### 01:377:416 Exploring the Origins of the Mediterranean Diet

Credits	Language	Term	Year	Start Date	End Date
6	English	Summer	2022	July 7	July 27

# Course Description:

Diets adopted by the Mediterranean populations have been a subject of interest since antiquity, with more recent investigations demonstrating their numerous health benefits. The Rockefeller Foundation's study in 1940s and the Seven Countries Study in 1950s both highlighted the Greek islands diet as a palatable primarily plant-based dietary pattern with distinct differences compared to the western-type diet and a strong link to the maintenance of good health. The local diet of the Greek islands is what we know today as the Mediterranean diet, acknowledged as an Intangible Cultural Heritage of Humanity by UNESCO and proposed as one of the three major health promoting dietary patterns in the 2015-2020 Dietary Guidelines for Americans. The 3-week educational program «Exploring the Origins of the Mediterranean Diet in the Greek islands» aims to provide students the opportunity to study the Mediterranean diet in its place of origin, along with sustainable food production and consumption patterns, emphasizing on traditional Mediterranean practices.

During the first days of the course, students will visit Athens, the capital of Greece, where they will participate in lectures, cooking classes and educational activities about the history, evolution, culinary aspects and health benefits of the traditional Greek lifestyle. For the three core weeks of the program, educational activities will take place in the Greek Islands of Leros and Kos (the island of Hippocrates, father of medicine). While there, students will learn about landmark studies carried out in the Greek islands, to familiarize with the history and evolution of the Greek islands diet and lifestyle. The program will focus on the fundamental principles of the Mediterranean diet through lectures regarding its health benefits, and workshops on the production and nutritional properties of wine and olive oil, both fundamental parts of the Greek islands diet. In line with the island's rich food production sector, lectures and educational activities will address the cultivation of citrus fruits, green leafy vegetables and herbs, and the production of honey, traditional dairy products and spirits. Students will also be exposed to the complex concept of food systems and its association with culture, public health, economy and the environment through the example of the agriculture-based diet and economy of the Greek islands as well as the characteristics of environmentally friendly and sustainable food production with emphasis on organic agriculture and livestock applications.

During the 3-week course, some days will be devoted to theoretical lectures and discussion sessions on the scientific and cultural themes of the day combined with workshops, experiential activities or studying. Other days will be devoted entirely to field trips and interactive educational activities, including visits to monumental sites, observation of Greek islands lifestyle practices, demonstrations of traditional and modern cultivation and food production procedures and techniques, cooking classes with emphasis on traditional Greek products, tasting of local Mediterranean recipes, as well as collective sports activities in nature.

# Pre-Requisites:

- 1. Instructor's consent
- 2. Minimum GPA 2.5
- 3. Online Application and personal interview

# **Objectives:**

- 1. Gain an insight into the concept of the Mediterranean lifestyle (with emphasis on the traditional Greek islands lifestyle) as a holistic way of living, its origins and its evolution throughout time.
- 2. Become aware of the ancient Greek civilization, recognize its influence on modern European civilizations and be able to identify its differences compared to Western civilizations.
- 3. Recognize the importance of olive oil, wine, fruits, vegetables and herbs in the traditional Cretan diet,

become familiar with their cultivation-production-processing techniques, and critically understand their cultural importance, nutritional value and health properties.

- 4. Gain competencies in traditional Greek islands diet and cultural practices, such as the design of nutritionally balanced non-meat meals, the application of traditional food production, preservation and cooking techniques and traditional rural activities.
- 5. Be able to identify the unique characteristics of the Greek islands diet and its differences compared to other dietary patterns adopted around the world (e.g. the Western type diet).
- 6. Obtain the skills to evaluate, compare and properly select foods according to their nutritional value, degree of processing, locality, seasonality and eco-friendliness.
- 7. Critically understand and interpret the available scientific data regarding the beneficial effects of the Cretan diet on health and disease.
- 8. Be able to identify the unique characteristics of organic food production (legislation, production techniques and standards) and its differences compared to conventional food production.
- 9. Acknowledge the multidimensional role of food systems, i.e. environmental (both positive and negative), nutritional (food security and public health), developmental (development of sustainable rural communities) and social (preservation of tradition, family structures and culinary heritage).
- 10. Become aware of the concept of sustainable development, as a process for meeting human development goals while maintaining the ability of the ecosystem to continue to provide the natural resources upon which the economy and society depend.

### Learning Experiences:

The course will engage the student in the following types of learning experiences (total 220 hours):

- 140 hours contact (as presented in the preliminary syllabus)
- Reading for tasks on the portfolio 30 hours
- Preparing for Online quizzes & course discussions- 20 hours
- Working on final project (presentation) 30 hours

### **Reading List:**

- Sidossis LS & Kales S (2021). Textbook of Lifestyle Medicine [Optional].
- Lectures & experiential activities notes (printed and electronic material uploaded to Canvas). List of some examples:
  - Introduction to Mediterranean Lifestyle
  - Food production, sustainable & organic agriculture
  - Connecting ancient history with contemporary way of living
  - Experiencing Seasonality, Locality, Biodiversity, Eco-Friendliness and Traditionality of the Mediterranean Diet
  - Collective Culinary Activities and Convivial Eating in the Mediterranean Diet
  - Coffee consumption and Greek coffee preparation: Coffee consumption and health benefit
  - Wine consumption and health benefits, Greek wines and other Greek spirits and distillates
  - Wholegrain cereals
  - Apiculture and honey production: Health benefits of honey
  - Herbs, spices and greens. Their use in cooking, flavoring and hydration.
  - Olives and Olive oil, origins of the olive tree, the olive tree in Greece, olives, production of olive oil, types of olive oils, health benefits, culinary use of olive oil and frying with olive oil
  - Knossos: A journey to Minoan civilization and lifestyle
  - Lifestyle physical activities
  - Traditional vs Modern Mediterranean Lifestyle & Diet, Is there any link?
- Scientific reading list of 100 research papers relevant to the course's learning objectives. List of some

examples:

- A. Bach-Faig, E. M. Berry, D. Lairon, J. Reguant, A. Trichopoulou, S. Dernini, F. X. Medina, M. Battino, R. Belahsen, G. Miranda, and L. Serra-Majem, "Mediterranean diet pyramid today. Science and cultural updates," *Public Health Nutr.*, vol. 14, no. 12A, pp. 2274–2284, 2011.
- C. Davis, J. Bryan, J. Hodgson, and K. Murphy, "Definition of the mediterranean diet: A literature review," *Nutrients*, vol. 7, no. 11, pp. 9139–9153, 2015.
- R. Altomare, F. Cacciabaudo, G. Damiano, V. D. Palumbo, M. C. Gioviale, M. Bellavia, G. Tomasello, and A. I. Lo Monte, "The mediterranean diet: A history of health," *Iran. J. Public Health*, vol. 42, no. 5, pp. 449–457, 2013.
- R. Engler-Stringer, "Food, cooking skills, and health: A literature review," Can. J. Diet. Pract. Res., vol. 71, no. 3, pp. 141–145, 2010.
- A. Giacosa, R. Barale, L. Bavaresco, M. A. Faliva, V. Gerbi, C. La Vecchia, E. Negri, A. Opizzi, S. Perna, M. Pezzotti, and M. Rondanelli, "Mediterranean Way of Drinking and Longevity.," *Crit. Rev. Food Sci. Nutr.*, vol. 8398, no. January 2015, pp. 37–41, 2014.
- M. Iriti and E. M. Varoni, "Cardioprotective effects of moderate red wine consumption: Polyphenols vs. ethanol," *J. Appl. Biomed.*, vol. 12, no. 4, pp. 193–202, 2014.
- A. Gil, R. M. Ortega, and J. Maldonado, "Wholegrain cereals and bread: a duet of the Mediterranean diet for the prevention of chronic diseases.," *Public Health Nutr.*, vol. 14, no. 12A, pp. 2316–22, 2011.
- JL. Johnston, JC. Fanzo and B. Cogill, "Understanding Sustainable Diets: A Descriptive Analysis of the Determinants and Processes That Influence Diets and Their Impact on Health, Food Security, and Environmental Sustainability", *American Society for Nutrition. Adv. Nutr.* vol. 55, pp. 418– 429, 2014
- AD. Dangour, SK. Dodhia, A. Hayter, E. Allen, K. Lock, and R. Uauy, "Nutritional quality of organic foods: a systematic review", *Am J Clin Nutr*, vol. 90, pp. 680–5, 2009
- JP. Reganold and JM. Wachter, "Organic agriculture in the twenty-first century", Nature Plants, vol 2, pp. 1-8, 2016
- L. Seconda ,J. Baudry, B. Allès, O. Hamza, C. Boizot-Szantai, L. Soler, P. Galan, S. Hercberg, D. Lairon and E. Kesse-Guyot, "Assessment of the Sustainability of the Mediterranean Diet Combined with Organic Food Consumption: An Individual Behaviour Approach", *Nutrients*, vol .9, no. 1, pp.61, 2017
- JL. Slavin and B. Lloyd, "Health Benefits of Fruits and Vegetables", American Society for Nutrition. Adv. Nutr., vol.3, pp.506–516, 2012
- AL. Garcia, R. Reardon, M. McDonald and EJ. Vargas-Garcia, "Community Interventions to Improve Cooking Skills and Their Effects on Confidence and Eating Behaviour", *Curr Nutr Rep*, vol.5, pp.315–322, 2016
- L. Yates and A. Warde, "Eating together and eating alone: meal arrangements in British households", *British Journal of Sociology*, vol. 68, no.1, pp. 97-118, 2016
- JA. Fulkerson, N. Larson, PhD, MPH, M. Horning, D. Neumark-Sztainer, "A Review of Associations Between Family or Shared Meal Frequency and Dietary and Weight Status Outcomes Across the Lifespan", J Nutr Educ Behav., vol.46, pp.2-19, 2014
- G. Siasos, E. Oikonomou, C. Chrysohoou, D. Tousoulis, D. Panagiotakos, M. Zaromitidou, K.Zisimos, E. Kokkou, G. Marinos, AG. Papavassiliou, C. Pitsavos and C. Stefanadis, "Consumption of a boiled Greek type of coffee is associated with improved endothelial function: The Ikaria Study", *Vascular Medicine*, vol.18, no.2, pp. 55–62, 2013
- MG. Miguel, MD. Antunes and ML. Faleiro, "Honey as a Complementary Medicine", Integrative Medicine Insights, vol.12, pp. 1–15, 2017
- A. Bower, S. Marquez and EG. de Mejia, "The Health Benefits of Selected Culinary Herbs and Spices Found in the Traditional Mediterranean Diet", *Crit Rev Food Sci Nutr*, vol.56, pp.2728– 2746, 2016
- Leaflets relevant to the course's educational and cultural activities :
  - Athens-Attica Guide, Ministry of Tourism, Greek National Tourism Organisation
  - Gastronomy, Ministry of Tourism, Greek National Tourism Organisation

## Student Responsibilities:

**Pre-departure assignments:** Students are expected to answer an online quiz and post in course discussion prior to their departure in order to be introduced to the objectives of the course.

**Presentation Group-Partner:** All students are expected to work in small groups (3-4 students) or pairs (depending on the total number of students enrolled in the course) to prepare a 15-minute presentation related to the course's learning objectives and topics being covered during the class.

Written assignment: Graduate students are expected to complete an individual written assignment (2000 words) related to the course's learning objectives.

**Portfolio:** Students will have a portfolio of evidence in which they will record all the information necessary to demonstrate the completion of the specific objectives and any other relevant information. In order to demonstrate the completion on course' objectives students are expected to answer short essay type questions for each educational activity (lecture or experiential activity). The portfolio will be completed through the PAL (Peer Assisted Learning) method. The term PAL essentially means that each student will work in collaboration with at least one other student in order to develop their knowledge and skills.

**Online quizzes & course discussions:** Students are expected to answer online quizzes and post in course discussions.

**Attendance:** Students are expected to attend all lectures and experiential activities; if you expect to miss a class, please use the University absence reporting website http://sims.rutgers.edu/ssra to indicate the date and reason for your absence. An e-mail is then automatically sent to the instructor.

**Cell Phones:** The use of cell phones and other electronic devices during the lectures and experiential activities is strictly prohibited.

Extra Credit: There are absolutely no opportunities for extra credit.

Academic Honor Code: As an academic community dedicated to the creation, dissemination, and application of knowledge, Rutgers University is committed to fostering an intellectual and ethical environment based on the principles of academic integrity. Academic integrity is essential to the success of the University's educational and research missions, and violations of academic integrity constitute serious offenses against the entire academic community. This academic integrity policy is designed to guide students as they prepare assignments, take examinations, and perform the work necessary to complete their degree requirements. The full honor code can be viewed at http://academicintegrity.rutgers.edu/academic-integrity-policy/.

Evaluation will be based on the above criteria, according to the following point distribution:

### Course Requirements for Undergraduate Students

Coursework	Due Date	Possible Points	
Course preparation/pre-departure assignments	July 6 <sup>th</sup>	5 points	
Participation (attention and interest in course activities) & Professionalism (professional behavior, teamwork and communication)	throughout the course	15 points	
Online quizzes & course discussions	As specified in syllabus	25 points	
Portfolio	July 27 <sup>th</sup>	25 points	
Presentation Group-Partner	July 27 <sup>th</sup>	30 points	
Total		100	

### Course Requirements for Graduate Students

Coursework	Due Date	Possible Points
Course preparation/pre-departure assignments	July 6 <sup>th</sup>	5 points
Participation (attention and interest in course activities) & Professionalism (professional behavior, teamwork and communication)	Throughout the course	15 points
Online quizzes & course discussions	As specified in syllabus	25 points
Portfolio	July 27 <sup>th</sup>	25 points
Presentation Group-Partner	July 27 <sup>th</sup>	15 points
Written assignment	August 6 <sup>th</sup>	15 points
Total		100

### Grading Scale:

A 100 -90	B+ 89-85	B 84-80	C+ 79-77	C 74-70
D 69-60	Below 60-F			

Grades of xx.5 and above will be rounded up to the next highest number whereas grades of less than xx.5 will be rounded down to the next lowest number.

Concerns regarding grades should be addressed during the course, not after the course has been concluded.

### Instructors:

Labros Sidossis, PhD, Department of Kinesiology and Health, School of Arts and Sciences, Rutgers University.

# American with Disability Act Compliance:

In accordance with the ADA, reasonable accommodations will be made for students with documented special needs. Students who require special assistance or accommodations must follow the procedures outlined at https://ods.rutgers.edu/students/registration-form. Full disability policies and procedures are available at https//ods.rutgers.edu.

Student-Wellness Services:

### Just In Case Web App

### http://codu.co/cee05e

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

### Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ www.rhscaps.rutgers.edu/

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

### Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

## **Disability Services**

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <u>https://ods.rutgers.edu/</u>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <u>https://ods.rutgers.edu/students/documentation-guidelines</u>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <u>https://ods.rutgers.edu/students/registration-form</u>.

### **Scarlet Listeners**

(732) 247-5555 / http://www.scarletlisteners.com/

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.