



INTERNATIONAL CONFERENCE ON MEDITERRANEAN DIET AND GASTRONOMY

Linking Innovation, Sustainability and Health

15-16 October, University of Évora

Book of Abstracts

Organizing partners:





Committee

Scientific Committee

Chair of the conference

Elsa Lamy, University of Évora (ICAAM - Institute of Mediterranean Agricultural and Environmental Sciences)

Committee

Ana Beatriz, Moratinos, University of Extremadura, Spain

Anabela Romano, University of Algarve, Portugal

Célia Quintas, University of Algarve, Portugal

Cláudia Viegas, Estoril Higher Institute for Tourism and Hotel Studies, Portugal

Cristina Carrasco, University of Extremadura, Spain

Cristina Pinheiro, University of Évora (ICAAM), Portugal

Fernando Capela e Silva, University of Évora (ICAAM), Portugal

Fernando Milheiro Nunes, University of Trás-os-Montes e Alto Douro, Portugal

Isabel Ferreira, Polytechnic Institute of Bragança (CIMO), Portugal

Jesús Román Martínez, Spain Dietetics Society and Complutense University of Madrid, Spain

Manuela Pintado, Católica University, Portugal

Maria Fernanda Cosme Martins, University of Trás-os-Montes e Alto Douro, Portugal

Maria João Cabrita, University of Évora (ICAAM), Portugal

Maria Palma Mateus, University of Algarve, Portugal

Maria Paulina Neves da Mata, NOVA University and University of Lisbon, Portugal

Maria Raquel Lucas, University of Évora (CEFAGE), Portugal

Miguel Elias, University of Évora (ICAAM), Portugal

International Conference on Mediterranean Diet and Gastronomy: Linking Innovation, Sustainability and Health | 15-16 October, University of Évora

Rui Gaspar, University of Algarve and Católica University, Portugal

Sofia Tavares, University of Évora (CIEP), Portugal

Organizing Committee

University of Évora

Ana Garrido (ICAAM)

Carla Simões (ICAAM)

Cristina Pinheiro (ICAAM)

David Guedes (CIEP)

Fernando Capela e Silva (ICAAM)

Graça Machado (ICAAM)

Lénia Rodrigues (ICAAM)

Raquel Ferro (ICAAM)

Raquel Lucas (CEFAGE)

Sofia Tavares (CIEP)

Vlademir Silva (CEFAGE)

International Conference on Mediterranean Diet and Gastronomy: Linking Innovation, Sustainability
and Health | 15-16 October, University of Évora



Contents

Introduction	8
Plenary Sessions	10
1. Eat well, sleep well – The Mediterranean way	11
2. Mediterranean Diet: Good sense and good taste	13
3. As the twig is bent, so is the tree inclined.....	14
4. Why we eat what we eat: Psychological determinants of food choice	15
5. Salivary signatures of taste perception and diet.....	16
6. Interactions between saliva, mucosae and flavor compounds.....	17
7. Sensory and hedonic responses to foods: highlights from the Italian Taste study.....	18
8. How nutrients, neuronal circuits, and gut bacteria shape nutritional decisions	20
9. ‘Gastrophysics’ Meets ‘The Mediterranean Diet’	21
10. Communicating Food: Design in the Culinary Arts.....	23
11. Promoting the Mediterranean Diet: Importance of Marketing, Innovation and Consumer	24
12. For the diversity of the Mediterranean Diet – the hidden role of the small family farmers	25
13. Mediterranean species: nutritional, bioactive and new ingredients development potential	26
14. Valorisation of by-products and resources of the Mediterranean diet	27
15. The Mediterranean and the Roman Food Supply: grain, wine, olive oil and salted fish	28
Oral communications	30
OC01. Local Production: A renewed approach in the region of Alentejo.....	31
OC02. Perceptions about the concept of Mediterranean Diet, its evolution and potential abuse: Perspectives of professionals from Algarve-Portugal.....	32
OC03. As we eat, so shall we be? Socialization, well-being and food in the transition to adult life ..	34
OC04. Redesigning Food Experience	36

OC05. Audio-visual to promote Mediterranean Diet and Health	37
OC06. Sensory characterization and evaluation of sweet miso-like fermented grass pea products: construction of a preference mapping.....	38
OC07. Promoting home cooking as an integral part of the Mediterranean diet: results of the PRIMEMEAL project	40
OC08. Study about the use of edible flowers for gastronomic purposes in Portugal.....	41
OC09. Alentejo Eating Habits vs Mediterranean Diet	42
OC10. Acceptance of exotic beverages with health benefits in Europe: a cross-country comparison of hibiscus products.....	43
OC11. EATMOT Project: Eating motivations in different parts of the world, and particularly in countries from the Mediterranean Area.....	44
OC12. The impact of the organic and gluten free claims on food perception.....	45
OC13. Knowledge about the benefits associated with the ingestion of dietary fibre: Comparison between Mediterranean and Non-Mediterranean Countries	46
OC14. Using by-products and non-valuable natural products as flour source to produce gluten free bread	47
Posters.....	48
P01. The role of taste sensitivity and lifestyle in food preferences in Portuguese primary school children.....	49
P02. Health nudge-based interventions in a retail setting: Evidences from a field experiment	51
P03. Sea lamprey (<i>Petromyzon marinus</i> L.), a delicacy in several Mediterranean countries: unlocked the chemical composition benefits behind the success of the high gastronomic impact and traditional usage.....	52
P04. Comparison between semi-intensively and intensively grown beef	53
P05. The use of acorns in Portugal – lessons from the past	55
P06. Cherry storage using Chitosan edible coatings and essential oils.....	56
P07. Cold storage of table grapes ‘Sugraone’	57
P08. Evolution of ‘Jonathan’ apples during cold storage	59
P09. Quality evaluation of Strawberry using NIR	60
P10. Texture evaluation of two Cachena bovine muscles during storage	61
P11. Aqueous extracts of <i>Origanum vulgare</i> and <i>Thymus</i> spp. from Alentejo: Anti-inflammatory and Antioxidant Screening	62
P12. Phenolic characterization and antioxidant assessment of <i>Vitis vinifera</i> L. grapes produced in Alentejo	64

P13. Regional olive oil food systems from a small producer’s perspective: similarities and differences in 4 Mediterranean regions – Castellón (Spain), Lucca (Italy), Ileia (Greece) and Central Alentejo (Portugal).....	65
P14. Extracts from two Mediterranean wild edible plants, <i>Helichrysum picardii</i> Franco and <i>Calamintha nepeta</i> (L.) Savi subsp. <i>nepeta</i> , as a source of natural antioxidants.....	66
P15. Variability in consumption and knowledge about edible flowers according to country	67
P16. Sterol and fatty acid profile in negrinha and santulhana varietal olive oils from Trás-os-Montes region	68
P17. Chemical and microbiological stability of the low caliber apple slices prepared by osmotic dehydration	70
P18. Strawberry spread - New Food New Tech.....	71
P19. The history of the manufacture of cheeses in Alentejo	72
P20. Influence of <i>Cynara cardunculus</i> L. ecotypes on physical and chemical properties of PDO Évora cheese.....	73
P21. Valorisation of Shiitake mushroom by-products through confection of pies and rissoles.....	75
P22. Characterization of consuming habits regarding bakery products and acceptance of new products incorporating whey residue	76
P23. Mathematical modelling of the drying kinetics of acorn (<i>Quercus rotundifolia</i>) - optimization of shelling process	77
P24. Consumption and knowledge on legumes in Portugal	78
P25. Table olives: a food of the millenary Mediterranean diet pattern	79
P26. Incorporation of Mediterranean shrub (<i>Cistus ladanifer</i> L.) in lamb diets to improve the nutritional value and oxidative stability of meat	80
P27. INIAV - Technology & Innovation Unit (UTI): contributions to the Mediterranean diet sustainability	82
P28. Nudging consumer behaviour in a restaurant setting through innovation: increasing legumes consumption by promoting healthier choices	83
P29. Wine water footprint assessment in the Mediterranean region.....	85
P30. Physical-chemical and rheological characterization of tomato (<i>Solanum lycopersicum</i> L.) of Algarve.....	87
P31. Human and canine prevalence obesity and feeding habits – a one health approach in Portugal	88
P32. Nutritional value of bread enriched with legume flours.....	90
P33. What is happening with Mediterranean Diet patterns in Alentejo?.....	91
P34. Regulated Deficit irrigation in pomegranate orchard	93
P35. Use of digital image analysis for monitoring the ripening of Évora PDO cheese.....	94

P36. Renewing concepts: adapting the food choice questionnaire to the Portuguese consumption of rice through the use of images.....	95
P37. Moroccan Diet between a protective and causative effect.....	96
P38. Mediterranean Diet and autoimmune diseases: what do we know?	97
P39. Attitudes and beliefs of producers and veterinarians regarding the implementation of biosecurity measures on cattle farms	98



Introduction

The International Conference on Mediterranean Diet and Gastronomy: Linking Innovation, Sustainability and Health

The Mediterranean Diet is the theme that brings together in Évora many renown national and international experts on many different domains and research topics. UNESCO's classification as Intangible Cultural Heritage of Humanity attests the relevance of a nutritional model that remained "constant over time and space", but, more importantly, it asserts it as much more than a simple diet.

In order to grasp the true essence of this conference, one question stands in the foreground: what is the Mediterranean Diet?

It's tradition. The customs and practices of communities of the Mediterranean basin are the base for this diet and cement the identity of this territory. In this conference, we want to talk about the past, but also about the future. We wish to reflect on how, in a context of pervasive change, tradition and innovation can coexist and give origin to new products and services that transform the old into the new.

It's socialization. Beyond food, this diet is about a way of being and living. Based on the values of sharing and caring, the Mediterranean Diet tells us about the identity of people. In some respects, each person is like all other people, some other people, and no other people. In this continuum between personal identity and cultural belonging, there is a world of factors affecting feeding behaviour.


It's health. Characterized by diversity and balance, the Mediterranean Diet is a rich and harmonious conjugation of highly nutritious food. International research has been documenting its benefits for health promotion and for preventing some of the most widespread chronic diseases of the XXI century.

It's sustainability. Valuing endogenous products and respecting biodiversity and seasonal cycles of produce allow for a more efficient and clever use of natural resources. To that extent, one cannot talk about Mediterranean Diet without mentioning sustainability. In a time when preservation is one of the

most pressing concerns of our collective conscience, sustainable practices of production and consumption are a necessary topic of discussion.

It's experience. The Greek root word "*diata*" means a way of life. Thus, we need not only to address the questions of "what", but also of "how": the act of eating. The experience with food is part of the essence of the Mediterranean Diet, making sensory science a necessary topic for this conference.

For all these reasons, we believe this conference is for you. From body to mind, from biology to culture, from history to innovation, from knowing to doing, there are multiple perspectives on eating.



International Conference on Mediterranean Diet and Gastronomy: Linking Innovation, Sustainability and Health | 15-16 October, University of Évora



P21. Valorisation of Shiitake mushroom by-products through confection of pies and rissoles

GUINÉ, R., P., F.^{1*}, GONÇALVES, I.², CORREIA, P., M., R.¹ & FLORENÇA, S., G.³

¹CI&DETS/CERNAS Research Centres, Polytechnic Institute of Viseu, Portugal ; ²Department of Food Industry ESAV, Polytechnic Institute of Viseu, Portugal; ³Faculty of Food and Nutrition Sciences, University of Oporto, Portugal

* raquelguine@esav.ipv.pt

ABSTRACT

Sustainability relies on a rational utilization of the natural resources as well as minimization of impacts resulting from industry. In the case of the food industry, in which the raw-materials used are biological (animal or vegetable) products, many of the generated residues or by-products contain components that can be successfully extracted and used in to obtain other products with added value, thus combining advantages in terms of environmental impacts as well as economic profitability. The objective of the present work was to develop food products incorporating Shiitake mushrooms, as a way to value some less appreciated parts of the mushroom and also to use those mushrooms that do not comply with standards in terms of shape or size for direct sale. Hence, it was planned to incorporate the mushrooms into fillings used in rissoles and pies, which are two types of product very much appreciated either for meals or as starts or snacks. Since it was aimed to obtain products with appreciated organoleptic characteristics, a sensory evaluation was carried out, complemented by physicochemical analyses and evaluation of colour and texture. The results demonstrated that the developed foods were a good alternative to avoid discard the mushrooms not complying with quality standards for commercialization.

KEYWORDS: Added value, Residue valorisation, Sensory characteristics, Textural properties