbohydrate timing for body composition, physical fitness/performance, and gut microbiome-distinguishing timing effects from total energy/CHO and diet quality.
- 3) Personalize within-day CHO timing using a practical decision framework that considers sleep status, training schedule/recovery window, chronotype, sex, and health/performance goals.

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

This session provides a concise, evidence-based synthesis of within-day carbohydrate timing in the context of chrononutrition and personalized care. We map what carbohydrate timing can and cannot do for body composition, physical fitness, and the gut microbiome, and current findings are translated into a practical decision framework that integrates sleep, chronotype, and training demands.

#### **Learning Outcomes Assessment**

- 1) Participants will be prompted to define chrononutrition and within-day carbohydrate periodization, and reflect on why timing is different from total calories or total carbohydrate.
- 2) Attendees will be tasked with explaining how carbohydrate timing can affect body composition, fitness (based on recovery window), and the gut microbiome, when overall diet is kept the same.
- 3) Participants will be asked to discuss the key checks for personalizing timing-sleep status, training schedule/recovery window, chronotype, sex, and goal.

#### **Abstract**

Within-day carbohydrate timing sits at the heart of chrononutrition and personalized care. It links everyday choices about breakfast, lunch, dinner, with the body's internal clocks and the natural rhythm of feeding and fasting. Yet, their effects have not systematically addressed. For this reason, in this presentation, recent human studies were reviewed, and key mechanistic work from the last decade was collected, focusing on three areas: body composition and metabolic control under energy-matched conditions; fitness and performance with attention to recovery windows (short; <24 hours vs longer; ≥24 hours) and session priority; and gut microbiome responses when diet composition is otherwise controlled. It is apparent that, across weight and metabolic outcomes, energy balance drives fat loss. By adjusting carbohydrate consumption earlier or later in the day does not reliably lead to extra loss of body fat when calories and total carbohydrate are matched. Still, carbohydrate timing can shape glycemic control, appetite, and adherence. Consuming more energy and carbohydrate earlier in the day tends to align with higher diet-induced thermogenesis and lower evening hunger and food-reward drive. Additionally, observational studies suggest that later first and last



meals may relate to higher cardiometabolic risk in some groups, with possible stronger effects in women. In practice, a modest earlier distribution can support glucose handling and make plans easier to follow, even if body-fat change is similar under equal calories. For physical fitness and exercise performance, the more important variable is the available recovery time. When sessions are ≥24 hours apart, differences between carbohydrate-timing patterns are usually small if total intake is the same. When recovery is <24 hours or the key session is later the same day, delaying post-exercise carbohydrate or skipping a carbohydrate-containing breakfast can reduce high-intensity capacity and increase perceived effort, even if later meals compensate for total intake. Here, timing shows a real effect tied to glycogen restoration and readiness. Lastly, for the gut microbiome, animal and mechanistic work shows strong links between circadian rhythms, feeding-fasting cycles, and gut barrier function. Although the literature is still limited, short-term human trials that only shift meal timing while keeping diet quality steady found small or absent changes in microbial diversity and related markers. Taken together, within-day carbohydrate timing is not a standalone fat-loss tool under calorie-matched conditions. It can improve metabolic control, appetite management, and performance when recovery is short-especially when plans are tailored to sleep status, chronotype, sex, and training schedule. A simple decision path-check sleep, recovery window, chronotype, and goal; then pair timing with diet quality-offers a practical way to personalize care in both clinical and athletic settings.

- 1. Vlahoyiannis, A., Andreou, E., Aphamis, G., Felekkis, K., Pieri, M., Sakkas, G. K., & Giannaki, C. D. (2025). Evaluating the evening carbohydrate dilemma: The effect of within-the-day carbohydrate periodization on body composition and physical fitness. European Journal of Nutrition, 64(1), 23.
- 2. Vlahoyiannis, A., Andreou, E., Bargiotas, P., Aphamis, G., Sakkas, G. K., & Giannaki, C. D. (2024). The effect of chrono-nutritional manipulation of carbohydrate intake on sleep macrostructure: a randomized controlled trial. Clinical Nutrition, 43(3), 858-868.
- 3. Komodromou, I., Andreou, E., Vlahoyiannis, A., Christofidou, M., Felekkis, K., Pieri, M., & Giannaki, C. D. (2024). Exploring the dynamic relationship between the gut microbiome and body composition across the human lifespan: a systematic review. Nutrients, 16(5), 660.
- 4. Papadopoulou, R. T., Theodorou, M. R., Ieong, C. S., Ballantyne, K., Marshall, D., Verney, A., ... & Gerasimidis, K. (2021). The acute effect of meal timing on the gut microbiome and the cardiometabolic health of the host: a crossover randomized control trial. Annals of Nutrition and Metabolism, 76(5), 322-333.
- 5. Tricò, D., Masoni, M. C., Baldi, S., Cimbalo, N., Sacchetta, L., Scozzaro, M. T., ... & Natali, A. (2024). Early time-restricted carbohydrate consumption vs conventional dieting in type 2 diabetes: a randomised controlled trial. Diabetologia, 67(2), 263-274.



#### Dr Wakil Elie

PhD, "Diplome d"Etat Francais de Docteur en Pharmacie " Director - Consultant Human Relations, Human Resource Development Authority, Cyprus

#### Title of Presentation

### **Empowering Dieticians with Intrapreneurship**

#### **CPE Leve**

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:

Inspire a culture of creativity and ownership in your clinic

Understand intrapreneurship and its relevance for dieticians

Build confidence lead initiatives in your workplace

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

Intrapreneurship-the practice of fostering entrepreneurial thinking and innovation within an organization-holds transformative potential for clinical dietitians, particularly in the unique healthcare and cultural context of the Mediterranean island of Cyprus.

As healthcare systems face rising demands from chronic disease management, nutrition-related public health challenges, and the integration of digital health solutions, clinical dietitians are ideally positioned to lead change from within.

#### **Learning Outcomes Assessment**

Driving change for better patient outcomes & professional growth

Fostering entrepreneurial thinking for better patient outcomes

Encouraging innovation within the clinic environment

#### Abstract

Intrapreneurship-the practice of fostering entrepreneurial thinking and innovation within an organization-holds transformative potential for clinical dietitians, particularly in the unique healthcare and cultural context of the Mediterranean island of Cyprus. As healthcare systems face rising demands from chronic disease management, nutrition-related public health challenges, and the integration of digital health solutions, clinical dietitians are ideally positioned to lead change from within. Empowering intrapreneurship enables dietitians to design novel patient-centered interventions, develop multidisciplinary collaborations, and implement culturally tailored nutrition strategies aligned with the island's Mediterranean dietary heritage. In the Cypriot context, where healthcare settings often operate within resource and policy constraints, intrapreneurial skills can drive service innovation without requiring major structural overhauls. This approach fosters professional growth, enhances patient outcomes, and strengthens the healthcare system's capacity to adapt to evolving nutritional needs. Promoting intrapreneurship among clinical dietitians is therefore a strategic investment in both healthcare quality and sustainable, culturally relevant innovation.

- 1. How to develop an intrapreneurial culture /David Lancefield August 9, 2023
- 2. Empowering Innovative Employees Through Intrapreneurship / Conference Board's 2017 "CEO Challenge" report,
- 3. Stanford University. Stanford, California



### **Prof Dr Zampelas Antonis**

PhD, RNutr, Professor of Human Nutrition, Agricultural University of Athens & Visiting Professor, University of Nicosia, Honorary Professor UCL

President of the Management Board, Hellenic Food Authority Greece

#### Title of Presentation

# Eating for Health, Eating for Earth: The Power of Nutrition in Sustainability

#### **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 consept of One Health
- 2. Explore the impact of agricultural policies in climate change
- 3. Undrerstand what is sustainable nutrition and its benefits to climate and to human health

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

The content of the sesion covers the principle of One Health approach to prevent diseases in humans. It wil also cover how climate change affect various aspects of the environment. Finally the sesion will expore the interelationship of climate change food systems and dietary habits.

#### **Abstract**

The concept of One Health has evolved from its initial focus on zoonoses to a comprehensive framework linking human, animal, and environmental health within shared ecosystems. In an era marked by global pandemics, climate change, biodiversity loss, and rising diet-related diseases, this integrative perspective offers a unifying scientific and policy language for addressing complex health challenges. Nutrition sustainability -defined as the ability of food systems to provide safe, nutritious, and culturally acceptable diets within planetary boundaries-represents one of the most dynamic and urgent frontiers of the One Health approach. This presentation explores how these two paradigms converge, offering both theoretical grounding and practical pathways for transforming health and food systems.

Today's food systems simultaneously nourish and endanger humanity. They are responsible for about one-third of global greenhouse gas emissions, most freshwater use, and major biodiversity loss. Yet, they fail to deliver equitable nutrition outcomes: more than three billion people cannot afford a healthy diet, while obesity and non-communicable diseases continue to rise. These dual crises of ecological degradation and malnutrition reveal a structural disconnection between health and sustainability. The One Health framework reframes this disconnection by recognizing that nutritional well-being depends on healthy ecosystems and sustainable agricultural practices, and that food security is inseparable from animal health, soil fertility, and water integrity.

From this perspective, nutrition sustainability becomes a multidimensional goal. It requires dietary patterns that promote human health, protect ecosystems, and support social justice. The EAT-Lancet Commission's planetary health diet illustrates this principle, proposing a global dietary model that is nutritionally adequate and environmentally sustainable. However, real-world application must be context-sensitive, adapting to cultural traditions, local production systems, and economic realities. One Health therefore acts as both a scientific framework and a policy compass-integrating food safety, nutrition, agriculture, and environmental stewardship into a coherent whole.



Operationalizing this integration demands cross-sectoral governance and data-driven decision-making. The presentation highlights examples where the One Health-nutrition nexus is already shaping policy and practice. These include national food safety authorities adopting ecosystem-based risk assessments; agricultural ministries implementing nature-positive farming systems; and public health agencies integrating sustainability metrics into dietary guidelines. Antimicrobial resistance (AMR) and foodborne zoonoses illustrate how interconnected health risks require unified monitoring and coordinated interventions across human, animal, and environmental domains. Similarly, climate-related food insecurity demonstrates that sustainable nutrition cannot be achieved without resilience in both ecosystems and livelihoods.

Education and research are central to this transformation. Embedding One Health in university curricula, professional training, and research agendas is essential for cultivating systems thinking and interdisciplinary collaboration. The creation of joint degrees, such as those linking nutrition science with environmental sustainability, represents an important step in this direction. Universities and international organizations can serve as platforms for bridging science and policy, ensuring that innovations in food production, safety, and consumption translate into public health gains. Knowledge co-production with local communities, farmers, and policymakers strengthens both the legitimacy and effectiveness of One Health implementation.

The presentation also examines the governance challenges that hinder progress. Institutional fragmentation -where ministries of health, agriculture, and environment operate in isolation-remains a major barrier. Integrating mandates and establishing shared accountability frameworks are prerequisites for effective One Health governance. At the international level, the WHO-FAO-WOAH-UNEP Quadripartite Alliance provides a model for multi-agency collaboration, yet national coordination mechanisms and local-level implementation are uneven. Financing and capacity building are equally crucial: without sustained investment, the One Health vision risks remaining a rhetorical ideal rather than an operational strategy.

The COVID-19 pandemic underscored the cost of neglecting systemic interconnections and the value of prevention over reaction. It also revealed opportunities for rebuilding food and health systems that are more resilient, equitable, and sustainable. Integrating nutrition sustainability within the One Health agenda can help reorient public health from a disease-centered model toward one focused on prevention, resilience, and ecological harmony.

- 1. Science Advice for Policy by European Academies SAPEA. (2024). One Health governance in the European Union
- 2. Winkler AS et al. Lancet 2025; 406: 501-70.
- 3. Steenson S & Buttriss JL Nutr Bulletin 2021;46:279-309



### **ABSTRACTS**

#### **Prof Dr Zampelas Antonis**

PhD, RNutr, Professor of Human Nutrition, Agricultural University of Athens & Visiting Professor, University of Nicosia, Honorary Professor UCL

President of the Management Board, Hellenic Food Authority Greece

#### Title of Presentation

# Nutrition Policy: A National Challenge for Health, Food Security, and Primary Production by EFET

#### **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. Undrestand how a National Food Authority
- 2. Realize how important is data generation to design and implement nutrition and food policies
- 3. How Food Systems operate and influence public health

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

The session will present the role of a National Food Authority to protect Public Health. It will focus on importnace of data generation for the design and the implementation nutrition and food policies. Finally How the operation of Food Systems and the influence public health will be covered

#### Abstract

Nutrition policy represents one of the most critical and complex public policy arenas of the 21st century, lying at the intersection of health, agriculture, environment, and economy. In Greece, as in many Mediterranean countries, the nutrition transition of recent decades has disrupted traditional dietary patterns and contributed to a rise in chronic diseases, food insecurity, and environmental pressures. This multifaceted challenge calls for a comprehensive, evidence-based national strategy that connects public health objectives with sustainable food systems and primary production. The Hellenic Food Authority (EFET), as the competent national body for food safety and nutrition policy implementation, has assumed a central role in shaping this integrated approach, promoting a new vision for nutrition governance under the framework of One Health and Food Systems Thinking.

The Greek population faces a paradox: while the traditional Mediterranean diet remains a global reference model for health and sustainability, actual dietary practices have diverged significantly from it. Non-communicable diseases (NCDs) such as obesity, cardiovascular disease, diabetes, and cancer account for over 80% of premature deaths in the country, with diet-related risk factors being among the leading contributors. Simultaneously, socioeconomic inequalities and the effects of the financial and climate crises have aggravated food insecurity, especially among vulnerable groups. These trends highlight the urgent need to redefine national nutrition policy, not merely as a matter of individual behavior but as a systemic issue encompassing food availability, affordability, safety, and sustainability.

The proposed framework, by the Hellenic Food Authority, the Ministry of Agriculture and Food and the Agricultural University of Athens emphasizes three interdependent pillars: (1) Public Health and Nutrition Education, (2) Food Security and Equity, and (3) Sustainable Primary Production and Food Systems Resilience.



#### 1. Public Health and Nutrition Education:

The first pillar prioritizes a population-wide approach to improving dietary quality through structured nutrition education, reformulation of processed foods, and regulatory actions on labeling and marketing. EFET's initiatives include the development of national dietary guidelines based on Mediterranean principles, the integration of nutrition literacy programs in schools, and the promotion of public awareness campaigns linking nutrition, health, and sustainability. Strengthening institutional cooperation with health and education sectors is essential to ensure consistency and impact across the lifespan.

#### 2. Food Security and Equity:

The second pillar addresses the growing challenge of ensuring access to safe, nutritious, and affordable food for all citizens. Food insecurity in Greece, although often hidden, affects up to one in five households. EFET's strategy integrates surveillance systems for nutritional risk, safety, and affordability indicators, while supporting social food programs and food redistribution networks. The Authority also plays a role in crisis preparedness, managing food safety risks that could exacerbate health or supply disruptions. Bridging the gap between social policy and food governance is critical for equity and resilience.

#### 3. Sustainable Primary Production and Food Systems Resilience:

The third pillar connects nutrition policy with the national strategy for agricultural and environmental sustainability. Greece's agri-food sector holds significant potential to supply healthy, minimally processed, and environmentally sustainable foods, yet it remains constrained by fragmented production and weak value chain integration. Aligning agricultural incentives, research priorities, and market regulations with public health goals will enable the transition toward nutrition-sensitive agriculture. EFET contributes by strengthening traceability, quality assurance, and food authenticity systems, ensuring that national production supports both public health and economic viability.

This presentation outlines the scientific rationale, strategic priorities, and institutional innovations required to build a modern, cohesive national nutrition policy in Greece. It argues that nutrition policy should not be seen merely as a health initiative, but as a pillar of national development, reinforcing the country's social cohesion, environmental stewardship, and economic resilience. The case of Greece - with its rich food culture, robust agricultural heritage, and pressing public health challenges - provides both a warning and a model for the broader European context.

Ultimately, the modernization of nutrition policy is not only a technical or administrative task but a national imperative that requires political commitment, societal participation, and sustained investment. Through an integrated, One Health-oriented strategy, Greece can reaffirm the Mediterranean diet as both a cultural legacy.

#### References

- 1. Ετήσιος Απολογισμός ΕΦΕΤ 2024.
- 2. Magriplis E et al, Nutrients. 2024 Jun 3;16(11):1751
- 3. Kotopoulou S et al, Eur J Nutr. 2025 Apr 5;64(4):147
- 4. Kopolpoulou S et al, Int J Environ Res Public Health. 2022 Oct 6;19(19):12800



## ABSTRACTS | CySPEN LLL - Topics

### **LLL Topic 41: Nutrition in Cancer: Focus on Tumor Types**

Director of the course: Stalo Kountouri, RDN, MSc, Clinical Dietitian, Officer at HIO, ESPEN teacher, Cyprus

- Module 41.1: Nutrition Support in Gastrointestinal Tract Cancer. Foregut Tumors Head and Neck, Esophagus Alessandro Laviano, MD, Associate Professor of Medicine, Sapienza University, Italy
- Module 41.2: Nutrition in Breast Cancer, Giagkos Lavranos, MD, Board Member of CySPEN, Cyprus
- Module 41.3: Nutrition in Colorectal Cancer, Stalo Kountouri, RD, Clinical Dietitian, Officer at HIO, CyDNA, AND, Cyprus
- Module 41.4: Nutrition in Gastric and Pancreatic Cancer, Elina loannou, RD, MSc, Clinical Dietetitian, Head of the Nutrition & Dietetics, Departments at Limassol and Paphos General Hospitals, Cyprus

#### **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 understand the prevelence of malnutrition and its impact on survival in foregut cancers
- 2. to know the basics of treatment protocols for foregut cancers
- 3. to recognize the symptoms related to the desease consequences of treatment to understand how to properly provide nutritional support to foregut cancer patients

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

The attendee will be able to determing the impact of nutrition on cancer treatmen outcomes and overall QoL and also to understand the risk factors associated with malnutrition and the implications of it on treatment tolerance, response and prognosis, focusing on ratiotherapy and chemotherapy treatments.

#### **Learning Outcomes Assessment**

To understand that malnutrition affects negatively outcome in cancer: overall survival, time to progression, complications, hospital stay, costs and QoL.

To learn how to manage nutritional intervention in particular types of cancers.

#### Abstract

The Life-Long Learning (LLL) Programme, developed by ESPEN (European Society for Clinical Nutrition and Metabolism), is a globally recognized educational platform tailored for medical doctors and healthcare professionals. It offers a structured, evidence-based curriculum designed to enhance clinical practice in nutrition and metabolism.

In this particular Module LLL 41: Nutrition in Cancer: Focus on Tumor Types we will discuss in detail the risk factors associated with malnutrition and the implications of it on treatment tolerance, response and prognosis, focusing on radiotherapy and chemotherapy treatments. We will focus on 4 different types of cancer including GIT Cancer Foregut tumors, breast cancer, colorectal cancer, gastric and pancreatic cancer and how to properly provide nutritional support to foregut cancer patients.

The Module includes:

- Current scientific review
- Clinical case study
- Self-assessment test
- Final grading guiz

#### References



#### LLL Topic 42: Clinical Sports: Nutrition in Sport-Related Health Problems

Director of the course: Stalo Kountouri, RDN, MSc, Clinical Dietitian, Officer at HIO, ESPEN teacher, Cyprus

- Module 42.1 Dehydration and Electrolyte Disturbance Silent Killer of Exercise Performance
   Dimitrios Papandreou, Dr (Medicine), Professor of Nutrition, Department of Clinical Nutrition and Dietetics, University of Sharjah, United Arab Emirates
- Module 42.2 Malnutrition in Physical Activity Etiopathogenesis, Diagnostics and Treatment of RED-Syndrome **Giagkos Lavranos**, MD, Board Member of CySPEN, Cyprus
- Module 42.3 Gut Training and Gastrointestinal Issues in Physical Activity
   Nikolaos Ntaflos, MSc, RD Clinical and Sports Dietitian, Nutritionist, Practice Placement Educator, University of Nicosia, Board Member, CyDNA, Treasurer, CySPEN (Cyprus Society for Clinical Nutrition and Metabolism), Member of HDA (Hellenic Dietetic Association), Cyprus
- Module 42.4 Nutrition for Optimising Immune Function and Recovery from Injury in Sports **Stalo Kountouri**, *RD*, *Clinical Dietitian*, *Officer at HIO*, *CyDNA*, *AND*, *Cyprus*

#### **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. explain the importance of water homeostasis in human body
- 2. present definitions of key concepts concerning Relative Energy Deficiency in sports (REDs)
- 3. Understand the physiology of EGIS and analyse the overlap between pre-existing GI condition such as IBS and EGIS
- 4. Understand the impact of nutritional interventions in sports injury prevention and their treatment and rehabilitation

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

The attendee will be able to identify and understand the impact of clinical nutrition in Sports Related Health Problems with concentration on

- Dehydration and electrolyte Disturbances
- Malnutrition
- Gut Training and GI issues
- Immunometabolism

#### **Learning Outcomes Assessment**

The attendee will be able to understand the complexity of thermoregulation during physical activity, define the role of clinical nutrition in management of REDs and plan a training programme for an athlete's gut. The attendee will also be able to define the role of clinical nutrition in prevention and management of immune system dysfunction.

#### Abstract

The Life-Long Learning (LLL) Programme, developed by ESPEN (European Society for Clinical Nutrition and Metabolism), is a globally recognized educational platform tailored for medical doctors and healthcare professionals. It offers a structured, evidence-based curriculum designed to enhance clinical practice in nutrition and metabolism.

During the LLL 42: Clinical Nutrition in Sport-related Health Problems we will discuss the recommendation in clinical sports nutrition to prevent dehydration, overhydration and electrolyte disturbances and go through the key concepts concerning Relative Energy Deficiency (RED) in sports. We will also learn about assessment and managing strategies in Exercise-Induces Gastrointestinal Symptoms (EGIS) and understand the nutritional strategies that may be effective in supporting immune function.

The Course includes:

- · Current scientific review
- Clinical case study
- Self-assessment test
- · Final grading quiz

#### References





#### **Andreou Eleni**

Eleni Andreou, DProf, RDN, is a Clinical Dietitian, Professor of Clinical Dietetics and Nutrition, and Head of the Department of Life Sciences at the University of Nicosia, School of Life and Health Sciences. She earned her B.Sc. (Summa Cum Laude) in Dietetics (Food and Nutrition/Dietetics) from Youngstown State University, USA, and completed a biennial postgraduate-level academic and practicum programme in Clinical Dietetics (CPD)—covering Clinical, Administrative, and Community Dietetics—at the same university and at Southside & Northside Memorial Hospitals in Youngstown, Ohio. She holds the Registered Dietitian/Nutritionist (RDN) credential from the



Commission on Dietetic Registration (USA) and a Doctorate in Professional Studies from Middlesex University, UK, specialising in Clinical Dietetics, Nutrition Sciences, and Health Education, with research interests in behavioural modification, diabetes, obesity, eating disorders, renal nutrition, and the relationship between cognition, sleep, and nutrition. Alongside her academic role, she maintains a private clinical practice, collaborates with medical centres, consults for the food and pharmaceutical industries, and advises health associations. She currently serves as President of the Cyprus Dietetic and Nutrition Association, the Cyprus Society of Clinical Nutrition and Metabolism (CySPEN), and MAZI – the Cyprus Foundation for Eating Disorders and Obesity; Treasurer of the Cyprus Atherosclerosis Association; President of the Cyprus Registration Board for Food Scientists, Technologists, and Dietitians (appointed by the Cyprus Government); and a member of both the National Committee of Diabetes (Ministry of Health) and the Regulation Committee of School Canteens (Ministry of Education). A published author of scientific articles, academic textbooks, and professional resources, she has made significant contributions to clinical practice, public health nutrition, and policy-making. As of 2020present, her academic impact includes 1,143 citations (950 since 2020), 70 peer-reviewed publications, an h-index of 16, and an i10-index of 22 (22 since 2020), more than 20 dissertations (5Phd and 15 MSc) in the past 10 years. And author of 7 books (text books and for the public)



### **Angouridis Aris**

**Dr Aris Angouridis** is a specialist in Internal Medicine. He was graduated from the National and Kapodistrian University of Athens Medical School, Greece in 2007. He was trained as an Internist at the University Hospital of Ioannina, Greece (board qualification 2016).

He acquired his doctoral degree (PhD) by the University of Ioannina Medical School, Greece in 2017. He specialized in lipid and metabolic disorders and cardiovascular disease prevention at the Royal Free Hospital, London, UK (2014-2015), after receiving a scholarship from the Hellenic Atherosclerosis Society. He has published over 70 papers



in peer-reviewed journals with more than 1580 citations and has an H index of 23. He is currently an Assistant Professor in Internal Medicine/Pathophysiology & Disorders of Lipid Metabolism at the European University Cyprus, the Director of the Lipid Clinic at the German Medical Institute, and a Board member of the Cyprus Atherosclerosis Society.

#### **Avraam Thalia**

**Thalia Avraam** is a Registered Clinical Dietitian (RD, UK) with extensive experience in critical care nutrition. She has been working at Nicosia General Hospital since its establishment and has previously led the Dietetic Departments at Limassol and Paphos General Hospitals. Her clinical focus lies in the nutritional management of critically ill patients, patients with renal disease, pressure ulcers, burns, liver diseases, diabetes etc. She participated in ICU-based research published in Intensive Care Medicine (ESICM), focusing on early immunoenhancing enteral feeding in traumatic brain injury patients. She is the first Clinical Dietitian Lecturer of the BASIC ICU Course in Cyprus (2024), collaborating with



the Intensive Care Forum. She delivers specialized nutrition training to ICU teams, MDs, health caregivers and different patient groups, supports the development of feeding protocols, and contributes to national strategies on clinical nutrition. She is a member of professional associations like HCPC, CyDNA, CyRBFSTD and ICF.



### **Bogdanis Gregory**

**Gregory Bogdanis** is a Professor of Sport and Exercise Training at the School of P.E. and Sport Science of the National and Kapodistrian University of Athens. He is also the General Secretary of the Hellenic Society of Biochemistry and Physiology of Exercise (<a href="http://www.eevfa.gr">http://www.eevfa.gr</a>) and Fellow of the American College of Sports Medicine and the European College of Sport Science. His research work focuses on exercise physiology and muscle biochemistry and nutrition applied to sport and exercise, with seminal work on muscle fatigue and recovery. His recent work includes the study of functional and architectural adaptations to strength, power training and stretching training, as well



as on oxidative stress and inflammation during high intensity exercise and training. Over the last 30 years, Prof. Bogdanis has published more than 200 papers in national and international peer-reviewed journals (>9500 citations, h-index: 52, i10 index: 132, 16 books or book chapters and >500 abstracts in National and International Congresses. In terms of research achievements, Prof. Bogdanis is listed in the "Top 2%" scientists in the Sports Science field worldwide for the last 5 years (<a href="https://topre-searcherslist.com/Home/Profile/828122">https://topre-searcherslist.com/Home/Profile/828122</a>). Prof. Bogdanis serves as Section Editor in several top-tier scientific journals, such as the European Journal of Sport Science, the Journal of Sports Science and Medicine, the Journal of Human Kinetics.



#### **Charidemou Evelina**

**Dr Evelina Charidemou** is an Assistant Professor at the University of Nicosia. She graduated with first-class honours in Biochemistry from Imperial College London and completed her PhD in 2019 at the University of Cambridge in Professor Julian Griffin's group. Her doctoral research linked specific amino acids to insulin resistance via de novo lipogenesis, using advanced metabolomic and bioinformatic techniques. In 2019, Dr Charidemou was awarded a prestigious Marie Skłodowska-Curie Individual Fellowship. During this fellowship, she combined metabolomic and epigenomic approaches to study metabolic changes caused by epigenetic modifiers at the University



of Cyprus. She has presented her work internationally and published in leading scientific journals.

Dr Charidemou has developed innovative methodologies integrating molecular biology, biochemistry, and computational tools to investigate the interface between epigenetics and metabolism. She is an active member of the metabolomics research community, having chaired the Early Career Members Network of the Metabolomics Society (2021–2023) and founded the Cyprus Metabolomics Network to promote the field both locally and globally. In recognition of her contributions to the field, she was awarded the 2024 President's Award of the Metabolomics Society, an honour given for excellence in research within the first 5–10 years of an independent career. In the same year, she also received the Cyprus Young Researcher Award in Life Sciences, further acknowledging her impactful research trajectory.



#### **Constantinou Haris**

**Haris Constantinou** is an Internal Medicine Physician and Dietitian-Nutritionist with extensive experience in managing patients living with obesity as well as metabolic disorders. He is a member of the Cyprus Society of Internal Medicine, the Hellenic Society of Internal Medicine, the Hellenic Diabetes Association and the European Society of Clinical Nutrition.

He obtained his specialty in Internal Medicine in Athens in 2021 and is SCOPE-certified in Obesity Management by the World Obesity Federation (since 2023). He holds a Medical Degree from the University of Thessaly and a BSc in Dietetics & Nutrition from Harokopio University in Athens.



Since 2022, he has been working as a Specialist in Internal Medicine and Head of the Obesity Centre at Larnaca General Hospital. He has experience as a clinical instructor for medical students and actively participates in major conferences and seminars, delivering presentations and publishing in reputable medical journals and international conferences.

His research primarily focuses on methods for assessing and managing patients with obesity and its metabolic, functional, and psychological complications. He demonstrates a strong research focus on the critical role of comprehensive medical history, detailed clinical examination-anthropometric assessment and advanced body composition analysis as a fundamental methodologies for the accurate diagnosis and clinical staging of obesity.

Together with his team at the Obesity Medicine, Diabetes Center of Larnaca General Hospital, he aims to provide holistic patient care for individuals with obesity through a patient-centered approach to the disease.



### **Constantinou Constantina**

**Constantina Constantinou** is a Professor of Molecular Cancer Biology at the University of Nicosia Medical School.

Prof Constantinou earned her BA Degree in Biological Sciences (concentration in Microbiology) with Distinction in all subjects from Cornell University, USA and furthered her education with an MSc in General and Medical Microbiology with Distinction from University College London, UK, and a PhD in Biochemistry and Molecular Biology from St George's, University of London, UK. Her academic journey also includes a PgCertHE from the University of Hertfordshire.



Prof Constantinou's expertise has been enriched through post-doctoral research positions at St George's University of London, UK, and the University of Cyprus, in the field of molecular cancer biology.

Since joining the University of Nicosia in 2010, Prof Constantinou has held various pivotal roles, including Associate Dean for Research, Director of the PhD Progamme in Medical Sciences, and Director of the Doctor of Medicine (MD) undergraduate programme.

Prof Constantinou is a Fulbright Scholar and has also received prestigious scholarships from the A. G. Leventis Foundation, the Overseas Research Awards Scheme (ORS) and the Wellcome Trust Value in People (VIP) Award.

Prof Constantinou's research is centered around cancer biology and oncology, with a specific focus on molecular pathways of tumorigenesis. Additionally, she is interested in the field of lifestyle medicine, exploring the impact of nutrition, exercise, sleep, avoidance of risky substances, stress management, and social relationships, in the prevention and management of cancer and other chronic diseases.

Throughout her career, Prof Constantinou has actively participated in numerous research projects funded by national, European, and international agencies. Her research findings have been published in high impact factor journals.



### **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.

# 5

### 13th CYPRUS DIETETIC & NUTRITION ASSOCIATION CONFERENCE & EXPO

### **Efthymiou Dimitris**

Chief Executive Officer at NOUS Therapy Center - Mental Health Center Thessaloniki, Central Macedonia, Greece

#### **SUMMARY**

Psychiatrist Psychotherapist Cognitive Behavioural Therapy, Schema Therapy, Nutritional Psychology Accredited Educational Programme, NOUS THERAPY CENTER Executive Director



#### **EXPERIENCE**

### NOUS Therapy Center - Mental Health Center Chief Executive Officer

September 2021 - Present (4 years 3 months) Thessaloniki, Central Macedonia, Greece

#### **NOUS THERAPY CENTER**

#### **Executive Director**

January 2022 - January 2025 (3 years 1 month) Thessaloniki, Central Macedonia, Greece

## Private Mental Health Center, Psychiatry, Psychotherapy, Nutritional Education, Nutritional Psychology

## II University Department of Psychiatry, Aristotle University of Thessaloniki Resident Doctor in Psychiatry

2017 - 2021 (4 years)

#### General Hospital of Katerini Resident Doctor in Psychiatry

2015 - 2015 (less than a year)

#### Ministry of Health, Medical & Public Health Services Head of Human Resources

2013 - 2015 (2 years) Cyprus

### University of Nicosia Visiting Professor

2014 - 2014 (less than a year) Cyprus

#### Ministry of Health Cyprus

4 years

#### **Medical Manager**

2010 - 2013 (3 years) Cyprus

#### **Hospital Management Consultant**

2009 - 2010 (1 year)

Cyprus



VE VISION Healthcare Ltd Founder-General Manager 2007 - 2009 (2 years)

401 General Military Hospital of Athens Military Doctor

2004 - 2005 (1 year) Athens, Attiki, Greece

#### **EDUCATION**

#### Aristotle University of Thessaloniki (AUTH)

Psychotherapeutic Educational Program • (2018 - 2022)

#### European Association for Cognitive & Behavioural Therapies (EACBT)

Cognitive Behavioural Therapy • (2018 - 2021)

#### **University of Phoenix**

Master of Health Administration • (2008 - 2010)

#### University of Brighton

Master of Business Administration - MBA • (2006 - 2007)

#### Military School for Officer Corps

Lieutenant Military Doctor • (1997 - 2004)

#### **TOP SKILLS**

**Business Strategy** 

**Team Building** 

Marketing Strategy

#### **CERTIFICATIONS**

**Hospital Management** 

Schema Therapy for Borderline Personality Disorders

**Developing Negotiation Skills Psychodynamic Psychotherapy** 

**Cognitive Behavioural Therapy** 

(CBT)



### **Efrem Giorgos**

**Giorgos Efrem** is a distinguished former Cypriot professional footballer, born in Limassol in 1989. A product of Arsenal's youth academy, he went on to play for Rangers, Omonia, and APOEL, Cyprus National Football Team becoming one of Cyprus's most respected wingers. Throughout his career, he won multiple championships and cups, earning individual accolades such as Best Player of the Cypriot First Division (2015–16). Beyond his achievements on the field, Efrem now dedicates his time to developing the next generation of footballers through ELITE ΠΡΟΠΟΝΗΣΕΙΣ ΠΟΔΟΣΦΑΙΡΟΥ (Elite Training - Developing Footballers), inspiring young athletes to elevate their game, strengthen their mindset, and pursue excellence in sport.





### **Erotokritou Giorgos**

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.



### Fragkiskou Marianna

**Dr Marianna Fragkiskou** is an Assistant Professor in Operations Management and Logistics at Frederick University, with prior academic appointments at Tilburg University and the University of Nicosia Medical School. She holds a PhD in Management from the University of Bath, where her research focused on process improvement in healthcare operations. Her expertise lies in Operations and Service Management, Healthcare Management, and Corporate Social Responsibility, with research published in leading journals such as the Journal of Business Research and the International Journal of Operations & Production Management.



Dr Fragkiskou has extensive international experience in teaching and research, including collaborations with universities in the UK, Brazil, and Switzerland. She teaches courses such as Operations Management, Supply Chain Management, Organizational Behavior, and CSR, and designs customized management and leadership programs for professionals, emphasizing process efficiency, service quality, and sustainable organizational performance.



### Georgaki Evridiki

**Dr Evridiki Georgaki** is a forward-thinking resident doctor with a strong foundation in clinical medicine, currently pursuing a MSc in Health Data Science at University College London. She recently completed her Foundation Training at Southend University Hospital, gaining multidisciplinary experience across general and orthopaedic surgery, psychiatry, geriatrics, and more. Passionate about digital health and preventative care, she focuses on using data-driven solutions to improve healthcare outcomes, particularly in women's health, fertility, and weight management. Her academic background includes a MBBS and First-Class iBSc in Sports and Exercise Medicine, as well as hands-



on research involving health and nutrition. She has developed skills in Python, R, SQL, SPSS, and electronic health record analytics. Evridiki has also contributed to international nutrition and metabolic health conferences and is committed to combining clinical expertise with technology to advance equitable healthcare delivery.



### Giannaki Christoforos

**Professor Christoforos Giannaki** is a Clinical Exercise Physiologist and the Associate Head of the Department of Life Sciences at the University of Nicosia, Cyprus. He also serves as Director of the Research Centre for Exercise and Nutrition (RECEN) and as PhD Programme 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.





fields of Exercise Science, Medicine, and Nutrition. He is a member of several international health and medical organisations and serves as President of Exercise is Medicine Cyprus. In addition, Dr Giannaki is a member of the editorial boards of BMC Nephrology, European Review of Aging and Physical Activity, and Frontiers in Striated Muscle Physiology.



### **Hadjipanayis Adamos**

**Dr Hadjipanayis** is a Professor of Paediatrics. His primary teaching areas include paediatrics, communication skills, and information technology.

His research has focused on environmental hazards, human biomonitoring, the use and misuse of antibiotics, and vaccination. Dr Hadjipanayis has authored more than 150 peer-reviewed articles in paediatric journals. He is also the author and co-editor of the book European Mastercourse in Paediatrics and has published several books for parents.



He is the immediate past President of the European Academy of Paediatrics, the Deputy Executive Director of the International Paediatric Association, the Director of the Paediatric Department at Larnaca General Hospital, and the hospital's Medical Director.



#### **Heraclides Alexandros**

**Dr Alexandros Heraclides** is an Associate Professor of Epidemiology and Public Health at European University Cyprus (EUC). Dr Heraclides has an undergraduate degree in Biology (BSc) and was later trained at postgraduate level in Human Nutrition (MSc), and Social Epidemiology (MSc), from King's College London and University College London (UCL), respectively. Dr Heraclides concluded his formal education with a PhD in Epidemiology and Public Health from University College London (UCL), where he investigated mechanisms leading to health inequalities, with a focus on psychosocial stress and health behaviours, including diet and physical activity. Dr Heraclides



has previously worked at UCL in the UK, Steno Diabetes Center in Denmark, the German Institute of Human Nutrition, the Cyprus Institute of Neurology and Genetics, and the University of Nicosia. During these years, Dr Heraclides has also participated in training fellowships at Lund University (Sweden) and Durham University (UK). Dr Heraclides has previously worked in several large-scale epidemiological studies, including the Whitehall II study and the British 1946 birth cohort in the UK, the Danish Inter99 and ADDITION studies, and the Europe-wide EPIC study, focusing primarily on lifestyle-related determinants and gene-lifestyle interactions in chronic disease. Dr Heraclides is currently involved in projects aiming to investigate the interaction between health behaviours and genetic predisposition in chronic disease; as well as the aetiology of chronic lifestyle-related diseases, from an evolutionary perspective. Furthermore, he is investigating the shifting dietary patterns as regards adherence to the traditional Mediterranean diet in the Cypriot population. In addition to his research activity, Dr Heraclides is currently leading postgraduate and doctoral courses in Research Methodology, Biostatistics, Epidemiology, and Public Health. He is also supervising MSc and PhD students on a consistent basis and acts as co-Coordinator of the PhD in Public Health programme at EUC and as Vice Chair of the Department of Health Sciences.



### **lacovides Angelos**

Mr Angelos lacovides is the Managing Director of Scenario Group. He studied Media and Communication at Birmingham City University in the United Kingdom. He is a lecturer at Intercollege teaching Marketing and Public Relations. He is also Head of Marketing and Communication for Intercollege, the Cyprus Maritime Academy, and the University of Nicosia Training and Development Unit. He has over 25 years media experience as a radio producer and presenter (SUPER FM, KLIK FM), Journalist (To Periodiko, TV Star, Eleftheria newspaper London), website owner (music.net.cy, skopies.net, mugmag.co.uk), and TV producer and presenter (PIK, SIGMA, O  $\Lambda$ O $\Gamma$ O $\Sigma$ , MTV CYPRUS).





#### **Ioannou Elina**

Elina Ioannou studied at the Department of Dietetics and Nutrition Science at Harokopio University of Athens. She also obtained a Master's Degree from the same university, specializing in "Nutrition and Public Health," graduating with distinction. Since November 2008, she has been working as a Clinical Dietitian at the General Hospitals of Limassol and Paphos, managing both outpatients and inpatients. She has extensive experience in the field of clinical nutrition, having assessed hundreds of patients to date. Since 2019, she has been a PhD candidate at the Cyprus International Institute for Environmental and Public Health at the Cyprus University of Technology (CUT).



She has publications in scientific journals and has contributed to the writing of the European clinical nutrition guidelines for hospitals by ESPEN. She collaborates with the Department of Nutrition & Dietetics of the European University Cyprus and has participated as a speaker at scientific conferences in Cyprus and abroad.

She is registered with the Cyprus Council for the Registration of Food Technologists and Dietitians (SEETTD) and, since 2023, has been appointed by the Council of Ministers to its Board. She is also a member of the UK Health and Care Professions Council (HCPC), the European Society for Clinical Nutrition and Metabolism (ESPEN), the Cyprus Society for Clinical Nutrition and Metabolism (CySPEN) and the Cyprus Dietetic and Nutrition Association (CyDNA). She has been awarded scholarships by the Anastasios Leventis Foundation and the Cyprus State Scholarship Foundation. Additionally, she is was the first coordinator of ESPEN's Life Long Learning Programme in Cyprus and serves as a reviewer for the scientific journal Clinical Nutrition ESPEN. Finally, she is the Secretary of the Scientific Committee of the Limassol–Paphos Scientific Committee.



### **Karagiannis Dimitrios**

Dimitrios Karayiannis, MSc, PhD, is a highly experienced Clinical Dietician based at "The Evaggelismos" General District Hospital of Athens, with over 20 years in clinical nutrition. He holds a PhD from Harokopio University, focusing on the Mediterranean diet's impact on fertility and adiponectin levels. Dimitrios is an ESPEN Council Member and active reviewer for multiple prestigious nutrition journals. His expertise spans nutrition in chronic diseases, nutritional support in critical illness, fertility nutrition, and dietetics education. He leads clinical nutrition protocols in a major hospital setting and coordinates lifelong learning programs in clinical nutrition. WHe has published



extensively in peer-reviewed journals, contributed to book chapters, and won multiple research awards. Dimitrios is proficient in Greek and English, skilled in statistical and nutrition software, and committed to advancing clinical nutrition practice and education in Greece.





#### **Katsonis Costas**

Costas Katsonis was born in Aradippou, Larnaca, Cyprus, in 1949 (May, 24). He studied at the Cyprus Pedagogical Academy (Teachers Training College 1968-1971) and the Faculty of Philosophy of the National and Kapodistrian University of Athens (1974-1978). He had postgraduate studies in pedagogy (M.Ed., Trenton State College of New Jersey, USA 1996-1998) and holds (2006) a doctorate from the University of Thessaly, on The pedagogical element in modern Cyprus short story for children and young people (1974-2004).



Initially he worked as a teacher in primary schools (1971-1988) and then as a philologist in Secondary Education, retiring in 2009 from the post of First Education Officer, with special duties in the Office of the Minister of Education and Culture (2003-2009), having completed 38 years of successful educational service. Afterwards he co-operated, for five years, with the European University of Cyprus, as an associate at the School of Education.

He has been a member of the editorial team of the literary magazine "O Kyklos – The Circle" (1980-1986), while from 1989 to today (2025) he is responsible for the publication of the magazine Anemi, Review of Cyprus Children's Literature (issues 1-32), which is published annually by the Cyprus IBBY section. For 40 consecutive years he has served Cyprus IBBY, being a member since 1980, a member of its board (1985-2006), and then as chairman, from 2007 to 2020. As from 2020 he is an honorary chairman. He is a writer and researcher -promoter of children and youth literature through a great variety of activities as a chairman of Cyprus Ibby-locally and abroad and also as a writer and scholar. He also wrote books about Cyprus History and literature in general. He has also been involved in the drafting of textbooks, being a member of the Programme Development Service of the Ministry of Education and Culture. He has a plethora of literature works which include poetry, short stories, articles and studies on Cyprus literature for children and young people and modern Greek literature, studies in history, essays, short story anthology, doctoral dissertation, etc., and endless publications (articles and studies) in literature magazines in Cyprus and in Greece. Some of his poems have been translated into English and French.

He has also edited dozens of books by Cypriot authors (children's literature and literature in general, folk-poetry, etc.). As a member, initially, and as chairman subsequently of the Cyprus IBBY section he represented Cyprus in numerous international conferences for children and youth literature (IBBY Congress etc.), while he also participated in a large number of conferences and seminars for children and youth literature and for other issues (on education and culture), in Cyprus, Greece and abroad.

He pioneered in the establishment of the Larnaca House of Letters and Arts (2004), of which he has been the chairman since 2007, while on his own initiative the Cultural Movement Friends of Literature and Culture (2015) was founded in Larnaca, of which he was the first chairman and now being the vice chairman. In 2003 in cooperation with a group of parents he established the Cyprus Eating Association, being the president until 2023 and now being the onorary president. He is also the founder and chairman of the Andreas Mapouras Foundation (2015) and vice chairman of the Cultural Creation Foundation for Young People of Larnaca District. He was a member of the Jury for the State Awards for Children and Youth Literature of Cyprus (2002-2009, 2011-2012) and chairman of the Jury for the Literary Competitions of the Cyprus IBBY section (1990-2024). For a decade he was the chairman of the Jury for the Tefkros Anthias-Theodosis Pieridis Cultural Contribution Award (2006-2015) of AKEL party Central Committee. Since 2010 he has been the chairman of the Jury of the Annual Cyprus Poetry Competitions of the Larnaca Kataklysmos Folk Festival.



He has shown a significant social and cultural activity in his birthplace Aradippou as a municipal and school councillor (2011-2016) and in Larnaca, where he was the coordinator of the Demitriion Cultural Centre (1978-1983) - for which he wrote and published a book (2019). He was also a member of the Publishing and Culture Committees of the Municipalities of Larnaca and Aradippou.

He is married to the philologist Anastasia Hadjiloi from Lapithos and they have two children.

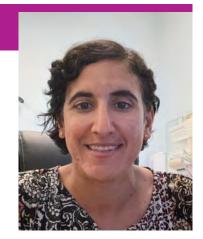
For his significant contribution to Literature, education and culture he was honoured with the following Honours:

- 1. Cyprus IBBY Annual Award "Michalakis Maratheftis" 2025, for his contribution in total promoting Child and Youth Literature (April 23, 2025).
- 2. Candidate for ALMA 2025, suggested by Greek and Cyprus IBBY. In 2021 he was also a candidate of the Cyprus IBBY section for ALMA (Astrid Lindgren Memorial Award), awarded annually by the Swedish government to individuals and organizations with a significant contribution to child and youth literature.
- 3. G.F. Pierides Annual Award of the Cyprus Literature Union (2021) for his contribution in total promoting Cyprus Literature and Culture (April 2022).
- 4. Greek Letters Award of the Municipality of Aradippou 2023 (January 30, 2023)
- 5. In December 2024 he was honoured by the AKEL (political party) Larnaca District Committee for his contribution to Education and Culture.
- 6. Special prize of Cyprus Greek Cypriots Philologist Association, for his total contribution in education and culture (December 5, 2011)
- 7. Honorary chairman of Cyprus IBBY section (2020), and of the Cyprus Eating Disorders Association (2022), of which he was the founder and chairman from 2003 to 2020.
- 8. Honorary member of Cyprus Literature (Writers) Union and the Hellenic-Cyprus Culture Association

### Katsoni Evgenia

**Dr Katsoni** was born in Cyprus and at the age of 12 received a scholarship to attend the American Academy in Larnaca where she completed her high school studies in 2004.

Prior to that and at the age of 14 she suffered from an eating disorder known as 'anorexia nervosa' . This was a challenging time for the family and it led to her having treatment in the UK. She was still able to continue with her studies and did not miss the year due to the support from the school , family and clinic environment.



Her father recently published a book known as 'The two voices' sharing the family journey during that difficult time .

She was able to overcome her battle with anorexia nervosa and eventually studied medicine in the UK. She qualified as a medical doctor in 2010 and then specialised in Family Medicine . She is currently working in the UK as a General Practitioner. She has a specialist interest in mental health and also facilitates teaching at her local medical school .

During her free time she enjoys running and triathlon training. She has recently qualified to race in a full ('Ironman') distance triathlon in the world championship.



#### **Kountouri Stalo**

**Stalo (Chrystalla) Kountouri** graduated with honors (Cum Laude) from Youngstown State University in Ohio, USA, earning a Bachelor of Science in Applied Science – Nutrition and Dietetics. She completed her practicum at Northside Memorial Hospital in Ohio and Jameson Memorial Hospital in Pennsylvania. Following the successful completion of the state examination, she was awarded the title of Registered Dietitian by the Commission on Dietetic Registration (CDR).



She also holds a Master's Degree in Healthcare Management from the Open University of Cyprus.

Professionally, she has worked as a private clinical dietitian and, from 2006 to 2022, served as a Clinical Dietitian at the General Hospital of Famagusta, providing care in the outpatient clinic, inpatient wards, and overseeing foodservice operations. From 2011 to 2022, she was also affiliated with the Bank of Cyprus Oncology Center, where she supported both outpatients and inpatients.

For the past three years, she has been working within the General Healthcare System (GHS), representing the interests of clinical dietitians.

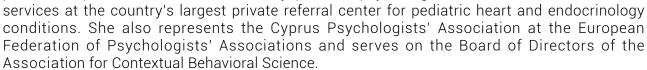
Stalo is an active member of the Academy of Nutrition and Dietetics, the Cyprus Dietetic and Nutrition Association, and ESPEN. She is a founding member of CySPEN, where she held the roles of Vice Secretary (2015–2019) and Treasurer (2019–2022). Also she is an instructor for ESPEN's Life Long Learning (LLL) courses.



#### **Koushiou Maria**

**Maria Koushiou**, PhD, is a licensed School and Clinical Psychologist in Cyprus and an Assistant Professor at the University of Nicosia. Her main research focuses on body image and maladaptive eating behaviors, emphasizing the psychological and emotional mechanisms behind their development. Her work has been published in peer-reviewed journals and contributed to the development of research projects within international, multidisciplinary collaborations.

Dr Koushiou has extensive clinical experience with youth across public and private sectors. She currently provides psychological







### **Kyprianou Theodoros**

Professor Theodoros Kyprianou is a clinician, researcher, teacher, mentor, and business consultant in the fields of Respiratory and Intensive Care Medicine, Digital Health Transformation and Electronic Patient Records. He is currently Professor of Medicine (UNIC) and has recently been Consultant physician in Critical Care and Respiratory Medicine at Guy's and St Thomas's Hospitals NHS Foundation Trust in London, UK (2024 - 2025) and Kings' College Hospitals NHS Foundation Trust (2021 - 2023). He has also served as Project lead for the development of the National Electronic Health Record's content and functionality on behalf of the National



e-Health Authority of Cyprus (2023 - 2025), and an adviser for European Health Data Space Xt-EHR (ongoing). He has held leadership positions at the European Society of Intensive Care Medicine and several scientific committees of EU-funded flagship research programs, being member of the H2020 SC1 program standing committee in Brussels (2012 - 2020).



### Kyriakidou Zoe

Councel of the Republic, Law Office of the Republic of Cyprus





### Laviano Alessandro

Alessandro Laviano, MD, is associate professor of Internal Medicine at the Department of Translational and Precision Medicine, Sapienza University of Rome, Italy. Dr. Laviano is Chief, Clinical Nutrition Unit at Sant'Andrea University Hospital in Rome, Italy. Dr. Laviano's main research interest is the prevention and treatment of disease-associated malnutrition, and particularly cancer anorexia-cachexia. More recently, Dr Laviano has extended his area of research to include the impact of biological aging in the pathogenesis of sarcopenia, and the development of nutritional strategies to reduce accelerated aging and favour healthy aging.



During the last decade, Dr. Laviano has served in different roles within the central committees of the European Society for Clinical Nutrition and Metabolism (ESPEN), and he is currently the Director of the ESPEN LLL programme, Coordinator of the Supervisory Board of the nutrition Day project, and Coordinator of the ESPEN Cancer Task Force. Dr. Laviano is currently: co-Editor in Chief of Nutrition and Associate Editor of Journal of Cachexia, Sarcopenia and Muscle. Dr Laviano has >330 publications in international peer reviewed journals (source: Scopus, accessed March 2025), with a H-index: 67 (source: Scopus, accessed March 2025). Since 2019, Dr Laviano is listed among the top 2% all-time world scientists in the Stanford-Elsevier ranking list.

Dr Laviano is the host of a series of video-pills on scientific evidence, i.e., "The Odd Drop of Wisdom", posted on Linkedin, Facebook and Instagram.



### **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



#### **EDUCATION AND TRAINING**

#### 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



### Lysigakis Nikolaos

**Dr Nikolaos Lysigakis** is an experienced Corporate Affairs executive specializing in translating complex policy and regulatory concepts into viable business strategies. He represents Lidl Greece and Cyprus at the 13<sup>th</sup> Cyprus Dietetic & Nutrition Association Conference, focusing on the future of food systems.

His background is uniquely suited to address the conference themes, combining deep policy knowledge with sector experience. With almost 15 years of experience in Ministerial offices, political organizations, and the private sector, he possesses a proven track record in shaping impactful communication campaigns and political initiatives.



Mr Lysigakis's presentation will offer key insights into how major retailers, bridging the gap between consumer behaviour and planetary boundaries, can become essential partners in delivering public health objectives.



#### **Middleton Nicos**

**Dr Nicos Middleton,** BSc Statistics and Operational Research (UCL, 1997), MSc Health Care Decision Analysis (LSE and LSHTM, 1998), PhD Epidemiology (Dept Social & Community Medicine, Univ Bristol, 2004) is Associate Professor in Health Research Methodology and Biostatistics at the Department of Nursing, School of Health Sciences, Cyprus University of Technology (CUT). At CUT, he teaches a range of research-orientated subjects at undergraduate, postgraduate and doctoral level. Dr Middleton has led or participated in several research projects, funded by European or local agencies, with a track record of >150 articles in peer-reviewed journals (GoogleScholar: >6000 citations, h-index=42, i10-index=93).



His recent work emphasizes "policy-driven research," advocating for stronger integration of methodological and participatory action research and learning approaches to influence health policy in Cyprus. Dr Middleton is member of the International Epidemiological Association and the Society for Social Medicine (UK). He was a Founding member, Vice-President (2022-2024) and currently President elect of the Cyprus Epidemiology and Public Health Association, national representative in the European Public Health Association (EUPHA).



#### Nicolaou A. Stella

**Dr Stella A. Nicolaou** is an Associate Professor of Immunology at the Department of Life Sciences at the University of Nicosia and the Coordinator of the BSc Human Biology. Dr Nicolaou holds a BSc in Medical Technology (University of Indianapolis, USA), a PhD in Pathobiology and Molecular Medicine (University of Cincinnati, USA) and a PgCert HBE by SGUL. She is currently the Chair of the University of Nicosia Research Committee and the School of Life and Health Sciences Teaching and Assessment Committee. Her active research interests focus on: (a) education research as it relates to the teaching and assessment of students in biomedical sciences and (b)



basic and epidemiological research relating to food allergies. She has participated in research projects related to those areas and the projects were funded both by the EU as well as locally. Her work has been published in international conference proceedings and refereed academic journals of Immunology and Medical Education.



#### **Ntaflos Nikolaos**

**Nikolaos Ntaflos** is a Clinical and Sports Dietitian-Nutritionist registered with the UK Health and Care Professions Council (HCPC). He holds a BSc in Nutrition & Dietetics from Harokopio University of Athens and an MSc in Sports Nutrition/Dietetics from the University of Nicosia. He also completed a diploma in Sports Medicine through the Cyprus Sports Medicine Society in collaboration with Aristotle University of Thessaloniki.

Since 2007, he has been professionally active in Athens and, from 2012, in Cyprus, where he runs his private practice, Feel Good. He

serves as a placement educator in the MSc Clinical Dietetics program at the University of Nicosia since 2017.



His research experience includes participation in the EU MENU project of the European Food Safety Authority (EFSA), which contributed to the Cyprus National Nutrition Survey. He is a board member of the Cyprus Dietetic and Nutrition Association, treasurer of CySPEN, and an active member of the National Committee on Fetal Alcohol Spectrum Disorders, contributing to the development of national prevention guidelines.

#### Degrees/ Credentials

BSc in Nutrition & Dietetics MSc in Sports Nutrition/Dietetics Diploma in Sports Medicine RD HCPC (UK)

Position Title: Clinical and Sports Dietitian-Nutritionist & Placement Educator

Affiliation: University of Nicosia, Cyprus & Feel Good Private Practice



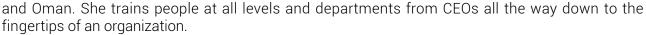
#### O'Neill Christina

**Christina** studied Marketing and received a Masters in Organizational Analysis and Behavior from Lancaster University in the UK.

A Senior Consultant specializing in learning and development of teams and individuals.

Specifically she excels in training, facilitation, coaching and mentoring.

With a 25 year career she has delivered more than 2.500 workshops and trained people mainly in Cyprus, Greece, Kuwait, Abu Dhabi, Dubai





She is also a trainer for TACK-TMI, (<a href="https://www.tacktmiglobal.com">https://www.tacktmiglobal.com</a>) an international training consultancy firm and is currently involved in projects with international companies like: Unilever, Idiada-Applus and Eurofragance.







## **Panayiotou Andrie**

**Dr Andrie Panayiotou** is Associate Professor in Public Health at the Cyprus University of Technology where she heads the Cardiovascular Epidemiology and Genetics research lab, coordinating several epidemiological studies, such as the CESA, DEPICT and CARTESIAN-CY. It additionally 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 EAS-FH Studies Collaboration network. To date she has more than 50 peerreviewed journal papers in several high-impact journals such as Nature Genetics, JACC, BMJ and others, 35 conference abstracts



and 2 book chapters. AP is a founding member of the Cyprus Atherosclerosis Society and elected Secretary (2019-), a founding member and currently elected Vice-president (2025-) of the Cyprus Epidemiology and Public Health Association, while she has also served at the board of the National Bioethics Committee (two terms) and heads the Cyprus Unit on Bioethics under the International Chair in Bioethics.



## Papakonstantinou Aimilia

**Dr Aimilia Papakonstantinou** is an Associate Professor of Nutrition and Metabolism at the Department of Food Science and Human Nutrition, Agricultural University of Athens, and Director of the Laboratory of Dietetics and Quality of Life. She holds a BSc and MSc in Human Nutrition and Dietetics from the University of Georgia (USA) and a PhD in Clinical Nutrition from Harokopio University, with a focus on glycemic responses in individuals with type 2 diabetes. She has also received advanced postdoctoral training at the University of Georgia under Prof. Ruth B. Harris, specializing in stress, omega-3 lipid intake, calcium metabolism, and body composition analysis in animal models.



Dr Papakonstantinou leads the design and execution of randomized controlled clinical trials (RCTs) in human populations across the lifespan—from children to older adults—including healthy individuals, those who are overweight/obese, and those at risk of or diagnosed with type 2 diabetes, non-alcoholic fatty liver disease, insulin resistance, and polycystic ovary syndrome. Her research explores the effects of functional foods, food ingredients, and dietary patterns (including time-restricted feeding and meal frequency) on glycemic control, insulin sensitivity, satiety, blood pressure, stress markers, and body composition.

Her portfolio includes glycemic index and glycemic load determinations for a wide variety of foods (e.g., breads, legumes, juices, sweeteners, dairy products, and novel food formulations with spirulina, byproducts such as sunflower seed flour, cocoa, saffron, and carob flour). She also evaluates the metabolic and psychophysiological responses to functional foods such as probiotic juices, yogurt with raisins, spirulina-based desserts, and fortified pastas. To date, she has participated in or led over 14 competitive research projects funded by EU and national bodies and the private sector, attracting over €2 million in funding. She has authored more than 55 peer-reviewed publications, 17 book chapters, and co-edited a nutrition textbook published by CRC Press. Her work has received more than 1,500 citations (h-index: 21).

Dr Papakonstantinou collaborates with leading national and international institutions, including the University of Copenhagen, University of Leeds, Institut Paul Bocuse, Harokopio University, ELGO-DEMETRA, NKUA, and the Medical School of the University of Athens. She also maintains a high-impact collaboration with Prof. Antonis Zampelas—President of the Hellenic Food Authority (EFET) and Board Member of the European Food Safety Authority (EFSA)—on research at the intersection of clinical nutrition and food policy.

She is an active member of EFAD, EASO, ESPEN, EASD, and the World Obesity Federation, serves as Guest Editor for Nutrients (MDPI), and regularly contributes to scientific committees, grant evaluations, and journal peer review panels.



## **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 has been a scientific associate of the Harokopio University of Athens since 2011.



## **Papandreou Dimitrios**

Professor Dimitrios Papandreou is a Professor of Nutrition and Dietetics at the Department of Clinical Nutrition, University of Sharjah, UAE. He holds a Doctor of Medicine in Clinical Pediatric Nutrition from Aristotle University of Thessaloniki, Greece, and two Master's degrees from Columbia University, USA. A Registered Dietitian licensed in the USA since 1998, he also holds the ESPEN TLLL certificate and is a Fellow of the Higher Education Academy (UK). His research output includes 136 peer-reviewed articles in international journals, with over 22,150 citations, an h-index of 35, and an i10-index of 73 (Google Scholar). His work spans pediatric



and adult nutrition, metabolic health, and obesity, contributing significantly to both academic and clinical fields. He actively engages in teaching, research supervision, and scholarly collaborations, holding memberships in leading professional organizations. His career demonstrates a consistent commitment to advancing nutrition science, evidence-based dietary practice, and academic excellence on an international scale.



## **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 studied in USA with athletic scholarship and earned the BS from

Southern Illinois University at Carbondale (SIU-C) in Clinical Dietetics and the MS in Sports Nutrition with the highest-grade average and passed the Registration Examination of the Commission of Dietetics Registration.

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.





## **Philpot Ursula**

**Ursula** is a consultant dietician and senior lecturer specialising in eating disorders, disordered eating, mental health, and autism. She has a clinic for eating problems in Leeds and works in complex mental health in Bradford. Ursula is a clinical lead for children and young people's Mental Health in Yorkshire with NHS England. She is especially interested in producing guidelines, pathways, and consensus statement within the area of eating disorders and mental health.





#### Preventi Fani

**Fani Preventi**, MSc, RD, is a registered dietitian and nutritionist with over 20 years of professional experience in Greece. She serves as President of the Hellenic Dietetic Association and Vice President of the Hellenic Dietitians – Nutritionists Association. Her practice includes clinical nutrition, sports nutrition, pediatric and adolescent dietary management, weight management, and obesity prevention.

She specializes in body composition optimization, metabolic health, and nutritional support for athletes in weight-category sports. She also provides assessment, monitoring, and personalized interventions for children, adolescents, and adults struggling with overweight or obesity.



Fani has contributed to scientific publications, workshops, and community programs, promoting evidence-based nutrition strategies and health education. Committed to advancing the profession, she engages in research, policy development, and public awareness initiatives, integrating nutrition science into everyday practice. Her work combines practical application, advocacy, and education, fostering healthier communities and supporting the role of dietitians in public health and disease prevention.



## **Risvas Grigoris**

**Dr Grigoris 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's Degree in Medical Science from the Medical School of the University of Glasgow in Human Nutrition with specialisation in Public Health Nutrition and a second Master's from the Department of Nursing of the National and Kapodistrian University of Athens, in Health Services Management. Finally he has a PhD in Applied Dietetics-Nutrition from the Department of Dietetics-Nutrition Science of Harokopio University in Athens, Greece.



He has worked at the Department of Dietetics-Nutrition Science, at Harokopio University and at the Department of Food Science and Human Nutrition of the 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.

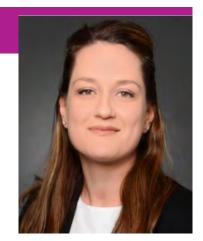
His authorship work includes participation in the editorial team of four academic books, as well as a Health Promotion Guide for Primary School Students. He also has 18 publications in international scientific journals, with 578 citations. He has participated as a speaker, chair and member of the organizing 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 Executive Committee since 2016 and Vice-President of the European Federation of the Associations of Dietitians (EFAD) from 2018-2025 and he is currently President of EFAD.



## Rousouli Kleopatra

**Kleopatra Rousouli** has extensive experience in the food industry, specializing in quality control, research and product development, and quality assurance. Since 2017, she has been serving as Quality Control and R&D Director at Charalambides Christis Dairy Industry in Cyprus, where she is responsible for implementing quality standards, conducting laboratory testing of raw materials and finished products, ensuring compliance with GMP and GHP requirements, and developing innovative new products in collaboration with the Marketing Department. Previously, she worked in Germany as a Quality Manager at Trienon GmbH – IFC Europe Group, overseeing supplier audits, managing certifications



(IFS, ISO, HACCP), evaluating laboratory results, and ensuring compliance with food legislation. She also has teaching experience as a Chemistry Instructor in public vocational institutes and schools in Greece. She holds an MBA in Business Administration (University of Macedonia, Greece), is a certified PMI Risk Management Professional (PMI-RMP), and has completed postgraduate studies in Chemistry and Biochemistry (University of Ioannina, Greece) as well as in Dairy Technology and Innovation (University College Cork, Ireland).



## Serra-Majem Lluís

Research Institute of Biomedical and Health Sciences, University of Las Palmas de Gran Canaria, and Complejo Hospitalario Universitario Insular-Materno Infantil (CHUIMI), Canarian Health Service, Spain.





## Siekkeris Panagiotis

#### **EDUCATION**

**2025: Independent & Supplementary Prescribing Programme, V300**, University of Northampton

**2024: PhD Nutrition/ Dietetics**, Department of Life Sciences, School of Life and Health Sciences, University of Nicosia, Cyprus.

**2023: Certificate Management of Childhood Diabetes (Postgrad.)** - Birmingham City University

**2013-2015: M.Sc. Diabetes**- Faculty of Medicine, University of Leicester, United Kingdom.

2009-2013: B.Sc. (Hons) in Nursing- Department of Nursing, Technological University of Cyprus.



11/2022 - Present: Paediatric Diabetes Specialist Nurse Band 7 - Milton Keynes University Hospital

03/2019 - 11/2022: Diabetes Advanced Nurse Practitioner (Adults) Band 7 - Milton Keynes University Hospital

02/2018-03/2019: Diabetes Specialist Nurse (Adults) Band 6- Northampton General Teaching Hospital

07/2016 – 01/2018: Cardiac Intensive Care Staff Nurse: Bristol Heart Institute, University Hospitals Bristol NHS Foundation Trust,

#### **RESEARCH EXPERIENCE**

Undergraduate Dissertation: Systematic review titled: "Investigation of Quality of Life in

Children and Adolescents with Type 1 Diabetes on insulin pump

therapy" passed with distinction.

Postgraduate Thesis: A retrospective observational cohort study titled: "7-Year

Experience From A Tertiary Centre Insulin Pump Service And The Impact Of Dafne Structured Education On Metabolic

Outcomes" passed with distinction.

PhD Thesis: Development of an online educational tool for adults with type

1 diabetes living in Cyprus, based on carbohydrate counting

and incorporating their views and needs.

#### **SPECIFIC TRAINING**

Certified Educator for Remote DAFNE (Dose Adjustment For Normal Eating) structured education programme since 2020 for adults with type 1 diabetes.

Educator for SEREN (Structured Education Reassuring Empowering Nurturing) structured education programme in 2023 for children and adolescents with type 1 diabetes

Counselling Course, University of Leicester, in 2014





#### **Skordis Nicos**

**Nicos Skordis**, MD, PhD is a Professor of Paediatrics at the School of Medicine, University of Nicosia. He served as the director of the department of Paediatrics at Makarios Hospital in Nicosia and is currently the director of the division of Paediatric and Adolescent Endocrinology at the Paedi Center for specialized Paediatrics in Nicosia.

He received his MD degree from the Medical School of Athens University and his specialty in Paediatrics from the Aghia Sophia Children's University Hospital in Athens. He then completed the fellowship program in Paediatric Endocrinology at the Children's



Hospital of Buffalo, New York and the department of Paediatrics, University of Florida College of Medicine in Gainesville. As a Fulbright scholar he studied Genetics in the Division of Medical Genetics, Cedars-Sinai Medical Centre, Los Angeles and the Embryology-Teratology Unit, Massachusetts General Hospital, Harvard Medical School, Boston. He is certified as specialist in Paediatrics and Endocrinology, Diabetes and Metabolism.

Prof Skordis has a strong publication record in the area of Paediatric Endocrinology and has participated as a guest speaker in various international and national conferences. He has been involved in many national and international research projects and has been selected as reviewer in a large selection of journals. His research work on endocrinopathies in Thalassaemia, genetics of endocrine disorders, disorders of sexual development, epidemiology of congenital hypothyroidism, immunogenetics of Diabetes Mellitus type 1 and genetics of precocious and late puberty has been presented in numerous national and international conferences and published in peer reviewed journals and books (PubMed: 121 papers, citation index:4,175, h—index: 36, i10-index: 94).



## **Theofilou Panayiota**

I am a Chemist and Food Technologist with 20 years of experience in the dairy and food sector, combining strong scientific expertise with a deep ethical commitment to authenticity. My career has focused on production, innovation, quality management, regulatory compliance, and food safety, ensuring alignment with international standards while safeguarding consumer trust. Innovation is never easy, and innovating from tradition is even harder to achieve, but it is the path I choose. Through leadership roles in quality and production management, I have promoted authenticity, safety, and consumer trust, while developing products that are as simply processed as



possible, offering people exactly what they need. As President of the Food Scientists & Technologists Association of Cyprus, I continue to advocate for food authenticity and integrity, ensuring that science, ethics, and tradition work hand in hand for a better food future. By uniting science, ethics, and tradition, I strive to shape a food industry where authenticity and innovation work hand in hand.



## **Tomholt Frank**

General Manager Nutricia Worldwide @ Danone, Netherlands





## 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



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.



## **Vlahoyiannis Angelos**

**Dr Angelos Vlahoyiannis** is an Adjunct Lecturer in the Department of Life Sciences at the University of Nicosia, Cyprus. He holds a BSc in Nutrition and Dietetics and a MSc in Sports Nutrition/Dietetics and Nutrition Intervention, both awarded with First Class Honours, and a PhD in Nutrition and Dietetics, focusing on the integrative physiology of nutrition, exercise, and sleep. His research examines carbohydrate periodisation, chrono-nutrition, and their effects on sleep physiology and physical fitness. He has published in high-impact peer-reviewed journals and co-authored book chapters including Interactions between Sleep and Exercise Performance



in Fundamentals of Recovery, Regeneration, and Adaptation to Exercise Stress. Alongside his academic duties, he serves as the Sports Dietitian at the UFIT Fitness Center, the University of Nicosia's sports facilities, providing performance-focused nutrition support to collegiate and professional athletes. He also works with multidisciplinary teams across Europe to advance research in nutrition, exercise, and sleep science.



#### **Wakil Elie**

**Elie Wakil** is an experienced trainer, HR consultant, and coach based in Nicosia, Cyprus, with over 40 years of professional career.

#### **Career Highlights**

He has collaborated since 2008 with KEBE (the Cyprus Chamber of Commerce and Industry), delivering HRDapproved programs in areas like Employee Engagement, Talent Management, Customer Strategy, Employee Experience and Customer Experience.

Specializes in training modules on Stress Management, Communication, Interpersonal Relations, and Leadership.



#### **Professional Background**

From 1986 to 2004, he served as Director of Personnel Training for F. HoffmannLa Roche Ltd (pharma giant), overseeing multiple international branches.

He has completed executive education at elite institutions including London Business School, Ashridge (UK), INSEAD (France), and Management Centre Europe (Belgium).

40+ years' experience in training, consulting, and coaching

#### Entrepreneurship & Academia

Founded E.W. Human Development Ltd in 2005 in Nicosia, offering human capital development and workplace consulting.

Founder and Partner at the Be.e philosophy Team in Cyprus aiming to engender a cultural evolution that will state a common purpose, create happy collaborative individuals at work, improve organization performance, contribute to society's wellbeing and care for the environment.

Serves as an accredited lecturer at Saint Joseph University (Lebanon), teaching postgraduate students in pharmacy and science faculties.

#### **Certifications & Expertise**

#### Professional Development

London Business School, Ashridge, INSEAD, MCE Management Center

#### Certifications

- Accredited HR Trainer by AnAD (HRDA-Human Resource Development Authorities-Cyprus)
- Certified practitioner in behavioural assessment (16PF), 360° feedback, and stress therapy.
- Recognized as an interpersonal communication expert approved by the European Training Foundation (ETF), and a certified trainer by the Cyprus Chamber of Commerce.

Elie Wakil is widely known in Cyprus, Lebanon, Jordan for his expertise in HR strategies, executive coaching, and employee engagement.



## **Zampelas Antonis**

Currently serving his second term as President of the Hellenic Food Authority (EFET). He is Professor of Human Nutrition at the Department of Food Science and Human Nutrition, Agricultural University of Athens, and a Member of the Management Board of the European Food Safety Authority (EFSA). He is also an Honorary Professor at the Division of Medicine, University College London (UCL), and Visiting Professor at the Department of Health Sciences, University of Nicosia. He holds professional registration as a Nutritionist (RNutr, UK).



**Professor Zampelas** obtained his undergraduate degree in Food Science and Technology from the Agricultural University of Athens, his MSc in Food Science from the University of Reading (UK), and his PhD in Human Nutrition from the University of Surrey (UK) in 1993.

His research focuses on the role of dietary patterns and nutrients in the prevention of chronic diseases, with emphasis on cardiovascular disease and obesity in both children and adults. He is the Principal Investigator of the Hellenic National Nutrition and Health Survey (HNNHS), which is representative of the Greek population and the Greek Childhood Obesity Study (GRECO) which was also representative of school years students in Greece aged 11-12. His scientific interests also include the development of school-based educational programs for the prevention of childhood obesity. The Laboratory of Dietetics and Quality of Life he developed, collaborates closely with WHO in several areas of nutrition research and policies.

For his contributions to the field of Human Nutrition, he was awarded Honorary Membership of the Cyprus Dietetic & Nutrition Association (2021). In 1994, he received the "Young Scientist of the Year" award in the field of chronic diseases from the British Nutrition Foundation. In 2021, 2022, 2023 and 2024, he was ranked among the world's top 2% of scientists, according to a global health research database (Stanford University).

He is the author of 22 book chapters (Greek and international) and 210 scientific articles in peer-reviewed international journals in the field of Human Nutrition. His Google Scholar h-index is 66.

# ORAL & POSTER PRESENTATIONS



# **ORAL PRESENTATIONS**

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OP 002	Elina Polydorou	NUTRITION DOCUMENTATION PROCESS AND STANDARDISED LANGUAGE, WHAT CAN BE IMPROVED? AN OBSERVATIONAL CROSS-SECTIONAL STUDY
OP 003	Nazal Bardak Percinci	COMPARISON OF NUTRITION AND DIETETICS DEPARTMENT 1ST AND 4TH GRADE STUDENTS' NUTRITION KNOWLEDGE LEVELS, FEEDING HABITS AND ANTHROPOMETRIC MEASUREMENTS
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OP 008	Mikaela Sekkidou	A PARTIALLY HYDROLYZED FORMULA REDUCES THE RISK OF FOOD ALLERGY AND ATOPIC DERMATITIS IN HIGH-RISK FOR ALLERGY CHILDREN
OP 009	Anna Michael	UNDERSTANDING PLADO: DEVELOPMENT AND VALIDATION OF A QUESTIONNAIRE TO ASSESS DIET KNOWLEDGE AND MANAGEMENT IN CYPRIOT KIDNEY AND HEALTHY POPULATIONS
OP 010	Nayia Andreou	THE DIAGNOSTIC INTERSECTION OF BODY DYSMORPHIA AND EATING DISORDERS: A SYSTEMATIC REVIEW



#### **OP 001**

#### SUSTAINABLE NUTRITION AMONG PASTORALS IN THE MIDDLEAST

#### Prof. Aref Abu-Rabia

Ben-Gurion University of the Negev, Israel; arefabu@gmail.com

#### **Abstract**

Pastoralists make their livelihoods in some of the harshest and unpredictable climatic conditions. They face challenges due to demographic, economic, geo-political and climatic changes.

Since availability of food is a basic concern for all human societies, anthropologist have long been interested, among others, in human diet and the socio-cultural classification of foods as edible or inedible. The nutritional and medicinal consequences of particular consumption patterns have also equally interested anthropologists.

The main purpose of this paper is to describe the various Practices of Sustainable Nutrition and dietary habits among Pastorals in the Middle East.

The second purpose is to describe animal products, and identify wild edible plants and their uses.

#### Methodology

The data for this paper is derived from a study among pastoral nomadic tribes in the Negev, Jordan and Sinai deserts. Unstructured interviews and the observation of participants were carried out in the informants homes. Plant samples were collected and identified by healers and university botanists.

#### Results

Pastorals sustain themselves from livestock, cows and camels: milk and milk products, meat and fats. In addition to edible wild plants in their environment. Camel milk and livestock milk products have always been a major traditional staple in the nutrition of pastoral nomadic peoples, this is in addition to being a source of food and drink. Camel milk is high in minerals and vitamins.

#### Conclusion

Analysis of the finding shows that these plants were available because they grew wild and were part of their natural flora, and were available in their environment. They used these plants as food and as medicine.

Livestock and cattle supply them food for more than one year in normal and short/hard climate, when they use certain strategic practices which were adapted throughout generations.

#### Keywords

Sustainability, Nutrition, Plants, Animals, Pastorals, Middle East.

#### References

Abu-Rabia Aref 1999. Some notes on Livestock Production among Negev Bedouin Tribes. Nomadic Peoples New Series Vol.3, No.1, pp.22-30.

Abu-Rabia Aref. 2018, Camel Milk as a Complementary and Alternative Medicine, International Journal of Science Research, Vol.7:1, Jan.2018:435-439

Cole, Donald and Soraya Altorki. 1998. Bedouin, Settlers, and Holiday-Makers: Egypt's Changing Northwest Coast.

Dong, et al. 2016, "Vulnerability and resilience of human-natural systems of pastoralism worldwide," in Building Resilience of Human-Natural Systems of Pastoralism in the developing World. Eds. Dong and Kassam.

Uddin Md E. and Ermias Kebreab 2020, Review: Impact of Food and climate change on Pastoral Industries. Front. Sustain. Food Syst. Volume 4, Article: 543403. Pp:1-13.



# **ORAL PRESENTATIONS**

#### **OP 002**

# NUTRITION DOCUMENTATION PROCESS AND STANDARDISED LANGUAGE, WHAT CAN BE IMPROVED? AN OBSERVATIONAL CROSS-SECTIONAL STUDY

#### Elina Polydorou, 1 and Eleni Andreou 1,2

- <sup>1</sup> Department of Life Sciences, School of Life and Health Sciences, University of Nicosia, Cyprus.; polydorou.e3@live.unic.ac.cy (E.P.); andreou.el@unic.ac.cy (E.A.);
- <sup>2</sup> Cyprus Dietetic and Nutrition Association, Nicosia, Cyprus

Presenting author: polydorou.e3@live.unic.ac.cy (E.P.)

#### **Background**

Nutrition documentation processes (DPs) and standardised languages (SLs) are powerful tools, that are often ignored or misused by nutrition and dietetic professionals (NDPs) (Lövestam et al., 2015; Regan et al., 2009). Understanding NDPs' perception about DP/SL, is critical for their improvement to meet their professionals needs.

#### **Objective**

The study questions whether an updated DP/SL, tailored to the NDPs needs could lead to their increased implementation. Understanding of current DP/SL implementation status and exploration of NDPs' perceptions and implementation factors is critical for establishing targeted aspects to improve. Therefore, the study aims to mitigate identified barriers to the extent feasible for the research team.

#### Methodology

The study has an observational cross-sectional design. Data were anonymously collected from 63 NDPs, via an online questionnaire. The Chi-Square test of independence (Fisher's exact with Monte Carlo simulation), the Creamer's V test of strength of association and the Uncertainty Coefficient, directional measure of association were used for the statistical analysis, using SPSS.

#### Results

The process for nutrition and dietetic practice (PNDP) was the most preferable DP (41.27%, n=26). Improved communication amongst health care professionals and the ability to facilitate a structured and consistent care plan, were the most acknowledged advantages of DP/SL, by 73% (n=46) and 31.7% (n=20) of participants respectively. Documentation processes and SLs are believed to be time-intensive by 33.3% (n=21) of the participants, while 14.3% (n=9) report no disadvantages. Finally, 63.49% (n=40) agree that DP/SL has or could lead to an improved patient outcome and to a greater appreciation of the NDP's by other HCPs.

#### **Conclusion**

Although DP/SL is a useful tool and its advantages are well recognised among NDPs, its drawbacks seem to hold greater magnitude when it comes to its implementation. Therefore, finding solutions and methods to improve DPs/SLs to better fit NDPs needs are important.

#### **Keywords**

Dietetic documentation; standardised terminology; SL benefits; SL drawbacks; improvements in SLs

#### References

Lövestam, E., Orrevall, Y., Koochek, A., Karlström, B., & Andersson, A. (2015). Evaluation of Nutrition Care Process documentation in electronic patient records: Need of improvement. Nutrition & Dietetics, 72(1), 74–80. 10.1111/1747-0080.12128

Regan, T., Maillet, J. O., Touger-Decker, R., Khan, H., Byham-Gray, L., Rigassio Radler, D., & Brody, R. (2009). Knowledge, Perceptions and Practices of Registered Dietitians in the Dietetic Practice Group, Consultant Dietitians in Health Care Facilities, Regarding the American Dietetic Association's Standardized Language to Document the Nutrition Care Process. Journal of the American Dietetic Association, 109(9), A10. 10.1016/j.jada.2009.06.010



#### **OP 003**

# COMPARISON OF NUTRITION AND DIETETICS DEPARTMENT 1<sup>ST</sup> AND 4<sup>TH</sup> GRADE STUDENTS' NUTRITION KNOWLEDGE LEVELS, FEEDING HABITS AND ANTHROPOMETRIC MEASUREMENTS

Associate Prof. Dr Nazal Bardak Perçinci

nbardak@eul.edu.tr

#### **Abstract**

The aim of this study was to compare the Nutritional Knowledge Levels, Nutritional Habits and Anthropometric Measurements of year 1 and year 4 students of Nutrition and Dietetics Department. 150 students participated in the survey. The information in the research was obtained by the questionnaires applied to the students. The 50.7% of the 1 grade and 44% students of the fourth grade answer negative to the question' Do you think that you have a balanced diet, ave no answer to the question. From 1st grade 13.3% found themselves weak whereas 4.0% found themselves fat. From the 4th Grade 14.7% found themselves weak, and 6.7% found themselves fat. The most skipped meals were lunch for 1 class (42.7%) and fourth grade (42%). The participants showed that both groups were the most time-consuming reasons for not having breakfast; 48% and 37.3% respectively. In the study, a significant relationship was found between the body mass, body fat percentage, body muscle mass and body muscle percentage (p <0.05). A significant relationship was found between the two groups in the question of whether you participated in nutrition activities (p <0,05). The differences in the students' inadequate and unbalanced nutrition in university life are visible. Nutrition, environmental factors are neglected due to lack of responsibility for the material insufficiencies and nutrition. Therefore, it is aimed that only nutrition and dietetics students will be educated in order to have knowledge about whether or not nutrition students have created awareness.

#### Introduction

Maslow pointed out that the principles of individual needs prioritize what is essential and what needs to be done, showing that physiological needs such as food intake, water requirements, sleep needs, etc., are ranked at the top of the hierarchy. In these stages, food intake is part of the first layer of individuals' needs, which are physiological needs (Dölekoğlu and Yurdakul, 2004). Nutrition is a behavior that requires consciously consuming the necessary amounts of food that the body needs at the appropriate physiological intervals to protect health and enhance the individual's life (Kutluay, 2003). The amount of food intake is determined based on age range, gender status, work schedules, and individual circumstances when calculating energy needs (Baysal, 2002).

It is stated as the provision of the groups' needs as much as required (Özdoğan, 1991). Individuals who are unable to eat sufficiently, balanced, and regularly, experience not only deficiencies in essential life activities concerning health, but also face difficulties in personal behavioral patterns, as well as a lack of relief in socio-cultural and financial matters. It has been observed that adequate and balanced nutrition has significant positive values on mental development and work productivity. In light of these positive developments, extending human lifespan and eliminating situations that negatively affect health have helped in revealing real criteria in the literature of these data, thus assisting consumer communities in establishing a comprehensible consumption culture (Dölekoğlu et al., 2004).

#### **Material and Method of the Research**

This research was conducted with a total of 150 students who voluntarily agreed to participate, including 75 first-year and 75 fourth-year students from the Department of Nutrition and Dietetics at Lefke European University, with the aim of comparing their levels of nutritional knowledge, eating habits, and anthropometric measurements between February 2019 and April 2019. The study was approved by the Lefke European University Ethics Committee on January 31, 2019, with the Ethics Committee Approval number ÜEK/29/01/01/1819/01. The limitations of the study include the fact that only first-year and fourth-year Nutrition and Dietetics students were included, while second-year and third-year students were not.



# **ORAL PRESENTATIONS**

The study utilized a survey method. The surveys were conducted face-to-face. The survey includes multiple-choice questions. In the survey, there are scales for voluntary students' demographic characteristics, levels of nutritional knowledge, eating habits, food consumption frequencies, and anthropometric measurements.

Anthropometric measurements play a significant role in determining nutritional intake status, as they indicate the quantities of lean body tissue and fat tissue, as well as their distribution in the body. Measurements such as body weight, height, waist circumference, hip circumference, body muscle mass, body muscle percentage, body fat mass, body fat percentage, and waist-to-hip ratio are commonly used methods. When anthropometric measurements are used continuously and systematically, a person's nutritional intake status can be evaluated with confidence (Pekcan, 2008).

The data obtained in the study were analyzed using the IBM SPSS Statistics 22.0 (Demo version) program.

The qualitative (categorical) variables used in the research are presented with frequency and percentage (%) distributions, while the quantitative (continuous) variables are given as mean  $\pm$  standard deviation (x  $\pm$  sd).

Since the sample sizes of the quantitative data are greater than 50, the normality of the data has been assessed using the Kolmogorov-Smirnov test. When making intergroup comparisons of quantitative data (when there are 2 dimensions, such as E/H), the "t-test for independent samples" has been used. If the data does not comply with the normal distribution, the "Mann Whitney U test" has been utilized. Additionally, for intergroup comparisons of quantitative data (when there are more than 2 dimensions), "One-way ANOVA" has been applied. When a significant difference was found among the groups, they were compared pairwise using the post hoc test "Tukey HSD". If the data does not fit the normal distribution, "Kruskal Wallis Analysis of Variance" has been used. When a significant difference was observed between the groups, they were compared pairwise using the "Mann Whitney U test with Bonferroni Correction".

Table 1. Sociodemographic characteristics and status of taking nutrition classes of the sample (%) (n=150)

Table 2: Meal consumption status of the sample (%) (n=150)

Number

35

21

32

57

33

18

1,3 52,0

46,7

28.0

42.7

76,0 24,0

44,0

	Grade	1	Grade	e 4		Grade 1	
Sex	Number	Percentage (%)	Number	Percentage (%)	How many main meals do you consume?	Number	Percentage (%)
Male	15	20,0	31	41,3	1	5	6,7
				58,7	2	45	60,0
Female	60	80,0	44		3	25	33,3
Smoking Status					How many break meals do you consume?		
Yes	25	33,3	13	17,3	_ 0	7	9,3
Sometimes	8	10,7	11	14,7	1	21	28,0
					2	32	42,7
No	42	56,0	51	68,0	_ 3	15	20,0
Alcohol Consumption					Do you skip meals?		
Yes	12	16,0	15	20,0	Evet	64	85,3
Sometimes	22	29,3	18	24,0	Hayır	11	14,7
No	41	54,7	42	56,0	Which meal is most often skipped?		
Had you taken nutrition					Sabah	30	40,0
lectures?					Öğle	32	42,7
Yes	1	1,3	74	98,7	Akşam	2	2,7
No	74	98,7	1	1,3	Cevap vermeyenler	11	14,7
Total			150	100,0	Total		

Table 1 shows the socio-demographic characteristics of the sample and their status of receiving nutrition education.1st grade classes; When examining the gender distribution, 80.0% are female and 20.0% are male. Regarding smoking status, 56.0% answered no, 33.3% answered yes, and 10.7% expressed that they sometimes smoke. Looking at alcohol consumption, 54.7% answered no, 16.0% answered yes, and 29.3% stated that they sometimes consume alcohol. When the distribution of whether they have taken a nutrition class is examined, 98.7% reported that they have not taken one, while 1.3% indicated that they have. In 4th grade classes; When examining the gender distribution, 58.7% are female and 41.3% are male. Regarding smoking status, 68.0% answered no, 17.3% answered yes, and 14.7% expressed that they sometimes smoke. In terms of alcohol consumption, 56.0% answered no, 20.0% answered yes, and 24.0% stated that they sometimes drink. When the distribution of whether they have taken a nutrition class is examined, 1.3% said they have not taken one, and 98.7% said they have.



	Grade 1		Grade 4	
How many types of food groups are there?	Number	Percentage (%)	Number	Percenatge (%)
2	1	1,3	2	2,7
3	18	24,0	20	26,7
4	30	40,0	19	25,3
5	26	34,7	34	45,3
Food with the highest carbohydrate content				
Starch	45	60,0	57	76,0
Wheat Flour	18	24,0	7	9,3
Rice Flour	6	8,0	9	12,0
Semolina	6	8,0	2	2,7
Vitamin E-rich food				
A	4	5,3	3	4,0
В	60	80,0	72	96,0
D	6	8,0	0	0,0
к	5	6,7	0	0,0
Vitamin A-rich food				
Olive oil	2	2,7	3	4,0
Green pepper	31	41,3	7	9,3
Liver	38	50,7	56	74,7
Milk	4	5,3	9	12,0
Calcium-rich food				
Beef	3	4,0	1	1,3
Cheese	53	70,7	67	89,3
Egg	19	25,3	6	8,0
Bread		0,0	1	1,3
Most calorie content food				
Fat	43	57,3	65	86,7
Protein	2	2,7	3	4,0
Carbohydrate	29	38,7	7	9,3
Vitamin	1	1,3	0	0,0
lean avenue food course				
Nut	19	25,3	17	22,7
Beef	51	68,0	55	73,3
Rice	2	2,7	1	1,3
Honey	3	4,0	2	2,7
D Vitamin-rich food				
Fish	21	28,0	17	22,7
Milk	33	44,0	41	54,7
Red Meat	14	18,7	13	17,3
Cheese	7	9,3	4	5,3
Total			150	100

1st Grade and 4th GradeIn the test regarding the food knowledge level of the students, the answer to the first question about how many types of food groups there are was indicated as 4. Among the 1st graders, the percentage of those who said there are 2 food groups is 1.3%, those who said there are 3 food groups is 24.0%, and those who said there are 5 food groups is 34.7%. Among the 4th graders, the percentage of those who said there are 2 food groups is 2.7%, those who said there are 3 is 26.7%, and those who said there are 5 is 45.3%. Here, 40.0% of the 1st grade students and 25.3% of the 4th grade students answered the question correctly by stating there are 4 food groups. Overall, 32.7% answered this question correctly. From this, it is clear that the nutrition and dietetics students are clearly caught between 4 or 5 groups.



# **ORAL PRESENTATIONS**

It has been found that the relationship between the distribution of the question about which carbohydrates are more abundant according to classes is significant (c²=8.852, p=0.031). In the second question regarding nutrition knowledge level, the food with the highest carbohydrate content was asked; among the 1st-grade students, 24.0% stated that it is wheat flour, 8.0% said it is rice flour, and 8.0% noted semolina. Among the 4th graders, 9.3% said it is wheat flour, 12.0% said rice flour, and 2.7% mentioned semolina. Among the 1st-grade students, 60% answered starch correctly, while 76% of the 4th-grade students answered this question correctly. Overall, 68% responded correctly to this question. The difference between them was found to be significant. In response to the question about water-soluble vitamins, 80% of the 1st graders answered B vitamin, and 96% of the 4th graders answered correctly, leading to an overall correct response rate of 88%. Among the 1st graders, 5.3% answered vitamin A, 8.0% said vitamin D, and 6.7% mentioned vitamin K.

In the 4th grade, 4.0% mentioned vitamin A, while those who mentioned vitamin D were noted. No significant relationship was found among them. However, the relationship between the distribution of the question regarding which class contains the most vitamin A was found to be significant (c²=20.728, p=0.0001). Among the 1st grade students who answered that liver contains the most vitamin A, 50.7% provided that answer, while 74.7% of the 4th grade students answered correctly. Overall, 62.7% answered this question correctly. Among the 1st graders, 2.7% answered olive oil, 41.3% green pepper, and 5.3% milk, while among the 4th graders, 4.0% answered olive oil, 9.3% green pepper, and 12.0% milk. The difference between them was found to be significant.

In response to the question of which food is the richest in calcium, 70.7% of first-grade students answered cheese, while 89.3% of fourth-grade students gave the same answer, resulting in a total of 80.0% answering correctly. Among first graders, 4.0% consume beef, 25.3% consume eggs, and 0.0% consume bread, while among fourth graders, 1.3% consume beef, 8.0% consume eggs, and 1.3% consume bread.

In the question we stated as the food that gives the most calories, 57.3% of the 1st-grade students answered with fat, while 86.7% of the 4th-grade students answered this question correctly. In total, 72.0% answered this question correctly. Among the 1st graders, 2.7% answered protein, 38.7% answered carbohydrates, and 1.3% answered vitamins, while among the 4th graders, 4.0% answered protein, 9.3% answered carbohydrates, and 0.0% answered vitamins. In response to the question of which is the best source of iron, 68.0% of the 1st graders answered beef, while 73.3% of the 4th graders provided the same answer, with a total of 70.7% answering correctly. Among 1st graders, 25.3% answered nuts, 2.7% answered rice, and 4.0% answered honey, while among the 4th graders, 22.7% answered nuts, 1.3% answered rice, and 2.7% answered honey. No significant relationship was found regarding which class has the highest amount of vitamin D ( $\chi^2$ =2.141, p=0.544).

#### **Nutrition Information Level Statistical Analyses**

For 1st graders; no significant difference was found among the averages of all anthropometric measurements according to the food item that provides the most calories (p>0.05). For 4th graders, while a significant difference was found in terms of "Waist-Hip Ratio" based on the food item that provides the most calories (p≤0.05), no significant difference was found among the averages of other anthropometric measurements (p>0.05). Since the difference was found to be significant according to One-Way ANOVA, "Tukey HSD" from the Post Hoc tests was used for pairwise comparisons of the groups. A significant difference was found in anthropometric measurements in terms of body weight (p<0.05), whereas no significant difference was found among the averages of other anthropometric measurements (p>0.05). Again, due to the significant difference found according to One-Way ANOVA, "Tukey HSD" from the Post Hoc tests was employed for pairwise comparisons of the groups. For 4th graders; regarding the disease caused by iodine deficiency, while the differences in "BMI" and "Body Fat Percentage" were found to be significant (p≤0.05), no significant differences were found between the averages for other anthropometric measurements (p>0.05). Since the difference was significant according to the One-Way Analysis of Variance, "Tukey HSD" was used for pairwise comparisons of the groups. For BMI; Tooth Decay - Osteoporosis significant (p=0.006) Osteoporosis - Anemia significant (p=0.019) Osteoporosis -Goiter significant (p=0.016) Other pairwise comparisons were found to be insignificant (p>0.05). For Body Fat Percentage; Tooth Decay – Osteoporosis significant (p=0.043) Osteoporosis – Anemia significant (p=0.018)

#### **Keywords**

Nutrition, University Students, Education

#### **OP 004**

THE EFFECT OF TIME-RESTRICTED EATING IN COMBINATION WITH A LOW GLYCAEMIC INDEX DIET ON COGNITIVE FUNCTION, MARKERS OF BIOLOGICAL AGE AND METABOLIC HEALTH IN OVERWEIGHT AND OBESE POSTMENOPAUSAL WOMEN: A RANDOMIZED CONTROLLED TRIAL (THE NUTRIAGE STUDY)

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#### **Background**

Menopause-related oestrogen decline is associated with reduced brain-derived neurotrophic factor (BDNF), impaired neuroplasticity, and metabolic dysregulation, leading to an increased risk of cognitive decline. Chrono-nutrition strategies, such as time-restricted eating (TRE), may enhance cognitive function by synchronizing circadian rhythms, improving insulin sensitivity, and increasing BDNF levels. When combined with a low-glycaemic index (low-GI) diet, TRE may further stabilize blood glucose and reduce systemic inflammation, contributing to improved metabolic and cognitive outcomes. By modulating inflammatory and metabolic pathways, these dietary interventions may also influence biological ageing, offering a potential strategy to preserve cognitive health in postmenopausal women.

#### **Objective**

The study aims to determine whether TRE combined with a low GI (TRE-LGI) dietary pattern enhances cognitive function—specifically attention and memory—by improving BDNF concentrations, metabolic health, and biological ageing in overweight and obese postmenopausal women.

#### Methods

A six-month randomized controlled trial (RCT) will be conducted where 72 overweight/obese postmenopausal women will be randomized to: (1) TRE-LGI (16:8 eating window; Mediterranean-style low-GI diet) or (2) Control (wait-list). The primary outcomes are: cognitive performance (assessed using CNS Vital Signs) and fasting BDNF (assessed using ELISA). The secondary outcomes are: insulin sensitivity (assessed by HOMA), lipid profile, blood pressure, body composition, and biological age via IgG N-glycome (assessed at 0, 6, 12, 18, 24 weeks). Gut microbiome (16S rRNA) will be assessed at 0 and 12 weeks. Adherence will be monitored with Nutrium (meal-timing logs and photo-verified intake). Statistical analyses will use mixed-effects models with time×group interactions.

#### **Results**

The study has received Bioethical permission. Recruitment and baseline assessments are in progress.

#### Conclusion

This RCT will assess whether combining TRE with a low-GI pattern improves neurocognitive function and biological ageing. If effective, TRE-LGI could offer a scalable, dietetic strategy for cognitive and metabolic health in postmenopausal women.

#### **Keywords**

Time-restricted eating; Low glycaemic index; Cognitive function; BDNF; Postmenopausal women; IgG N-glycome



# **ORAL PRESENTATIONS**

#### References

"The analysis of covariance and alternatives: Statistical methods for experiments, quasi-experiments, and single-case studies" 2011, in , 2nd edn, John Wiley & Sons, Hoboken, NJ, pp. 297–309.

Abildgaard, J., Danielsen, E.R., Dorph, E., Thomsen, C., Juul, A., Ewertsen, C., Pedersen, B.K., Pedersen, A.T., Ploug, T. & Lindegaard, B. 2018, "Ectopic Lipid Deposition Is Associated With Insulin Resistance in Postmenopausal Women", The Journal of Clinical Endocrinology & Metabolism, vol. 103, no. 9, pp. 3394–3404.

Banbury, A., Nancarrow, S., Dart, J., Gray, L. & Parkinson, L. 2018, "Telehealth Interventions Delivering Home-based Support Group Videoconferencing: Systematic Review", Journal of medical Internet research, vol. 20, no. 2, pp. e25.

Blumenthal, J.A., Babyak, M.A., Hinderliter, A., Watkins, L.L., Craighead, L., Lin, P., Caccia, C., Johnson, J., Waugh, R. & Sherwood, A. 2010, "Effects of the DASH diet alone and in combination with exercise and weight loss on blood pressure and cardiovascular biomarkers in men and women with high blood pressure: the ENCORE study", Archives of Internal Medicine, vol. 170, no. 2, pp. 126–135.

Bulanov, N., Suvorov, A., Blyuss, O., Munblit, D., Butnaru, D., Nadinskaya, M. & Zaikin, A. 2021, "Basic principles of descriptive statistics in medical research", Sechenov Medical Journal, vol. 12, pp. 4–16.



#### **OP 005**

# FROM DIET TO IDENTITY: THE NUTRITIONAL, BEHAVIOURAL(PSYCHOLOGICAL) AND SOCIOCULTURAL ROOTS OF ADOLESCENT EATING DISORDERS

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#### **Background**

Eating disorders in adolescence represent a growing public health concern, reflecting the interaction of nutritional, psychological, and sociocultural factors. Adolescents face increased vulnerability due to body image pressures, emotional dysregulation, and limited nutritional awareness, highlighting the urgent need for holistic prevention within educational contexts.

#### **Objective**

To synthesise recent research evidence on the interplay between nutritional, behavioural (psychological), and sociocultural factors contributing to the development of EDs in adolescents, and to highlight prevention strategies within school and community contexts.

#### **Methods**

This narrative review draws on contemporary studies published between 2018 and 2024, identified through PubMed, Scopus, and Web of Science. Literature was selected for relevance to adolescent EDs, with a focus on multi-factorial etiological frameworks and prevention-oriented interventions.

#### Results

Findings indicate that ED onset in adolescents is strongly influenced by a convergence of nutritional habits, psychological vulnerabilities, and sociocultural pressures. Media exposure, especially to unrealistic beauty ideals, amplifies body dissatisfaction and disordered eating tendencies. Preventive interventions integrating nutritional education, psychosocial skill-building, and critical media literacy demonstrate promising outcomes, particularly when implemented in school and community settings.

#### Conclusion

Preventing EDs in adolescence requires immediate, multi-level action addressing both internal vulnerabilities and external pressures. Programmes that foster resilience, challenge harmful beauty standards, improve dietary attitudes, and promote balanced lifestyles are essential. Prevention is not optional—it is a strategic investment in the future of adolescent health.

#### Keywords

Eating disorders, adolescence, nutritional factors, psychological factors, sociocultural influences

#### References

- 1. Levine, M. & Smolak, L. (2018) The prevention of eating problems and eating disorders: Theory, research, and practice. 2nd edn. Routledge.
- 2. Stice, E., Marti, C. N. & Durant, S. (2017) 'Risk factors for onset of eating disorders: Evidence from prospective studies', Annual Review of Clinical Psychology, 13, pp. 241–263.
- 3. Rodgers, R. F., Donovan, E. & Cousineau, T. (2020) 'Social media and body image concerns: Current research and future directions', Current Opinion in Psychology, 9, pp. 1–5.
- 4. Beckers, C. C., Hildebrandt, T. & Anderson, L. M. (2023) 'The role of perfectionism in disordered eating: A systematic review', Eating Behaviors, 50, 101739.
- 5. Bonfanti, R. C. et al. (2025) 'The association between social comparison in social media, body image concerns and eating disorder symptoms: A systematic review and meta-analysis', Body Image, 52, 101841.
- 6. Argyrides, M. & Alexiou, E. (2020) 'Body image and disordered eating behaviors in Cypriot adolescents', Hellenic Journal of Psychology, 17(2), pp. 132–146.
- 7. Paterna, A., Alcaraz-Ibáñez, M., Fuller-Tyszkiewicz, M. & Sicilia, Á. (2021) 'Internalization of body shape ideals and body dissatisfaction: A systematic review and meta-analysis', International Journal of Eating Disorders, 54(9), pp. 1575–1600.
- 8. Zhou, Y., Li, L., Chen, Y., Wang, S. & Zhang, J. (2025) 'Emotion regulation and eating pathology: A systematic review and meta-analysis', Clinical Psychology Review, 101, 102251.
- 9. Neumark-Sztainer, D. et al. (2006) 'Family meals and disordered eating in adolescents: Longitudinal findings from Project EAT', Archives of Pediatrics & Adolescent Medicine, 160(11), pp. 1106–1112.
- 10. World Health Organization (2021) Food and nutrition policies for schools: A policy brief. Copenhagen: WHO Regional Office for Europe.



# **ORAL PRESENTATIONS**

#### **OP 006**

# ADHERENCE TO MEDITERRANEAN DIET IN COLORECTAL CANCER SURVIVORS AND ITS ASSOCIATION WITH RECURRENCE RISK AND LEVEL OF DISEASE-RELATED FATIGUE: Narrative Review

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#### Introduction

Cancer survivors face an increased risk of cancer recurrence and persistent disease-related fatigue (CRF). The Mediterranean Diet (MD) has been proposed as a protective dietary pattern. However, data are limited on its effect on recurrence and CRF.

#### Aim

The paper analyzes the available data on the effect of MD on the risk of recurrence and CRF in adult colon cancer survivors.

#### Methodology

Search sources: PubMed, CINAHL and Cochrane. Keywords: "cancer survivor", "colorectal cancer survivor", "Mediterranean diet", "cancer recurrence", "fatigue". Research selection criteria: a) the participants were adults who completed cancer treatment and b) the studies researched the effect of MD on the risk of cancer recurrence and CRF.

#### **Results**

Data on the effect of MD on the risk of cancer recurrence and CRF in people who have treated colorectal cancer are limited and therefore do not provide safe conclusions. Due to the reduced number of studies in the review, researches with participants who had faced other types of cancer were included. Although this approach increases generalization, MD has a protective effect against recurrence and CRF.

#### Conclusions

Although the findings are not substantive, the trend suggests potential benefits of MD in reducing the risk of recurrence and reducing CRF, particularly in colorectal cancer. The data do not indicate an etiological relationship due to heterogeneity, the small number of samples and the methodology of the surveys. More extensive, well-designed RCTs are needed.

#### **Keywords**

Mediterranean diet; cancer recurrence. cancer-related fatigue. colon cancer. survival; nutritional intervention; systematic review; Meta-analysis

#### References

Chan DSM, Cariolou M, Markozannes G, Balducci K, Vieira R, Kiss S, Becerra-Tomás N, Aune D, Greenwood DC, González-Gil EM, Copson E, Renehan AG, Bours M, Demark-Wahnefried W, Hudson MM, May AM, Odedina FT, Skinner R, Steindorf K, Tjønneland A, Velikova G, Baskin ML, Chowdhury R, Hill L, Lewis SJ, Seidell J, Weijenberg MP, Krebs J, Cross AJ, Tsilidis KK. Post-Diagnosis Dietary Factors, Supplement Use, and Colorectal Cancer Prognosis: A Systematic Literature Review and Meta-Analysis of the Global Cancer Information Program (CUP Global). Int J Cancer. 2024 Aug 1; 155(3):445-470. DOI: 10.1002/IJC.34906. Epub 2024 May 1. PMID: 38692645.

Fung, T.T., Kashambwa, R., Sato, K., Chiuve, S.E., Fuchs, C.S., Wu, K., Giovannucci, E., Ogino, S., Hu, F.B., and Meyerhardt, J.A., 2014. Post-diagnosis, diet quality and colon cancer survival in women. PloS a, 9(12), p.e115377.

George, S.M., Alfano, C.M., Neuhouser, M.L., Smith, A.W., Baumgartner, R.N., Baumgartner, K.B., Bernstein, L. &; Ballard-Barbash, R. 2014, "Better nutrition quality after diagnosis is associated with less cancer-related fatigue in breast cancer survivors," Journal of cancer survivorship: research and practice, vol. 8, no. 4, pp. 680-687.



Inglis, J.E., Lin, P.J., Kerns, SL, Kleckner, I.R., Kleckner, AS, Castillo, D.A., Mustian, K.M. &; Peppone, L.J. 2019, "Nutritional Interventions for Treatment Cancer-Related Fatigue: A Qualitative Review", Nutrition and Cancer, Vol. 71, No. 1, pp. 21-40.

Kleckner AS, Reschke JE, Kleckner IR, Magnuson A, Amitrano AM, Culakova E, Shayne M, Netherby-Winslow CS, Czap S, Janelsins MC, Mustian KM, Peppone LJ. The effects of a Mediterranean diet intervention on cancer-related fatigue for patients undergoing chemotherapy: a pilot randomized controlled trial. Cancers (Basel). 2022 August 30; 14(17):4202. doi: 10.3390/cancers14174202. PMID: 36077737; PMCID: PMC9454611.

Meyerhardt JA, Niedzwiecki D, Hollis D, et al. Association of dietary patterns with cancer recurrence and survival in patients with stage III colorectal cancer. JAMA. 2007; 298(7):754–764. doi:10.1001/jama.298.7.754

Schwingshackl, L., Schwedhelm, C., Galbete, C. &; Hoffmann, G. 2017, "Adherence to Mediterranean Diet and Risk of Cancer. An Updated Systematic Review and Meta-Analysis", Nutrients, τόμος 9, αριθ. 10, σ. 1063.

Zick, S.M., Colacino, J., Cornellier, M., Khabir, T., Surnow, K. &; Djuric, Z. 2017, "Fatigue Reduction Diet in Breast Cancer Survivors: A Pilot Randomized Clinical Trial," Breast Cancer Research and Treatment, Vol. 161, No. 2, pp. 299-310.

Rajen I. Safmeyer, C., of Joseph, R., Wanyek, S., Sail - Danielzik, S., Cook M. Nöthlings, USA, Habe, J., Schlesinger, S. & Lib, In. 2017, "Μετδιαγνωστική Τα μεσογειακά και υγιή σκανδιναβικά διατροφικά πρότυπα συνδέονται αντιστρόφως με τη θνησιμότητα από όλες τις αιτίες σε μακροχρόνιους επιζώντες καρκίνου του παχέος εντέρου", Η Εφημερίδα της διατροφής, τόμος 147, τεύχος 4, σ. 636-644



# **ORAL PRESENTATIONS**

#### **OP 007**

# SCHOOL PERSONNEL TRAINING AND DIABETES MANAGEMENT IN SCHOOL SETTINGS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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#### **Background**

The rising prevalence of diabetes among adolescents presents an urgent challenge for schools, where teachers often act as first responders to diabetes-related incidents. However, many educators lack adequate knowledge, confidence, and standardized training in diabetes management.

#### **Objective**

This systematic review and meta-analysis aimed to evaluate the effectiveness of school-based educational interventions in improving teachers' knowledge, attitudes, and self-efficacy regarding diabetes management.

#### Methods

Following PRISMA 2020 guidelines, four databases (PubMed, ScienceDirect, Wiley Online Library, Cochrane) were systematically searched for peer-reviewed studies (2000 - 2025). Sixteen eligible studies were included. Meta-analysis using a random-effects model assessed standardized mean differences (SMD) for knowledge outcomes.

#### **Results**

Baseline knowledge among educators was consistently low across countries. Structured training programs significantly improved teachers' knowledge and readiness to implement diabetes care plans (pooled SMD = 2.08; 95% CI: 0.30-3.85; p < 0.05). Successful models emphasized interdisciplinary collaboration, inclusion of school nurses, and continuous professional development. Despite heterogeneity ( $I^2 = 98\%$ ), evidence supports the adoption of standardized educator training across educational systems, including Cyprus.

#### Conclusion

Educator training is essential for safe, effective diabetes management in schools. Integrating evidence-based programs into national education frameworks can promote student well-being, reduce complications, and build health-literate school communities.

#### **Keywords**

diabetes, teacher training, school personnel, adolescent health, health literacy

#### References

Ameneh, P. D., Piri, R., Karimy, M., & Shakibazadeh, E. (2023). School-based peer-led diabetes intervention among female adolescents: A cluster randomized trial. BMC Public Health, 23, 15430. https://doi.org/10.1186/s12889-023-15430-3

Salameh, A. B., Al-Sheyab, N., El-Hneiti, M., Shaheen, A., Williams, L. M., & Gallagher, R. (2017). Effectiveness of a 12-week school-based educational preventive programme on weight and fasting blood glucose in "at-risk" adolescents of type 2 diabetes mellitus: Randomized controlled trial. International Journal of Nursing Practice, 23(3), e12528. https://doi.org/10.1111/jin.12528

Bassi, M., Scalas, M., Spacco, G., Perasso, V., Franzone, D., Strati, M. F., Dufour, F., Lionetti, B., Rizza, F., Parodi, S., d'Annunzio, G., & Minuto, N. (2024). Management of type 1 diabetes in a school setting: Effectiveness of an online training program for school staff. Frontiers in Public Health, 11, 1228975. https://doi.org/10.3389/fpubh.2023.1228975

Dixe, M. dos A. C. R., Gordo, C. M. G. de O., Catarino, H. B. P., Kraus, T., & Menino, E. P. da S. G. (2020). Effects of an education program on knowledge and self-perception of school personnel in preparing to care for type 1 diabetes students. Einstein (São Paulo), 18, eA05384. https://doi.org/10.31744/einstein\_journal/2020A05384

Stefanowicz-Bielska, A., Miszk, M., & Rąpała, M. (2024). Teachers' knowledge about the principles of dealing with a student with type 1 diabetes mellitus. BMC Public Health, 24, 3164. <a href="https://doi.org/10.1186/s12889-024-20590-x">https://doi.org/10.1186/s12889-024-20590-x</a>.

Knowles, J., Waller, H., Eiser, C., Heller, S., Roberts, J., Lewis, M., Wilson, K., Hutchinson, T., Willan, M., Bavelja, P., Bennet, G., & Price, K. (2006). The development of an innovative education curriculum for 11-16-year-old children with type 1 diabetes mellitus (T1DM). Pediatric Diabetes, 7(6), 322-328. https://doi.org/10.1111/j.1399-5448.2006.00198.x

American Diabetes Association. (2024). Diabetes care in the school setting: A statement of the ADA. Diabetes Care, 47(12), 2050-2062. https://doi.org/10.2337/dc24-S012

#### **OP 008**

# A PARTIALLY HYDROLYZED FORMULA REDUCES THE RISK OF FOOD ALLERGY AND ATOPIC DERMATITIS IN HIGH-RISK FOR ALLERGY CHILDREN

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#### **Background**

Allergic diseases are increasing worldwide<sup>1,2</sup>. Although several nutritional strategies for allergy prevention have been proposed, there is no robust evidence to support their role<sup>3-7</sup>. Partially hydrolyzed formulas (pHF) have been used however, their effectiveness has been questioned<sup>8,9</sup>.

#### **Objective**

To examine whether the risk reduction effect observed in the participants of the Allergy Reduction Trial (A.R.T.) for Atopic Dermatitis (AD) persists at the age of 5 years and, if it applies to other Allergic Manifestations (AM).

#### Methods

The A.R.T.<sup>10</sup> is a multicenter double-blinded randomized controlled study investigating a nutritional intervention with a whey-based pHF compared to a standard formula (SF) within the first 6 months of life in the prevention of AM, in high-risk for allergy infants. Exclusively breastfed infants were followed-up as an observational group. During the 5-year follow-up parentally reported doctor diagnosis of AM between 1-5 years of age including AD, Food Allergy (FA), Asthma (As), and Allergic Rhinitis (AR) were recorded using an enriched validated guestionnaire.

#### Results

Four hundred and fifty-five subjects (83%) completed the 5-year follow-up (pHF: 131/160, SF: 145/171 and EBF: 179/220). Infant feeding with the pHF compared to SF was associated with an 87% reduced risk of FA [1,5% vs 12.4%, RR 0.13 (0.03-0.58), p=0.007] between the ages of 1-5 years. The RR assessed from birth to 5 years of age was significantly lower in infants fed with the pHF for the development of any AM [32.7% vs 51.7%, RR 0.73 (0.57-0.94), p=0.016], AD [22.1% vs 38.5%, RR 0.58 (0.41-0.83), p=0.003] and FA [10.5% vs 20.4%, RR 0.53 (0.29-0.95), p=0.03] as compared to SF. No significant results were observed for As and AR.

#### **Conclusion**

In non-exclusively breastfed infants at high-risk for allergy, this pHF may reduce the risk of developing allergic manifestations particularly, AD and FA up to the age of 5 years.

#### **Keywords**

allergy prevention, food allergy, atopic dermatitis, partially hydrolyzed formula



## **ORAL PRESENTATIONS**

#### References

- 1. Peters RL, Koplin JJ, Gurrin LC, et al. The prevalence of food allergy and other allergic diseases in early childhood in a population-based study: HealthNuts age 4-year follow-up. Journal of Allergy and Clinical Immunology. 2017;140(1):145–153.e8. https://www.jacionline.org/article/S0091-6749(17)30412-8/fulltext. Accessed Sep 27, 2025. doi: 10.1016/j.jaci.2017.02.019.
- 2. Akinbami LJ, Simon AE, Schoendorf KC. Trends in allergy prevalence among children aged 0-17 years by asthma status, united states, 2001-2013. J Asthma. 2016;53(4):356–362. <a href="https://pubmed.ncbi.nlm.nih.gov/26666655/">https://pubmed.ncbi.nlm.nih.gov/26666655/</a>. Accessed Sep 27, 2025. doi: 10.3109/02770903.2015.1126848.
- 3. Han S, Binia A, Godfrey KM, El-Heis S, Cutfield WS. Do human milk oligosaccharides protect against infant atopic disorders and food allergy? Nutrients. 2020;12(10):1–12. doi: 10.3390/nu12103212.
- 4. Korpela K, Hurley S, Ford SA, et al. Association between gut microbiota development and allergy in infants born during pandemic-related social distancing restrictions. Allergy: European Journal of Allergy and Clinical Immunology. 2024:1–14. doi: 10.1111/all.16069.
- 5. Venter C, Smith PK, Fleischer DM. Food allergy prevention: Where are we in 2023? Asia Pacific allergy. 2023;13(1):15–27. https://www.ncbi.nlm.nih.gov/pubmed/37389093. doi: 10.5415/apallergy.00000000000001.
- 6. Maslin K, Pickett K, Ngo S, Anderson W, Dean T, Venter C. Dietary diversity during infancy and the association with childhood food allergen sensitization. Pediatr Allergy Immunol. 2022;33(1):e13650. https://doi.org/10.1111/pai.13650. doi: 10.1111/pai.13650.
- 7. Toit GD, Roberts G, Sayre PH, et al. Randomized trial of peanut consumption in infants at risk for peanut allergy. New England Journal of Medicine. 2015;372(9):803–813. <a href="https://www.nejm.org/doi/full/10.1056/NEJMoa1414850">https://www.nejm.org/doi/full/10.1056/NEJMoa1414850</a>. Accessed Jun 18, 2025. doi: 10.1056/NEJMoa1414850.
- 8. Osborn DA, Sinn JKH, Jones LJ. Infant formulas containing hydrolysed protein for prevention of allergic disease. Cochrane Database of Systematic Reviews. 2018(10). doi: 10.1002/14651858.CD003664.pub6.
- 9. Boyle RJ, Ierodiakonou D, Khan T, et al. Hydrolysed formula and risk of allergic or autoimmune disease: Systematic review and meta-analysis. BMJ (Online). 2016;352. doi: 10.1136/bmj.i974.
- 10. Nicolaou N, Pancheva R, Karaglani E, Sekkidou M. The risk reduction effect of a nutritional intervention with a partially hydrolyzed whey-based formula on cow 's milk protein allergy and atopic dermatitis in high-risk infants within the first 6 months of life: The allergy reduction trial (A.R.T), a multicenter double-blinded randomized controlled study. 2022;9:1–13. doi: 10.3389/fnut.2022.863599.



#### **OP 009**

# UNDERSTANDING PLADO: DEVELOPMENT AND VALIDATION OF A QUESTIONNAIRE TO ASSESS DIET KNOWLEDGE AND MANAGEMENT IN CYPRIOT KIDNEY AND HEALTHY POPULATIONS.

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Chronic kidney disease (CKD) requires dietary strategies that balance protein restriction, nutritional adequacy, and sustainability. As plant-dominant dietary models gain prominence in renal nutrition, understanding public perceptions of protein sources and their health impacts is increasingly critical. However, no validated assessment tool exists to evaluate such perceptions within the Cypriot population. This study presents the development and validation of a novel questionnaire designed to assess perceptions of sustainability, nutritional value, and health impacts of plant- and animal-based proteins, with a focus on kidney health. The instrument was developed through literature review, expert input (n = 10), cognitive pretesting, and pilot testing (n = 120). Validation included content validity indexing (I-CVI), Modified Kappa statistics, internal consistency via Cronbach's alpha, and exploratory factor analysis (EFA). Expert agreement was high, with an S-CVI/Ave of 0.89 and 93% of items achieving I-CVI ≥ 0.83. Internal consistency across subscales ranged from  $\alpha$  = 0.71 to 0.82. EFA supported construct validity, explaining 36% of the variance. The final 42-item questionnaire covers eight domains, including sustainability beliefs, dietary behavior, and protein knowledge. A unique feature is its embedded educational content-glossary terms, visuals, and explanatory prompts-designed to evaluate baseline knowledge and learning outcomes. Pilot results revealed knowledge gaps and uncertainty about the sustainability of plant-based proteins among CKD respondents. This validated tool fills a significant gap in renal nutrition education and research and offers a reliable, culturally relevant means to assess dietary perceptions. It supports patient education, public health interventions, and clinical practice in promoting sustainable, kidney-friendly diets. Broader application and cross-cultural adaptation are recommended to enhance global utility.

#### **Keywords**

Cyprus; chronic kidney disease; plant-based diet; protein perception; questionnaire validation.

#### References

- 1. Chen TK, Knicely DH, Grams ME. Chronic kidney disease diagnosis and management: a review. JAMA. (2019) 322:1294–304. doi: 10.1001/jama.2019.14745.
- 2. Michail A, Andreou E. A Plant-dominant low-protein diet in chronic kidney disease management: a narrative review with considerations for cyprus. Nutrients. (2025) 17:970. doi: 10.3390/nu17060970.
- 3. Deligiannidou GE, Philippou E, Vasiari E, de Andrade VL, Massaro M, Chervenkov M, et al. Exploring the relationship between mediterranean diet adherence and subjective well-being among Greek and Cypriot adults. Nutrients. (2024) 16:1238. doi: 10.3390/nu16081238.
- 4. Zarantonello D, Brunori G. The role of plant-based diets in preventing and mitigating chronic kidney disease: more light than shadows. J Clin Med. (2023) 12:6137. doi:10.3390/jcm12196137.
- 5. STROBE. STROBE Checklists. (2022). Available online at: https://www.strobe-statement.org/checklists/ (Accessed March 15, 2025).
- Kyprianidou M, Panagiotakos D, Faka A, Kambanaros M, Makris KC, Christophi CA. Adherence to the Mediterranean diet in Cyprus and its relationship to multi-morbidity: an epidemiological study. Public Health Nutr. (2021) 24:4546–55.
   doi: 10.1017/S1368980020004267.
- 7. Kalantar-Zadeh K, Moore LW, Tortorici AR, Chou JA, St-Jules DE, Aoun A, et al. North American experience with Low protein diet for Non-dialysis-dependent chronic kidney disease. BMC Nephrol. (2016) 17:90–9. doi: 10.1186/s12882-016-0304-9.
- 8. Murali S, Arab L, Vargas R, Rastogi A, Ang A, Shetty N. Internet-based tools to assess diet and provide feedback in chronic kidney disease stage IV: a pilot study. J Renal Nutr. (2013) 23:e33–42. doi: 10.1053/j.jrn.2012.05.001
- 9. Rhee CM, Wang AY, Biruete A, Kistler B, Kovesdy CP, Zarantonello D, et al. Nutritional and dietary management of chronic kidney disease under conservative and preservative kidney care without dialysis. J Renal Nutr. (2023) 33:S56–S66. doi: 10.1053/j.jrn.2023.06.010.
- 10. Hampton JR, Harrison MJ, Mitchell JR, Prichard JS, Seymour C. Relative contributions of history-taking, physical examination, and laboratory investigation to diagnosis and management of medical outpatients. Br Med J. (1975) 2:486–9. doi: 10.1136/bmj.2.5969.486.



# ORAL PRESENTATIONS

#### **OP 010**

## THE DIAGNOSTIC INTERSECTION OF BODY DYSMORPHIA AND EATING DISORDERS: A SYSTEMATIC REVIEW.

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#### **Background**

Muscle dysmorphia (MD) is a condition characterised by a preoccupation with muscularity, often leading to behaviours similar to those seen in body dysmorphic disorder (BDD) and eating disorders (EDs). This systematic review aimed to clarify whether MD is more accurately classified as a subtype of BDD or an ED.

#### **Methods**

With the use of the Preferred Reporting Items for Systematic Reviews and Meta-Analysis guidelines the search was conducted across the electronic databases PubMed, EMBASE, PsycINFO and the International Journal of Eating Disorders. Search terms included "muscle dysmorphia", "vigorexia", "adonis complex", "bigorexia", "reverse anorexia", "body dysmorphic disorder", "eating disorder", and "dysmorphophobia".

#### **Results**

A total of 19 eligible studies reporting data of 11,490 study participants were used. According to the identified literature from six different countries, prevalence rates for MD, EDs and BDD were 5.9-58.3%, 9.1-67.5% and 5.1-15.3% respectively. The findings revealed significant symptom overlap between MD, BDD, and EDs, including body image dissatisfaction and compulsive behaviours. MD is distinct in its emphasis on muscularity and the use of appearance- and performance-enhancing drugs. Shared risk factors like sociocultural influences and perfectionism were identified. Gender differences were noted, with MD more prevalent in males and EDs more common in females. Quality assessment indicated that studies were of medium to high quality, with 18 studies rated as high quality and one as medium quality, ensuring the reliability of the findings.

#### **Conclusion**

The review suggests that MD may be best conceptualised as a distinct disorder with overlapping features of both BDD and EDs. Accurate classification is essential for effective treatment, as misclassification can lead to inappropriate therapeutic approaches. Future research should focus on standardising diagnostic criteria, exploring diverse populations, and evaluating long-term treatment efficacy.

#### **Keywords**

Muscle dysmorphia, Body dysmorphic disorder, Eating disorders, Classification, Appearance-enhancing drugs

#### References

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

Amodeo, A. L., Esposito, C., Antuoni, S., Saracco, G., & Bacchini, D. (2020). Muscle dysmorphia: what about transgender people?. Culture, health & sexuality, 1–16. Advance online publication. <a href="https://doi.org/10.1080/13691058.2020.1814968">https://doi.org/10.1080/13691058.2020.1814968</a>

\* Arslan, M., Yabancı Ayhan, N., Sarıyer, E. T., Çolak, H., & Çevik, E. (2022). The Effect of Bigorexia Nervosa on Eating Attitudes and Physical Activity: A Study on University Students. International journal of clinical practice, 2022, 6325860. <a href="https://doi.org/10.1155/2022/6325860">https://doi.org/10.1155/2022/6325860</a>

Babusa, B., & Túry, F. (2011). Az izomdiszmorfia nozológiai helye és mérése [Nosological classification and assessment of muscle dysmorphia]. Psychiatria Hungarica: A Magyar Pszichiatriai Tarsasag tudomanyos folyoirata, 26(3), 158–166.



Bégin, C., Turcotte, O., & Rodrigue, C. (2019). Psychosocial factors underlying symptoms of muscle dysmorphia in a non-clinical sample of men. Psychiatry research, 272, 319–325. https://doi.org/10.1016/j.psychres.2018.12.120

Behar, R., & Molinari, D. (2010). Dismorfia muscular, imagen corporal y conductas alimentarias en dos poblaciones masculinas [Muscle dysmorphia, body image and eating behaviors in two male populations]. Revista medica de Chile, 138(11), 1386–1394.

Bienvenu, O. J., Samuels, J. F., Riddle, M. A., Hoehn-Saric, R., Liang, K. Y., Cullen, B. A., Grados, M. A., & Nestadt, G. (2000). The relationship of obsessive-compulsive disorder to possible spectrum disorders: results from a family study. Biological psychiatry, 48(4), 287–293. https://doi.org/10.1016/s0006-3223(00)00831-3

Bienvenu, O. J., Samuels, J. F., Wuyek, L. A., Liang, K. Y., Wang, Y., Grados, M. A., Cullen, B. A., Riddle, M. A., Greenberg, B. D., Rasmussen, S. A., Fyer, A. J., Pinto, A., Rauch, S. L., Pauls, D. L., McCracken, J. T., Piacentini, J., Murphy, D. L., Knowles, J. A., & Nestadt, G. (2012). Is obsessive-compulsive disorder an anxiety disorder, and what, if any, are spectrum conditions? A family study perspective. Psychological medicine, 42(1), 1–13. https://doi.org/10.1017/S0033291711000742

PP 001	Pavlina Theodorou	ONGOING STUDY: DEMONSTRATION OF DIETARY TRENDS AND BEHAVIORS OF ADULTS IN FOOD INTAKE USING THE EAT-26 QUESTIONNAIRE TO DETERMINE THE RISK OF EATING DISORDERS OR DISORDERED EATING IN CYPRIOT ADULTS. ASSOCIATION WITH BODY IMAGE (2025)
PP 002	Eleftheria Panagiotou	ADHERENCE TO THE MEDITERRANEAN DIET AND ITS INFLUENCE ON ALLERGIC DISEASES: A SYSTEMATIC REVIEW AND META-ANALYSIS
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PP 008	Chrystalla Myriantheos	EXPLORING DIETARY PATTERNS AND NUTRITION LABEL USE AMONG ADULTS IN CYPRUS: INSIGHTS AND ASSOCIATIONS. A CROSS-SECTIONAL STUDY
PP 009	Ioanna Georgiou	ONGOING STUDY: INVESTIGATION OF DIETARY TRENDS AND EATING BEHAVIORS AMONG ADULTS USING THE EAT-26 QUESTIONNAIRE TO ASSESS THE RISK OF EATING DISORDERS OR DISORDERED EATING IN CYPRIOT ADULTS. CORRELATION WITH BODY DYSMORPHIC DISORDER (2025)
PP 010	Persa Korfiati	A MIXED-METHOD EXPLORATION OF MINDFUL EATING INTERVENTIONS AND THE TRANSTHEORETICAL MODEL IN THE TREATMENT OF EMOTIONAL AND BINGE EATING DISORDERS IN GREEK CYPRIOT ADULTS
PP 011	Eleni Hadjioannou	ASSESSING UNIVERSITY STUDENTS' KNOWLEDGE AND INTERPRETATION OF FOOD LABELS AND THEIR RELATIONSHIP WITH FOOD CHOICES AND MEDITERRANEAN DIET ADHERENCE: A QUANTITATIVE CROSS-SECTIONAL ANALYSIS
PP 012	Georgia Spyrou	ADHERENCE TO MEDITERRANEAN DIET AND ITS IMPACT TO PEOPLE WITH BREAST CANCER, A NARRATIVE REVIEW
PP 013	Ntorzi Nicoletta	IMPACT OF MILITARY SERVICE ON EATING BEHAVIORS, BODY WEIGHT, AND BODY FAT: A CROSS-SECTIONAL OBSERVATIONAL STUDY OF SOLDIERS IN THE CYPRUS MILITARY
PP 014	Anna Stephanou	A SYSTEMATIC REVIEW ON HYPOGLYCAEMIC RISKS IN EATING DISORDERS

#### **PP 001**

ONGOING STUDY: DEMONSTRATION OF DIETARY TRENDS AND BEHAVIORS OF ADULTS IN FOOD INTAKE USING THE EAT-26 QUESTIONNAIRE TO DETERMINE THE RISK OF EATING DISORDERS OR DISORDERED EATING IN CYPRIOT ADULTS. ASSOCIATION WITH BODY IMAGE (2025)

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#### Introduction

Disordered eating behaviors and body image dissatisfaction are emerging public health concerns, particularly among young populations. Sociocultural influences, dietary trends, and increasing exposure to idealized body standards contribute to the rising prevalence of eating disorders (EDs). This thesis focuses on assessing disordered eating attitudes and related behaviors in the Cypriot population using the EAT-26 questionnaire, within the broader context of body image, self-perception, and nutrition.

#### Method

A quantitative, observational, cross-sectional study design was employed. Data were collected through the validated Greek version of the EAT-26 questionnaire, combined with a set of demographic and self-reported health behavior questions. The study sample consisted of adolescents and adults from Cyprus, with data collection spanning from 2020 to 2023. Descriptive statistics, frequency analyses, and cross-tabulations were used to examine gender differences, BMI categories, and body image concerns.

#### **Results**

The findings revealed a considerable percentage of participants at risk of developing an eating disorder, with higher scores observed among females. A significant portion of the sample expressed dissatisfaction with their body image, a desire to be slimmer, and anxiety related to weight and appearance. Moreover, notable gender differences were observed in water intake, mirror self-perception, and preoccupation with public appearance. Associations were also found between BMI and the severity of eating concerns and body dissatisfaction.

#### **Discussion**

These results align with global trends indicating an increase in ED risk factors, especially among young females. Social pressure, media influence, and appearance-centered behaviors were prevalent contributors. The study highlights a critical need for early identification and culturally sensitive interventions targeting body image and eating behaviors, particularly among adolescents and women in Cyprus.

#### **Conclusion**

The study provides valuable local data to enhance the broader understanding of disordered eating in non-clinical populations. It underscores the urgency for educational and preventative programs within schools and community settings to reduce stigma, improve body image, and promote healthy relationships with food and self-perception.

#### **Keywords**

Eating disorders, body image, EAT-26, Cyprus, adolescents, BMI, disordered eating behaviours, gender differences, nutrition, public health



#### **PP 002**

## ADHERENCE TO THE MEDITERRANEAN DIET AND ITS INFLUENCE ON ALLERGIC DISEASES: A SYSTEMATIC REVIEW AND META-ANALYSIS

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#### **Background**

Allergic diseases, including asthma, rhinitis, wheezing and eczema, are increasing globally and pose a major public health burden. The Mediterranean Diet, known for its anti-inflammatory and antioxidant properties, has been suggested as a dietary pattern that may help protect against these conditions.

#### **Objective**

This study aimed to evaluate whether adherence to the Mediterranean Diet is associated with a reduced risk of allergic conditions.

#### Methods

Electronic databases (PubMed, Scopus, Science Direct, and EBSCO) were searched for eligible studies published up to April 2024. Studies reporting odds ratios (OR) with 95% confidence intervals (CI) for asthma, wheezing, rhinitis, or eczema were included. Risk of bias was assessed using the National Heart, Lung, and Blood Institute tool. Random-effects models were applied to account for heterogeneity, and publication bias was evaluated through forest plots and Egger's test.

#### Results

Twenty-three studies comprising 111,583 participants were included. Higher MD adherence was associated with a significantly reduced risk of asthma (log OR: -0.18; 95% CI: -0.34, -0.02), wheezing (log OR: -0.29; 95% CI: -0.56, -0.03), and rhinitis (log OR: -0.54; 95% CI: -1.00, -0.08). Stronger protective effects were observed in Mediterranean populations. No significant association was identified between MD adherence and eczema risk (pooled OR: 0.09; 95% CI: -0.02, 0.20). Heterogeneity was moderate across analyses.

#### **Conclusions**

Adherence to the MD may reduce the risk of respiratory allergies, particularly asthma, wheezing, and rhinitis, but not eczema. These findings support the promotion of MD as a potential population-level strategy for allergy prevention. Further longitudinal research with standardized methodologies is required to confirm causality.

#### Keywords

Allergies; Mediterranean diet; respiratory allergies; eczema; food allergies

#### References

Panagiotou E, Andreou E, Nicolaou SA. The Effect of Dietary Components of the Mediterranean Diet on Food Allergies: A Systematic Review. Nutrients. 2023 Jul 25;15(15):3295.

Castro-Rodriguez JA, Garcia-Marcos L. What are the effects of a mediterranean diet on allergies and asthma in children? Vol. 5, Frontiers in Pediatrics. Frontiers Media S.A.; 2017.

Serra-Majem L, Bach-Faig A, Raidó-Quintana B. Nutritional and Cultural Aspects of the Mediterranean Diet. International Journal for Vitamin and Nutrition Research. 2012 Jun 1;82(3):157–62.

Venter C, Agostoni C, Arshad SH, Ben-Abdallah M, Du Toit G, Fleischer DM, et al. Dietary factors during pregnancy and atopic outcomes in childhood: A systematic review from the European Academy of Allergy and Clinical Immunology. Pediatric Allergy and Immunology. 2020 Nov 1;31(8):889–912.

Nurmatov U, Dhami S, Arasi S, Roberts G, Pfaar O, Muraro A, et al. Allergen immunotherapy for allergic rhinoconjunctivitis: a systematic overview of systematic reviews. Clin Transl Allergy. 2017 Dec 8;7(1):24.

Seyedrezazadeh E, Pour Moghaddam M, Ansarin K, Reza Vafa M, Sharma S, Kolahdooz F. Fruit and vegetable intake and risk of wheezing and asthma: A systematic review and meta-analysis. Nutr Rev. 2014;72(7):411–28.

Garcia-Marcos L, Castro-Rodriguez JA, Weinmayr G, Panagiotakos DB, Priftis KN, Nagel G. Influence of Mediterranean diet on asthma in children: A systematic review and meta-analysis. Pediatric Allergy and Immunology. 2013 Jun;24(4):330–8.



#### **PP 003**

# COMPARATIVE ANALYSIS OF GOAT AND COW MILK ON BIOCHEMICAL MARKERS AND GUT MICROBIOTA IN HUMANS: A RANDOMISED CONTROLLED TRIAL

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#### **Background**

Obesity, metabolic syndrome, diabetes, and cardiovascular diseases (CVD) are interrelated disorders driven by disturbances in lipid and glucose metabolism and remain leading causes of global mortality. Traditional biomarkers (cholesterol, triglycerides, lipoproteins, glucose, insulin) and emerging indices such as the triglyceride—glucose index and lipid ratios are important tools for early detection of cardiometabolic risk. Nutrition is a major modifiable factor influencing these biomarkers. Milk, one of the most widely consumed dietary components worldwide, has been linked to metabolic health. Evidence suggests that goat milk (GM), compared with cow milk (CM), may provide superior digestibility, distinct effects on lipid and glucose metabolism, and potential benefits for gut microbiota. However, human data directly comparing GM and CM in relation to cardiometabolic outcomes are still limited, underscoring the need for further investigation.

#### **Objective**

To examine the effects of daily GM consumption for 12 weeks on biochemical cardiometabolic biomarkers and gut microbiota composition in healthy Greek-Cypriot adults compared with CM.

#### **Methods**

In this parallel randomised controlled trial, 24 adults were recruited; 19 completed the intervention. Participants consumed 250mL/day of either GM or CM while following an isocaloric Mediterranean diet. Anthropometrics, stool samples, and fasting cardiometabolic biomarkers were measured at baseline and post-intervention. Microbiota analysis assessed Bifidobacterium, Bacteroides fragilis, Prevotella, and Clostridium coccoides.

#### Results

Dietary intake remained stable. Waist circumference decreased in GM (p=0.04, p=0.03) at the 2nd and 3rd months. CM significantly increased total body water (1.87%, p=0.001), modestly lowered TChol (-9.09 mg/dL, p=0.05), and improved fasting glucose (p=0.007). HDL declined in both groups, while TG/HDL-C increased only in CM (p=0.045). TChol/HDL-C rose significantly in both groups. CM reduced Bifidobacterium (p=0.0004) and Clostridium coccoides (p=0.038), whereas GM only reduced Clostridium coccoides (p=0.002).

#### Conclusions

CM improved glucose and TChol regulation but was linked with lower HDL and unfavourable lipid ratios. GM exerted minimal biochemical changes but maintained beneficial microbiota. Larger, longer studies with varied fat content are warranted.

#### **Keywords**

Cow milk, goat milk, cardiometabolic, microbiome, gut microbiota

#### References

Eroglu, T., Capone, F., & Schiattarella, G. G. (2024). The evolving landscape of cardiometabolic diseases. EBioMedicine, 109. Hou, K., Wu, Z. X., Chen, X. Y., Wang, J. Q., Zhang, D., Xiao, C., ... & Chen, Z. S. (2022). Microbiota in health and diseases. Signal transduction and targeted therapy, 7(1), 135.

Lima, M. J. R., Teixeira-Lemos, E., Oliveira, J., Teixeira-Lemos, L. P., Monteiro, A. M., & Costa, J. M. (2018). Nutritional and health profile of goat products: focus on health benefits of goat milk. Goat science, 189-232.

Wang, Z., Jiang, S., Ma, C., Huo, D., Peng, Q., Shao, Y., & Zhang, J. (2018). Evaluation of the nutrition and function of cow and goat milk based on intestinal microbiota by metagenomic analysis. Food & function, 9(4), 2320-2327.

Yu, Y., Raka, F., & Adeli, K. (2019). The role of the gut microbiota in lipid and lipoprotein metabolism. Journal of clinical medicine, 8(12), 2227.

Zheng, Y., Qin, C., Wen, M., Zhang, L., & Wang, W. (2024). The effects of food nutrients and bioactive compounds on the gut microbiota: a comprehensive review. Foods, 13(9), 1345.



#### **PP 004**

# THE IMPACT OF SPACE CONDITIONS ON THE GUT MICROBIOME AND THE MODULATORY ROLE OF NUTRITION: A SYSTEMATIC REVIEW AND META-ANALYSIS

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#### Background

As the space community strives for longer missions, it is crucial to understand how space conditions impact human health. The gut microbiome remains an underexplored area in space research, despite its potential importance in sustaining astronauts' health during extended missions.

#### **Objective**

This study aimed to evaluate the effects of spaceflight and simulated space environments on the human gut microbiome, examining the role of nutrition as a modulator of these alterations.

#### Methods

Relevant studies were identified through searches of PubMed, PubMed Central and Scopus from 2000 through July 10, 2025. Alterations to gut microbial diversity, the Firmicutes-to-Bacteroidetes (F/B) ratio, and other physiological values were reported. Statistically significant fluctuations in gut microbial composition were collected as mean differences and standard deviations and statistically analysed with 95 % confidence intervals (CI) using SPSS. Heterogeneity was assessed using the I2 statistic. The link between these changes and other confounding factors was statistically evaluated.

#### Results

15 studies were included, with 3 being actual spaceflights and 12 being space environment simulations. 6 out of the 11 studies that examined gut microbial diversity were included in the meta-analysis, and they presented a non-statistically significant trend toward increased diversity during the control phase (Hedges' g: -0.05, p = 0.84). The environment appeared to influence the observed alterations, with actual spaceflights having a greater impact (Hedges' g: 0.58, p = 0.19). Nutritional strategies, particularly those rich in fibre, probiotics, and vitamin D, were linked with stabilised or improved microbiome diversity, in contrast to ultra-processed foods (UPFs).

#### **Conclusions**

Overall, the findings suggest a negative effect of space conditions on gut microbial diversity, along with an adaptive microbiome response, with targeted nutritional interventions being promising in preserving gut health. Further research is needed to develop effective countermeasures that can be applied in both space and on Earth.

#### Keywords

gut microbiome<sup>1</sup>, gut microbial diversity<sup>2</sup>, spaceflight<sup>3</sup>, space conditions<sup>4</sup>, nutrition<sup>5</sup>.

#### References

- 1. Chen, J., Wang, Q., Hao, Z., Li, Z., Sahu, S.K., Liu, H. and Xiao, L. (2020) 'Relationship between the Gut Microbiome and Energy/Nutrient Intake in a Confined Bioregenerative Life Support System', Applied and environmental microbiology, 86(4). doi: 10.1128/AEM.02465-19 https://www.ncbi.nlm.nih.gov/pubmed/31811045.
- 2. Dong, H., Chen, P., Yu, Y., Zang, P. and Wei, Z. (2019) 'Simulated manned Mars exploration: effects of dietary and diurnal cycle variations on the gut microbiome of crew members in a controlled ecological life support system', PeerJ (San Francisco, CA), 7, pp. e7762. doi: 10.7717/peerj.7762 https://www.ncbi.nlm.nih.gov/pubmed/31579622.
- 3. Douglas, G.L., DeKerlegand, D., Dlouhy, H., Dumont-Leblond, N., Fields, E., Heer, M., Krieger, S., Mehta, S., Rooney, B.V., Torralba, M.G., Whiting, S.E., Crucian, B., Lorenzi, H., Smith, S.M., Young, M. and Zwart, S.R. (2022) 'Impact of diet on human nutrition, immune response, gut microbiome, and cognition in an isolated and confined mission environment', Scientific reports, 12(1), pp. 20847. doi: 10.1038/s41598-022-21927-5 https://link.springer.com/article/10.1038/s41598-022-21927-5.



- 4. Garrett-Bakelman, F.E., Darshi, M., Green, S.J., Gur, R.C., Lin, L., Macias, B.R., McKenna, M.J., Meydan, C., Mishra, T., Nasrini, J., Piening, B.D., Rizzardi, L.F., Sharma, K., Siamwala, J.H., Taylor, L., Vitaterna, M.H., Afkarian, M., Afshinnekoo, E., Ahadi, S., Ambati, A., Arya, M., Bezdan, D., Callahan, C.M., Chen, S., Choi, A.M.K., Chlipala, G.E., Contrepois, K., Covington, M., Crucian, B.E., De Vivo, I., Dinges, D.F., Ebert, D.J., Feinberg, J.I., Gandara, J.A., George, K.A., Goutsias, J., Grills, G.S., Hargens, A.R., Heer, M., Hillary, R.P., Hoofnagle, A.N., Hook, V.Y.H., Jenkinson, G., Jiang, P., Keshavarzian, A., Laurie, S.S., Lee-McMullen, B., Lumpkins, S.B., MacKay, M., Maienschein-Cline, M.G., Melnick, A.M., Moore, T.M., Nakahira, K., Patel, H.H., Pietrzyk, R., Rao, V., Saito, R., Salins, D.N., Schilling, J.M., Sears, D.D., Sheridan, C.K., Stenger, M.B., Tryggvadottir, R., Urban, A.E., Vaisar, T., Van Espen, B., Zhang, J., Ziegler, M.G., Zwart, S.R., Charles, J.B., Kundrot, C.E., Scott, G.B.I., Bailey, S.M., Basner, M., Feinberg, A.P., Lee, S.M.C., Mason, C.E., Mignot, E., Rana, B.K., Smith, S.M., Snyder, M.P. and Turek, F.W. (2019) 'The NASA Twins Study', Science (American Association for the Advancement of Science), 364(6436), pp. 144. doi: 10.1126/science.aau8650 https://www.istor.org/stable/26649236.
- 5. Hao, Z., Meng, C., Li, L., Feng, S., Zhu, Y., Yang, J., Han, L., Sun, L., Lv, W., Figeys, D. and Liu, H. (2023) 'Positive mood-related gut microbiota in a long-term closed environment: a multiomics study based on the "Lunar Palace 365" experiment', Microbiome, 11(1), pp. 88–22. doi: 10.1186/s40168-023-01506-0 https://www.ncbi.nlm.nih.gov/pubmed/37095530.
- 6. Li, Y., Liu, Z., Luo, G., Lan, H., Chen, P., Du, R., Jing, G., Liu, L., Cui, X., Li, Y., Han, Y., Xu, J., Zhu, H., Ling, S. and Li, Y. (2023) 'Effects of 60 days of 6° head-down bed rest on the composition and function of the human gut microbiota', iScience, 26(5), pp. 106615. doi 10.1016/j.isci.2023.106615 https://dx.doi.org/10.1016/j.isci.2023.106615.
- 7. Liu, Z., Luo, G., Du, R., Sun, W., Li, J., Lan, H., Chen, P., Yuan, X., Cao, D., Li, Y., Liu, C., Liang, S., Jin, X., Yang, R., Bi, Y., Han, Y., Cao, P., Zhao, W., Ling, S. and Li, Y. (2020) 'Effects of spaceflight on the composition and function of the human gut microbiota', Gut Microbes, 11(4), pp. 807–819. doi: 10.1080/19490976.2019.1710091 https://www.tandfonline.com/doi/abs/10.1080/19490976.2019.1710091.
- 8. Mardanov, A.V., Babykin, M.M., Beletsky, A.V., Grigoriev, A.I., Zinchenko, V.V., Kadnikov, V.V., Kirpichnikov, M.P., Mazur, A.M., Nedoluzhko, A.V., Novikova, N.D., Prokhortchouk, E.B., Ravin, N.V., Skryabin, K.G. and Shestakov, S.V. (2013) 'Metagenomic Analysis of the Dynamic Changes in the Gut Microbiome of the Participants of the MARS-500 Experiment, Simulating Long Term Space Flight', Actanaturae, 5(3), pp. 116–125. doi: 10.32607/20758251-2013-5-3-116-125 https://www.ncbi.nlm.nih.gov/pubmed/24303207.
- 9. Turroni, S., Rampelli, S., Biagi, E., Consolandi, C., Severgnini, M., Peano, C., Quercia, S., Soverini, M., Carbonero, F.G., Bianconi, G., Rettberg, P., Canganella, F., Brigidi, P. and Candela, M. (2017) 'Temporal dynamics of the gut microbiota in people sharing a confined environment, a 520-day ground-based space simulation, MARS500', Microbiome, 5(1), pp. 39. doi: 10.1186/s40168-017-0256-8 https://www.ncbi.nlm.nih.gov/pubmed/28340597.
- 10. Voorhies, A.A., Mark Ott, C., Mehta, S., Pierson, D.L., Crucian, B.E., Feiveson, A., Oubre, C.M., Torralba, M., Moncera, K., Zhang, Y., Zurek, E. and Lorenzi, H.A. (2019) 'Study of the impact of long-duration space missions at the International Space Station on the astronaut microbiome', Scientific Reports, 9(1), pp. 9911–17. doi: 10.1038/s41598-019-46303-8 https://link.springer.com/article/10.1038/s41598-019-46303-8.



#### **PP 005**

# OBSERVATION OF THE USE OF NUTRITIONAL SUPPLEMENTS AND ERGOGENIC AIDS EXERCISING AND NON-EXERCISING ADULTS: A CROSS-SECTIONAL PHASE OF A LONGITUDINAL STUDY

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#### **Background**

The use of dietary supplements and ergogenic aids is constantly increasing among physically active and non-active adults. Despite their popularity, scientific evidence on long-term use and effects is limited, with most studies focusing mainly on athletes. Longitudinal research is needed to provide safe guidance and ensure evidence-based use.

#### **Objective**

Are there differences in the use and effect of dietary supplements and ergogenic aids between athletes and non-athletes, and what factors influence their use?

#### **Methods**

A cross-sectional study was conducted using an anonymous online questionnaire distributed between March and April 2025. The sample included 266 adults (72 men, 194 women, ≥18 years). Data analysis was performed using SPSS and Excel, including descriptive statistics, normality testing, non-parametric tests, Chi-Square tests, Spearman correlations, and logistic regression.

#### **Results**

Results show that men use supplements more often than women, although women reported higher overall consumption (72.9%). Men had higher BMI than women (26.14 vs. 24.63 kg/m², p = 0.007), and active participants had lower BMI than inactive ones (p < 0.001). Multivitamin use differed by activity level (p = 0.0054), while vitamin D use showed no significant difference (p = 0.598). BMI was negatively correlated with supplement use (p = -0.1991, p = 0.0011). Age, gender, and regular exercise ( $\geq$ 150 min/week) predicted supplement use, with men and active individuals more likely to take supplements (age: p = 0.0003, coefficient = -0.042).

#### **Conclusions**

The study found that younger and more active people are more likely to use dietary supplements, while inactive individuals tend to have higher BMI. These results suggest that health professionals could educate older or less active people about safe supplement use. Policies could provide guidance for active populations on the correct use of supplementation. Future research could explore diet knowledge, reasons for supplement use, and socioeconomic factors. Overall, these findings show associations, not direct causation.

#### **Keywords**

Dietary supplements, Ergogenic aids, Physical activity, Nutrition habits

#### References

Arenas-Jal, M., Suñé-Negre, J.M. and García-Montoya, E. (2020). Coenzyme Q10 supplementation: Efficacy, safety, and Formulation Challenges. Comprehensive Reviews in Food Science and Food Safety, 19(2), pp.574–594. doi: https://doi.org/10.1111/1541-4337.12539.

Basak, S. and Duttaroy, A.K. (2020). Conjugated Linoleic Acid and Its Beneficial Effects in Obesity, Cardiovascular Disease, and Cancer. Nutrients, 12(7), p.1913. doi:https://doi.org/10.3390/nu12071913.

Brisebois, M., Kramer, S., Lindsay, K.G., Wu, C.-T. and Kamla, J. (2022). Dietary Practices and Supplement Use among CrossFit® Participants. Journal of the International Society of Sports Nutrition, 19(1), pp.316–335. doi:https://doi.org/10.1080/15502783.2022.2086016.



Fatemeh, G., Sajjad, M., Niloufar, R., Neda, S., Leila, S. and Khadijeh, M. (2021). Effect of Melatonin Supplementation on Sleep quality: a Systematic Review and meta-analysis of Randomized Controlled Trials. Journal of Neurology, 269(1). doi: https://doi.org/10.1007/s00415-020-10381-w.

Food and Drug Administration (2022). FDA 101: Dietary Supplements. [online] U.S. Food and Drug Administration. Available at: https://www.fda.gov/consumers/consumer-updates/fda-101-dietary-supplements.

Guillochon, M. and Rowlands, D.S. (2017). Solid, Gel, and Liquid Carbohydrate Format Effects on Gut Comfort and Performance. International Journal of Sport Nutrition and Exercise Metabolism, 27(3), pp.247–254. doi:https://doi.org/10.1123/ijsnem.2016-0211.

Haponiuk-Skwarlińska, J., Antoniak, A., Ciurla, M., Paluch, K., Makulec, G., Klimczak-Tomaniak, D., Kuch, M. and Janiszewski, M. (2023). Dietary supplements, Nutraceuticals and Functional Foods Use after Myocardial Infarction Depend on the age, sex, BMI and Professional Activity - a Pilot Study. International journal of occupational medicine and environmental health, [online] 36(6), pp.732–743. doi:https://doi.org/10.13075/ijomeh.1896.02255.

Harvey, N.C., Biver, E., Kaufman, J.-M., Bauer, J., Branco, J., Brandi, M.L., Bruyère, O., Coxam, V., Cruz-Jentoft, A., Czerwinski, E., Dimai, H., Fardellone, P., Landi, F., Reginster, J.-Y., Dawson-Hughes, B., Kanis, J.A., Rizzoli, R. and Cooper, C. (2016). The Role of Calcium Supplementation in Healthy Musculoskeletal Ageing. Osteoporosis International, 28(2), pp.447–462. doi:https://doi.org/10.1007/s00198-016-3773-6.

Ito, H. and Ito, M. (2024). Recent Trends in Ginseng Research. Journal of Natural Medicines, 78(3), pp.455–466. doi:https://doi.org/10.1007/s11418-024-01792-4.



#### **PP 006**

### EXPLORING ASSOCIATIONS BETWEEN CHRONONUTRITION AND MENTAL HEALTH: THE LIFEMIND STUDY

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#### **Background**

The present study investigated the potential associations between chrononutrition and mental health in a sample of the Cypriot population. Chrononutrition, focuses on studying how synchronizing meals with circadian rhythms could improve metabolic health, while mental health constitutes a dynamic state influenced by biological, psychological, and social factors.

#### **Objective**

Based on previous literature, the hypothesis was that chrononutrition, particularly a shorter "eating window" (defined as the duration of time between the first and last eating episode of the day) aligned with the circadian rhythm, would be associated with better mental well-being, while delayed evening food consumption or skipping meals would be linked to higher levels of anxiety or depression.

#### **Methods**

This study assessed a sub-sample of participants of the LIFEMIND study – a cross-sectional online study. Mental health indicators (depression, anxiety, stress) and chrononutrition factors ("Eating window" and "Evening latency" – defined as the time interval between the eating occasion of the day and bedtime) were assessed using validated questionnaires. Factors such as BMI and activity level were also assessed. The associations between factors and their interaction was assessed using ANOVA tests with p<0.05 considered significant.

#### **Results**

227 adults (n=186 females (82%) living in Cyprus participated in the study. Levels of depression, anxiety, and BMI were not individually associated with the eating window. However, there was a statistically significant interaction between depression severity (F=2.476, p=0.007) and anxiety (F=3.082, p=0.001) with body mass index (BMI) on the eating window. There were no significant associations between 'evening latency' and any of the factors examined and no significant interaction between physical activity and BMI with "evening latency".

#### **Conclusions**

The study confirms the multidimensional relationship between chrononutrition and mental health and reinforces the need for individualized approaches to nutritional counseling and psychological support. Future research should utilize longitudinal designs and larger samples.

#### Keywords

Chrononutrition, Circadian Rhythm, Depression, Anxiety, Stress

#### References

- 1. Cardi, V., Leppanen, J. & Treasure, J. 2015, "The effects of negative and positive mood induction on eating behaviour: A meta-analysis of laboratory studies in the healthy population and eating and weight disorders", Neuroscience & Biobehavioral Reviews, vol. 57, pp. 299–309.
- 2. Craig, C.L., Marshall, A.L., Sjöström, M., Bauman, A.E., Booth, M.L., Ainsworth, B.E., Pratt, M., Ekelund, U., Yngve, A. & Sallis, J.F. 2003, "International physical activity questionnaire: 12-country reliability and validity.", Medicine and science in sports and exercise, vol. 35, no. 8, pp. 1381–1395.
- 3. Demetriou, C.A., et al., 2025, "Associations Between Chrono-Nutrition Behaviours and Cognitive Function in Middle-Aged Adults: The NUTRICO Cross-Sectional Cohort Study", Nutrition Bulletin.



- 4. Flanagan et al., 2021 Chrono-nutrition: from molecular and neuronal mechanisms to human epidemiology and timed feeding patterns", Journal of neurochemistry, vol. 157, no. 1, pp. 53–72.
- 5. Johnston, J.D., Ordovás, J.M., Scheer, F.A. & Turek, F.W. 2016, "Circadian rhythms, metabolism, and chrononutrition in rodents and humans", Advances in nutrition, vol. 7, no. 2, pp. 399–406.
- 6. Spitzer, R.L., Kroenke, K., Williams, J.B. & Löwe, B. 2006, "A brief measure for assessing generalized anxiety disorder: the GAD-7", Archives of Internal Medicine, vol. 166, no. 10, pp. 1092–1097.
- 7. Tjakradidjaja, F.A. 2024, "Chrononutrition and Mental Health: Exploring Links Between Eating Patterns Circadian Rhythms and Psychological Well-being", Global International Journal of Innovative Research, vol. 2, no. 10.
- 8. Veronda, A.C., Allison, K.C., Crosby, R.D. & Irish, L.A. 2020, "Development, validation and reliability of the Chrononutrition
- 9. Profile-Questionnaire", Chronobiology international, vol. 37, no. 3, pp. 375-394.
- 10. West, A.C. & Bechtold, D.A. 2015, "The cost of circadian desynchrony: evidence, insights and open questions", Bioessays, vol. 37, no.7, pp. 777–788.



#### **PP 007**

## ASSOCIATIONS BETWEEN FOOD INSECURITY, CHRONONUTRITION, AND BODY MASS INDEX (BMI)

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#### **Background**

Food insecurity is an important determinant of health, affecting both dietary quality and meal timing i.e. chrononutrition. Disruptions in meal timing can contribute to increased body weight, thus understanding associations between food insecurity and chrononutrition is important in public health strategies.

#### **Objective**

The present study aimed to investigate any associations between food insecurity and patterns of chrononutrition, these being eating window (time between the first and the last eating event of the day), evening latency (time between last meal of the day and bed time), and timing of the main meal, and the effect of these factors on body weight.

#### **Methods**

This study assessed a sub-sample of participants of the LIFEMIND study – a cross-sectional online study. BMI, social class, chrononutrition variables (eating window, evening latency, main meal timing), and food security were estimated using validated questionnaires. Data was analyzed using ANOVA, Chi-square, and regression tests and statistical significance was set as p < 0.05.

#### Results

261 adults residing in Cyprus participated in the study, 207 (79,3%) female and 54 (20,7%) male. Statistically significant associations were found between food security levels and BMI categories (p = 0.000), with BMI increasing alongside food security. The relationship was evident mainly within the first four BMI categories (underweight to obesity I) (p = 0.000), and BMI's overall effect was significant ( $\alpha$  = 0.003). When controlling for confounding factors (gender, chronic and metabolic conditions, mental, cardiovascular, and musculoskeletal disorders, and main meal timing), only 12.5% of the association was explained. A significant relationship also emerged between food security and main meal timing (p = 0.001), as individuals with lower food security were more likely to eat later in the day.

#### **Conclusions**

Food insecurity is linked to delayed meal timing and lower BMI, while higher food security is associated with earlier meals and higher BMI. These findings highlight the complex associations between food security, chrononutrition, and body weight, indicating the need for targeted public health interventions.

#### **Keywords**

Food insecurity, chrononutrition, Body mass index (BMI)

#### References

Chung, N., Bin, Y.S., Cistulli, P.A. and Chow, C.M. (2020). Does the Proximity of Meals to Bedtime Influence the Sleep of Young Adults? A Cross-Sectional Survey of University Students. International Journal of Environmental Research and Public Health, [online] 17(8). doi:https://doi.org/10.3390/ijerph17082677.

Drisdelle, C., Kestens, Y., Hamelin, A.-M. and Mercille, G. (2020). Disparities in Access to HealthyDiets: How Food Security and Food Shopping Behaviors Relate to Fruit and Vegetable Intake. Journal of the Academy of Nutrition and Dietetics, 120(11), pp.1847–1858. doi:https://doi.org/10.1016/j.jand.2020.03.020.



Gill, S. and Panda, S. (2015). A Smartphone App Reveals Erratic Diurnal Eating Patterns in Humans that Can Be Modulated for Health Benefits. Cell Metabolism, [online] 22(5), pp.789–798. doi:https://doi.org/10.1016/j.cmet.2015.09.005.

Giovana Longo-Silva, de, M., Pereira, K., Renan Serenini, Patricia and Egito, C. (2024). Association of Largest Meal Timing and Eating Frequency with Body Mass Index and Obesity. Clinical Nutrition ESPEN, 60. doi:https://doi.org/10.1016/j.clnesp.2024.01.022.

Wilkinson, M.J., Manoogian, E.N.C., Zadourian, A., Lo, H., Fakhouri, S., Shoghi, A., Wang, X., Fleischer, J.G., Navlakha, S., Panda, S. and Taub, P.R. (2020). Ten-Hour Time-Restricted Eating Reduces Weight, Blood Pressure, and Atherogenic Lipids in Patients with Metabolic Syndrome. Cell Metabolism, [online] 31(1), pp.92-104.e5. doi:https://doi.org/10.1016/j.cmet.2019.11.004.

Zhang, R., Cai, X., Lin, C., Yang, W., Lv, F., Wu, J. and Ji, L. (2022). The association between metabolic parameters and evening chronotype and social jetlag in non-shift workers: A meta-analysis. Frontiers in Endocrinology, 13. doi:https://doi.org/10.3389/fendo.2022.1008820.



#### **PP 008**

### EXPLORING DIETARY PATTERNS AND NUTRITION LABEL USE AMONG ADULTS IN CYPRUS: INSIGHTS AND ASSOCIATIONS. A CROSS-SECTIONAL STUDY

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#### **Background**

Unhealthy dietary habits are leading contributors to diet-related diseases worldwide. Nutrition label use (NLU) on packaged foods has been identified as a modifiable behavior influencing healthier food choices. Despite the global relevance of this topic, research exploring NLU in relation to overall dietary patterns within Mediterranean populations, particularly in Cyprus, remains limited. This study aimed to fill this gap by investigating dietary patterns and their associations with NLU and related determinants.

#### **Objective**

To identify the main dietary patterns followed by Cypriot adults using Principal Component Analysis (PCA) and to examine associations between these patterns, NLU, and demographic, lifestyle, and attitudinal factors.

#### Methods

A cross-sectional, web-based survey was conducted among 542 Cypriot adults aged 18+ years. Dietary data were collected via a validated Food Frequency Questionnaire and analyzed using PCA to derive dietary patterns. Self-reported NLU frequency and its predictors, including socio-demographics, nutrition knowledge, physical activity, and attitudes toward healthy eating, were examined using multivariate statistical analyses.

#### Results

Four dietary patterns were identified, explaining 35.8% of total variance: Mediterranean-like, Meat and Fish, Unhealthy, and Easy-Prepared. Overall NLU prevalence was 65.9%. Higher NLU was significantly associated with female gender, higher education, greater physical activity, better nutrition knowledge, and a positive attitude toward healthy diet. Adherence to the Mediterranean-like pattern correlated positively with NLU, younger age, and high nutrition awareness, whereas the Unhealthy pattern was linked to lower education and poor dietary attitudes.

#### **Conclusions**

This study highlights the positive association between nutrition label use and adherence to a Mediterranean-like dietary pattern among Cypriot adults. Promoting effective label interpretation and nutrition education could strengthen healthy eating behaviors and support sustainable public health strategies. These findings provide a foundation for evidence-based nutrition policies tailored to Mediterranean populations.

#### **Keywords**

Dietary patterns, Cross-sectional, Nutrition label use, Mediterranean diet, Public health.

#### References

Karageorgou, D., Magriplis, E., Mitsopoulou, A. V., Dimakopoulos, I., Bakogianni, I., Micha, R., . . . Roma, E. (2019). Dietary patterns and lifestyle characteristics in adults: results from the Hellenic National Nutrition and Health Survey (HNNHS) doi:10.1016/j. puhe.2019.03.013

Bonanni, A. E., Bonaccio, M., di Castelnuovo, A., de Lucia, F., Costanzo, S., Persichillo, M., . . . lacoviello, L. (2013). Food Labels Use Is Associated with Higher Adherence to Mediterranean Diet: Results from the Moli-Sani Study. Nutrients, 5(11), 4364-4379. doi:10.3390/nu5114364



Bonaccio, M., Di Castelnuovo, A., Costanzo, S., De Lucia, F., Olivieri, M., Donati, M. B., . . . Bonanni, A. (2013). *Nutrition knowledge is associated with higher adherence to Mediterranean diet and lower prevalence of obesity. Results from the Moli-sani study* doi:10.1016/j.appet.2013.04.026

Campos, S., Doxey, J., & Hammond, D. (2011). Nutrition labels on pre-packaged foods: a systematic review. *Public Health Nutrition*, 14(8), 1496-1506. doi:10.1017/S1368980010003290

Cooke, R., & Papadaki, A. (2014). Nutrition label use mediates the positive relationship between nutrition knowledge and attitudes towards healthy eating with dietary quality among university students in the UK Elsevier Ltd. doi:10.1016/j.appet.2014.08.039

Navarrete-Munoz, E. M., Torres-Collado, L., Valera-Gran, D., Gonzalez-Palacios, S., Maria Compan-Gabucio, L., Hernandez-Sanchez, S., & Garcia-de-la-Hera, M. (2018). Nutrition Labelling Use and Higher Adherence to Mediterranean Diet: Results from the DiSA-UMH Study. Nutrients, 10(4), doi:10.3390/nu10040442.



#### **PP 009**

ONGOING STUDY: INVESTIGATION OF DIETARY TRENDS AND EATING BEHAVIORS AMONG ADULTS USING THE EAT-26 QUESTIONNAIRE TO ASSESS THE RISK OF EATING DISORDERS OR DISORDERED EATING IN CYPRIOT ADULTS. CORRELATION WITH BODY DYSMORPHIC DISORDER (2025)

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#### **Background**

Disordered eating behaviours and body image disturbances are significant public health concerns that impact psychological well-being, particularly in young adults. This part of the study aimed to assess the prevalence and psychological correlates of disordered eating and body dysmorphic symptoms in Cypriot adults.

#### **Methods**

A cross-sectional, non-interventional observational design was employed. Data were collected via an anonymous, self-administered online questionnaire using Google Forms, completed by 170 Greek-speaking adults residing in Cyprus or abroad. Participants provided demographic and anthropometric data and completed three validated instruments: the Eating Attitudes Test (EAT-26), the Body Dysmorphic Disorder Questionnaire (BDDQ), and the Body Image Questionnaire (BIQ). Statistical analyses were performed using SPSS, incorporating descriptive statistics, reliability testing, Mann-Whitney U tests, chi-square analyses, and Spearman's rho correlations.

#### **Results**

Of the participants, 41.7% scored above the clinical cut-off ( $\geq$ 20) on the EAT-26, indicating a high risk for disordered eating. Body dysmorphic symptoms were reported by 59.8% of respondents, with females scoring significantly higher than males across all measures (p < 0.05). A strong positive correlation was found between BDDQ and BIQ total scores (p = 0.704, p < 0.0001). Behavioural and sociocultural factors, including binge eating, breakfast skipping, social shame, and exposure to influencer-driven body ideals, were significantly associated with higher BDDQ severity. Poor sleep efficiency was also linked to greater dysmorphic symptoms.

#### Conclusions

These findings highlight a substantial prevalence of disordered eating behaviours and body dysmorphic symptoms among Cypriot adults, emphasizing the need for targeted preventive measures and culturally sensitive screening strategies. Public health efforts should prioritize early identification, media literacy, and interventions tailored to women and young adults to mitigate the risk of disordered eating and body dysmorphia.

#### **Keywords**

EAT-26; eating disorders; body dysmorphic disorder; body image; cross-sectional study; Cyprus; disordered eating; young adults; mental health; psychosocial factors

#### References

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders: DSM-5.* 5th ed. Arlington, VA: American Psychiatric Publishing.

Andreou, E., Georgaki, E., Vlahoyiannis, A., Philippou, C., Ntorzi, N., Christoforou, C., Giannaki, C.D., Aphamis, G., Charidemou, E., Papaneophytou, C., et al. (2025). Changes in Lifestyle Behaviors, Shopping Habits and Body Weight Among Adults in Cyprus and Greece During COVID-19 Lockdown: A Cross-Sectional Study. Nutrients, 17(2), 214. https://doi.org/10.3390/nu17020214



Argyrides, M., & Sivitanides, M. (2017). Predictive factors of disordered eating and body image satisfaction in Cyprus: Predictors of Disordered Eating in Cyprus. European Journal of Counselling Psychology, 6(1), 63–74. https://doi.org/10.5964/ejcop.v6i1.109

Argyrides, M., Kkeli, N., & Koutsantoni, M. (2015). The comparison of Cyprus to six other European countries on body image satisfaction: The role of media influence and sociocultural factors. European Journal of Counselling Psychology, 4(1), 1–17.

Koushiou, M., Nikolaou, P., & Karekla, M. (2020). Prevalence and Correlates of Eating Disorders in Greek-Cypriot Adolescents and Young Adults. ResearchGate.

https://www.researchgate.net/publication/338565348\_Prevalence\_and\_correlates\_of\_eating\_disorders\_in\_greek-cypriot\_adolescents\_and\_young\_adults

Young, C. (2024). I'm a Dietitian & This Is What I Wish People Knew About Eating Disorders. EatingWell. <a href="https://www.eatingwell.com/eating-disorders-vs-disordered-eating-8605219">https://www.eatingwell.com/eating-disorders-vs-disordered-eating-8605219</a>

American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed.). Washington, DC: APA.

Grant, J.E., Menard, W., & Phillips, K.A. (2020). Pathologic grooming behaviors in individuals with body dysmorphic disorder. Annals of Clinical Psychiatry, 32(2), 89–96.

Hartmann, A.S., Poulton, R., & Wilhelm, S. (2018). The relationship between body dysmorphic disorder and eating disorders: Characteristics and therapeutic approaches. Harvard Review of Psychiatry, 26(4), 232–241. https://doi.org/10.1097/HRP.0000000000000196



#### **PP 010**

# A MIXED-METHOD EXPLORATION OF MINDFUL EATING INTERVENTIONS AND THE TRANSTHEORETICAL MODEL IN THE TREATMENT OF EMOTIONAL AND BINGE EATING DISORDERS IN GREEK CYPRIOT ADULTS

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#### **Background**

Obesity and related comorbidities, including poor sleep and vitamin D deficiency, remain major public health concerns in Mediterranean countries like Cyprus and Greece. While **Mindful Eating (ME)** has emerged as a behavioral strategy to support weight management and enhance overall well-being, its associations with **BMI**, **sleep duration**, **and vitamin D levels** remain underexplored in these populations.

#### **Objective**

To investigate the relationships between ME behaviors and key health outcomes—**BMI**, **sleep duration**, and **vitamin D** status—among Cypriot and Greek adults.

#### **Methods**

A cross-sectional study was conducted using two cohorts ( $N_1$  = 438 in 2022;  $N_2$  = 174 in 2023), totaling 612 participants. Adults aged 18+ completed the **Cyprus Mindful Eating Questionnaire (CyMEQ)**, a culturally adapted tool evaluating five ME domains (Awareness, Distraction, Disinhibition, Emotional, and External Cues). Self-reported data included anthropometrics, sleep duration, and vitamin D levels. Mann–Whitney U, chi-square, and Spearman correlation tests were used for analyses.

#### Results

Higher ME scores—particularly in Awareness and Disinhibition—were significantly associated with **lower BMI** (r = -0.25, p < 0.01) and **longer sleep duration** (r = 0.22, p = 0.01). Vitamin D levels were positively correlated with both sleep (r = 0.22, p = 0.01) and **ME scores** (r = 0.18, p = 0.03). Notable differences in ME behavior and vitamin D levels were observed between the two cohorts, suggesting potential temporal or behavioral shifts.

#### Conclusions

This study highlights meaningful associations between ME behaviors and BMI, sleep, and vitamin D status in Mediterranean adults. Findings support the integration of **mindfulness-based nutrition education**, sleep hygiene, and vitamin D awareness in public health interventions targeting obesity, emotional eating and lifestyle-related conditions.

#### **Keywords**

Mindful Eating, BMI, Vitamin D, Sleep Duration, Mediterranean Diet, Emotional Eating

#### References

NCD Risk Factor Collaboration (NCD-RisC). Worldwide trends in underweight and obesity from 1990 to 2022: A pooled analysis of 3663 population-representative studies with 222 million children, adolescents, and adults. Lancet 2024, 403, 1027–1050. [CrossRef] [PubMed]

Andreou, E.; Philippou, C.; Papandreou, D. Effects of an Intervention and Maintenance Weight Loss Diet with and without Exercise on Anthropometric Indices in Overweight and Obese Healthy Women. Ann. Nutr. Metab. 2011, 59, 187–192. [CrossRef]



Tapper, K. Mindful eating: What we know so far. Nutr. Bull. 2022, 47, 168-185. [CrossRef] [PubMed]

Minari, T.P.; de Araújo-Filho, G.M.; Tácito, L.H.B.; Yugar, L.B.T.; Rubio, T.d.A.; Pires, A.C.; Vilela-Martin, J.F.; Cosenso-Martin, L.N.; Fattori, A.; Yugar-Toledo, J.C.; et al. Effects of Mindful Eating in Patients with Obesity and Binge Eating Disorder. Nutrients 2024, 16, 884. [CrossRef]

Hilton, L.; Hempel, S.; Ewing, B.A.; Apaydin, E.; Xenakis, L.; Newberry, S.; Colaiaco, B.; Maher, A.R.; Shanman, R.M.; Sorbero, M.E.; et al. Mindfulness Meditation for Chronic Pain: Systematic Review and Meta-analysis. Ann. Behav. Med. 2016, 51, 199–213. [CrossRef]

Nelson, J.B. Mindful Eating: The Art of Presence While You Eat. Diabetes Spectr. 2017, 30, 171-174. [CrossRef]

Nicholls, B.; Ang, C.S.; Kanjo, E.; Siriaraya, P.; Bafti, S.M.; Yeo, W.-H.; Tsanas, A. An EMG-based Eating Behaviour Monitoring system with haptic feedback to promote mindful eating. Comput. Biol. Med. 2022, 149, 106068. [CrossRef] [PubMed]

Kristeller, J.L.; Wolever, R.Q. Mindfulness-Based Eating Awareness Training for Treating Binge Eating Disorder: The Conceptual Foundation. Eat. Disord. 2010, 19, 49–61. [CrossRef]

Framson, C.; Kristal, A.R.; Schenk, J.M.; Littman, A.J.; Zeliadt, S.; Benitez, D. Development and Validation of the Mindful Eating Questionnaire. J. Am. Diet. Assoc. 2009, 109, 1439–1444. [CrossRef] [PubMed]Nutrients 2024, 16, 4308

Xyda, S.E.; Kotsa, K.; Doumas, A.; Papanastasiou, E.; Garyfallos, A.A.; Samoutis, G. Could the Majority of the Greek and Cypriot Population Be Vitamin D Deficient? Nutrients 2022, 14, 3778. [CrossRef] [PubMed] [PubMed Central] (up to 6-10)



#### **PP 011**

# ASSESSING UNIVERSITY STUDENTS' KNOWLEDGE AND INTERPRETATION OF FOOD LABELS AND THEIR RELATIONSHIP WITH FOOD CHOICES AND MEDITERRANEAN DIET ADHERENCE: A QUANTITATIVE CROSS-SECTIONAL ANALYSIS

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The present cross-sectional study aims to investigate the knowledge and interpretation of food labeling among university students, as well as the influence of food labeling on their food choices in a university restaurant setting. A structured questionnaire, based on Regulation (EU) No 1169/2011 and incorporating the 14-point Mediterranean Diet Adherence Screener (MEDAS), was distributed to 123 students. The data collected included demographic and socioeconomic information, anthropometric data, dietary habits, knowledge and understanding of food labels, and adherence to the Mediterranean Diet as measured by the MED Score. Descriptive and inferential statistics, including the chi-square test, t-test, Mann-Whitney U, Pearson and Spearman correlations, and Kruskal-Wallis test, were used for data analysis. Results indicated that while most students had moderate knowledge of food labeling, there were notable gaps in their understanding and interpretation of nutrition labels. Importantly, a positive correlation was found between the correct interpretation of food labels and higher adherence to the Mediterranean Diet. Limitations of this study include the use of a convenience sampling method and the inability to perform objective anthropometric measurements due to the online nature of the data collection. Despite these limitations, the findings underscore the need for targeted nutrition education initiatives aimed at improving students' understanding of food labeling and fostering healthier food choices. Future research could expand upon these findings by including more diverse and representative student populations and exploring additional factors influencing dietary choices and label comprehension.

#### **Keywords**

Food labelling, Nutritional information, Mediterranean Diet Score, MED Score, University students, Eating habits, Nutrition education, Cross-sectional study

#### References

Alshahrani, A., Batais, M., Mujammami, M., Alrasheed, A., Almigbal, T., Aljulifi, M., Aldosari, A. and Almaflehi, N. (2023) Assessment of food labeling knowledge and associated reading barriers among patients with diabetes. Journal of Family Medicine and Primary Care, 12(2), p.264. Available at: <a href="https://doi.org/10.4103/jfmpc.jfmpc.1405\_22">https://doi.org/10.4103/jfmpc.jfmpc.1405\_22</a> (Accessed: 25 April 2025).

Bach, A., Serra-Majem, L., Carrasco, J.L., Roman, B., Ngo, J., Bertomeu, I. and Obrador, B. (2006) *The use of indexes evaluating the adherence to the Mediterranean diet in epidemiological studies: a review. Public Health Nutrition*, 9(1a), pp.132–146. Available at: https://doi.org/10.1079/phn2005936 (Accessed: 10 April 2025).

Bekar, C. and Goktas, Z. (2022) *Validation of the 14-item Mediterranean diet adherence screener. Clinical Nutrition ESPEN, 53.* Available at: https://doi.org/10.1016/j.clnesp.2022.12.026 (Accessed: 10 April 2025).

Bonanni, A., Bonaccio, M., di Castelnuovo, A., de Lucia, F., Costanzo, S., Persichillo, M., Zito, F., Donati, M., de Gaetano, G. and Iacoviello, L. (2013) *Food labels use is associated with higher adherence to Mediterranean diet: results from the Moli-Sani Study. Nutrients*, 5(11), pp.4364–4379. Available at: https://doi.org/10.3390/nu5114364 (Accessed: 25 April 2025).

Christoforou, C., (n.d.). Statistical tests. University of Nicosia. Unpublished teaching material.

Cristián Ortíz, C., Guaya, V. and Salinas, A. (2022) *Is nutrition labeling associated with decreased obesity? A quantitative approach to nutritional health policy in Ecuador. Journal of Public Health Policy*, 43(4), pp.593–612. Available at: <a href="https://doi.org/10.1057/s41271-022-00368-4">https://doi.org/10.1057/s41271-022-00368-4</a> (Accessed: 25 April 2025).

Dane'el, M.S. (2018) Nutrition label accuracy and the theory of triadic influence: The impact of knowledge on healthy food choices in a predominantly Hispanic sample. [online] ScholarWorks@UTEP. Available at: <a href="https://scholarworks.utep.edu/open\_etd/1419/">https://scholarworks.utep.edu/open\_etd/1419/</a> (Accessed: 26 May 2025).



Europa.eu (2020) EUR-Lex - 52020DC0207 - EN - EUR-Lex. [online] Available at: https://eur-lex.europa.eu/legal-content/EL/ALL/?uri=CELEX:52020DC0207 (Accessed: 25 April 2025).

Evelyn, H., Aziz, A.F. and Sariman, S. (2020) Associations of knowledge, attitude and practices of food label on cardiovascular diseases (CVD) risk amongst university students in Selangor, Malaysia. Journal of Nutritional Science and Vitaminology, 66(Supplement), pp.S275–S282. Available at: <a href="https://doi.org/10.3177/jnsv.66.s275">https://doi.org/10.3177/jnsv.66.s275</a> (Accessed: 25 April 2025).

Evelyn, H., Aziz, A.F. and Sariman, S. (2020) Associations of knowledge, attitude and practices of food label on cardiovascular diseases (CVD) risk amongst university students in Selangor, Malaysia. Journal of Nutritional Science and Vitaminology, 66(Supplement), pp.S275–S282. Available at: https://doi.org/10.3177/jnsv.66.s275 (Accessed: 16 May 2025).



#### **PP 012**

## ADHERENCE TO MEDITERRANEAN DIET AND ITS IMPACT TO PEOPLE WITH BREAST CANCER, A NARRATIVE REVIEW.

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This narrative review investigates the relationship between adherence to the Mediterranean Diet (MD) and breast cancer, focusing on both the prevention and prognosis of the disease. By synthesizing recent studies, it is evident that high adherence to the MD—characterized by high intake of fruits, vegetables, whole grains, fish, and extra-virgin olive oil—is associated with a significant reduction in the risk of developing breast cancer, particularly among postmenopausal women and hormone receptor-negative subtypes. Moreover, several studies report that maintaining the MD even after diagnosis contributes to improved prognosis, increased survival, and enhanced quality of life for patients. Although most studies are observational in nature, the convergence of results supports the perspective that the MD represents an effective and safe dietary pattern. This review also highlights variations in findings due to geographic or methodological heterogeneity, emphasizing the need for further randomized clinical trials. Overall, the evidence underscores the crucial role of nutrition in both cancer prevention strategies and therapeutic approaches, suggesting the Mediterranean Diet as a key element of healthy living and supportive care for breast cancer patients.

#### **Keywords**

Mediterranean Diet, Breast Cancer, Prevention, Prognosis, Quality of Life, Systematic Review, Narrative Review

#### References

AMERICAN INSTITUTE FOR, C.R., 2024-last update, Breast Cancer. <a href="https://www.aicr.org/cancer-survival/cancer/breast-cancer/">https://www.aicr.org/cancer-survival/cancer/breast-cancer/</a>.

AMERICAN, C.S., 2024-last update, Breast cancer statistics 2024. https://pubmed.ncbi.nlm.nih.gov/39352042/.

BHASKARAN, K., 2014. Body-mass index and risk of 22 specific cancers: a population-based cohort study of 5·24 million UK adults. *The Lancet*, 384(9945), pp. 755–765.

CALDAS, C., 2012. The genomic and transcriptomic architecture of 2,000 breast tumours reveals novel subgroups. *Nature*, 486(7403), pp. 346–352.

CANUDAS, S., HERNANDEZ-ALONSO, P., GALIÉ, S., MURALIDHARAN, J., MORELL-AZANZA, L., ZALBA, G., MILAGRO, F.I., MANSEGO, M.L., MARTINEZ, J.A. and CORELLA, D., 2020. Dietary patterns and telomere length: systematic review and meta-analysis. *Advances in Nutrition*, 11(4), pp. 944–963.

COLLABORATIVE GROUP ON HORMONAL FACTORS IN, BREAST CANCER, 2019. Type and timing of menopausal hormone therapy and breast cancer risk: individual participant meta-analysis of the worldwide epidemiological evidence. *The Lancet*, 394(10204), pp. 1159–1168.

DERNINI, S. and BERRY, E.M., 2015. Mediterranean diet: From a healthy diet to a sustainable dietary pattern. Frontiers in Nutrition, 2, pp. 15.

DINU, M., PAGLIAI, G., CASINI, A. and SOFI, F., 2018. Mediterranean diet and multiple health outcomes: an umbrella review of meta-analyses of observational studies and randomized trials. *European journal of clinical nutrition*, 72(1), pp. 30–43.

DUFFY, M.J., SYNNOTT, N.C. and CROWN, J., 2023. Omics approaches to understanding and treating breast cancer: Opportunities and challenges. *Cancer treatment reviews*, 117, pp. 102517.

#### **PP 013**

# IMPACT OF MILITARY SERVICE ON EATING BEHAVIORS, BODY WEIGHT, AND BODY FAT: A CROSS-SECTIONAL OBSERVATIONAL STUDY OF SOLDIERS IN THE CYPRUS MILITARY

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#### **Background**

The operational effectiveness of the Armed Forces depends significantly on the health and fitness of its personnel, influenced by dietary habits and physical activity.

#### **Purpose**

This study aims to evaluate the dietary habits, nutritional needs, and weight fluctuations of new recruits in the Cyprus Army across three phases of their service. The objective is to align these findings with the General Rule of Food Supply and Dietary Value (DV) guidelines of the Cyprus Armed Forces and propose necessary dietary modifications to prevent weight gain during military service.

#### Methods

Data were collected from 583 new recruits, including dietary preferences, physical activity levels, and personal metrics (age, height, weight, waist circumference, body composition), along with medical and dietary histories. Assessments were conducted at three key points: upon recruitment, six months later during basic combat training, and immediately before demobilization, twelve months after recruitment. A pilot study was also conducted.

#### Results

Comparisons between the General Rule of Food Supply and DV in the Cyprus Armed Forces and the National Dietary Guidelines for Adults revealed significant discrepancies. Notably, there was an increase in body weight and BMI, with a shift in BMI categorization towards overweight status among recruits (p<0.0001). The study also found that recruits generally did not adhere to dietary guidelines before, during, or after recruitment.

#### **Conclusions**

The findings suggest that comprehensive dietary adjustments are required across the military command to optimize the nutritional status and health of soldiers

#### **Keywords**

Dietary habits, Physical activity, BMI, Food supply guidelines, Cyprus Armed Forces, Nutritional needs, Weight management, Military health

#### References

Position of the Academy of Nutrition and Dietetics, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and Athletic Performance. 2016. Canadian journal of dietetic practice and research: a publication of Dietitians of Canada = Revue canadienne de la pratique et de la recherche en dietetique: une publication des Dietetistes du Canada, 77(1), pp. 54.

Consumer segmentation based on the level and structure of fruit and vegetable intake: an empirical evidence for US adults from the National Health and Nutrition Examination Survey (NHANES) 2005–2006. 2011. CABI Pub. on behalf of the Nutrition Society.



Weight loss interventions in young people (18 to 25 year olds): a systematic review. 2010a. Oxford, UK: Blackwell Publishing Ltd.

Weight loss interventions in young people (18 to 25 year olds): a systematic review. 2010b. Obesity reviews, 11(8), pp. 580-592.

The practical guide [electronic resource]: identification, evaluation, and treatment of overweight and obesity in adults / National Institutes of Health, National Heart, Lung, and Blood Institute [and] North American Association for the Study of Obesity. 2000. Bethesda, Md.]: The Institute, 2000.

Health Information on dietary intake. Ods.od.nih.gov. 2021.

World Health Organization. Available: https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight.

Euro.who.int. 2021. Body mass index - BMI. [online] Available at: <a href="https://www.euro.who.int/en/health-topics/disease-prevention/nutrition/a-healthy-lifestyle/body-mass-index-bm">https://www.euro.who.int/en/health-topics/disease-prevention/nutrition/a-healthy-lifestyle/body-mass-index-bm</a> [Accessed 27 April 2022].



#### **PP 014**

#### A SYSTEMATIC REVIEW ON HYPOGLYCAEMIC RISKS IN EATING DISORDERS

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#### **Background**

Hypoglycaemia is a serious, sometimes silent complication in people with eating disorders (EDs), delaying recognition and treatment

#### Introduction

Across ED subtypes, anorexia nervosa-restricting (AN-R), anorexia nervosa-binge/purge (AN-BP), bulimia nervosa (BN), binge-eating disorder (BED), and avoidant/restrictive food intake disorder (ARFID); behavioural, nutritional, and medical factors can disrupt glucose homeostasis, especially during restriction and refeeding.

#### **Objective**

To quantify and characterise hypoglycaemia risk in EDs across diagnostic subtypes.

#### **Methods**

Following PRISMA, we searched MEDLINE, Embase and PsycINFO for English-language studies published 2012–2022 (search conducted March–June 2022). Eligible observational studies and case reports enrolled adolescents or adults with DSM-IV/DSM-5 eating disorders and reported hypoglycaemia risk, prevalence/incidence, predictors or complications. Hypoglycaemia was defined as <3.5 mmol/L (64 mg/dL); severe hypoglycaemia as <3.0 mmol/L (54 mg/dL). Titles/abstracts and full texts were screened and data extracted by the author; risk of bias was assessed with the Academy of Nutrition and Dietetics Quality Criteria Checklist. Given heterogeneity, findings were synthesised narratively; reference lists were not hand-searched.

#### **Results/Discussion**

Fifteen studies (2012-2022; N = 34,344) met criteria, mostly observational, plus case reports. Eight studies reported prevalence of (severe) hypoglycaemia in ED cohorts. Biochemical predictors included elevated liver function tests (predicting hypoglycaemia; p= 0.005) and low prealbumin (≈2-fold higher risk; OR 2.21, 95% CI 1.05−4.63). Low-calorie refeeding protocols increased risk (p= 0.012). Insulin manipulation in type 1 diabetes appeared more prevalent among those with EDs. Electrolyte disturbances relevant to refeeding (hypophosphataemia, hypokalaemia, hyponatraemia) were frequent. Psychotropics (olanzapine, paroxetine) were associated with more hypoglycaemic events. Reported complications included cardiac abnormalities (e.g., Takotsubo cardiomyopathy). No eligible ARFID data were identified.

#### **Conclusion**

Hypoglycaemia is common across EDs and warrants routine screening and proactive management, particularly during refeeding. High-quality prospective studies and trials are needed to define incidence, mechanisms and prevention, including in under-studied groups such as ARFID.

#### Keywords

Hypoglycaemia; Eating disorders; Anorexia nervosa; Bulimia nervosa; Binge-eating disorder

#### References

Berger G et al. Insulin manipulation and complications in adolescents with type 1 diabetes. Pediatr Diabetes. 2018. Gaudiani JL et al. Low prealbumin predicts complications in severe anorexia nervosa. Int J Eat Disord. 2013.

Gibson D et al. Extreme anorexia nervosa: medical findings and outcomes. J Eat Disord. 2020.

Kikuchi K et al. Takotsubo cardiomyopathy after hypoglycemia in anorexia nervosa. Ann Gen Psychiatry. 2021.

Matthews K et al. Higher-calorie refeeding protocol and adverse outcomes in eating disorders. J Acad Nutr Diet. 2018.

Mehler PS et al. Medical findings in 1,026 adult inpatient-residential eating-disordered patients. Int J Eat Disord. 2018.

Rosen E et al. Liver dysfunction in severe anorexia nervosa. Int J Eat Disord. 2015.



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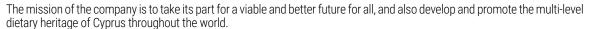




Charalambides Christis, the largest and longest living Cypriot milk industry is a leader in the production and distribution of foods. The company has always offered products of high nutritional value, according to the international quality standards, showing care throughout the supply chain, by cooperating with local producers.

The quality offered by Charalambides Christis has been recognized internationally, with the company being active in exports in 37 countries, constituting one of the largest export companies in Cyprus.

The vision of the company is to offer products of high nutritional value, maintaining the authenticity of flavors through unlimited choices of quality food enjoyment, with free and equal access to all Cypriot citizens and consumers, as well as to contribute decisively to the new model of sustainable development, with respect for human nature and younger generations.





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