



ABSTRACT BOOK

International Web Conference on

Food Choice & Eating Motivation

Coordenação Editorial

Cristina Lima

Ana Margarida Cunha

Andreia Pereira

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Yuliya Dulyanska

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INTERNATIONAL WEB CONFERENCE ON

Food Choice & Eating Motivation

Editorial

The International Web Conference on Food Choice & Eating Motivation took place online between 19th and 20th May 2022 and was organised by the CERNAS-IPV (Research Centre Centre for Natural Resources, Environment and Society), one of the Research Units of the Polytechnic Institute of Viseu. The scope of the conference was within the domain of Food Science and included different thematic areas related to the consumer science and food choice: Eating Motivations, Determinants of Food Choice, Trends in Food Science, Food Properties, Sensory Science, Gastronomy, Diet and Nutrition, Bioactive Ingredients, Functional Foods and Nutraceuticals, Food Safety Concerns, Food Security and Sustainability.

Consumers need to have foods available on the market that meet their expectations and which they valorise, either for their nutritional value, their organoleptic characteristics, or even their perceived benefits for human health and well-being. Industrials must, therefore, develop foods that satisfy consumers and that effectively comply with all necessary requirements for food quality and safety, as well as possible allegations, which can be an effective marketing tool. Furthermore, people's eating habits are influenced by many factors, of different nature, and the knowledge of these factors and their interconnections can help to understand consumer trends and promote the evolution of the food industry and the academia as supporters for the development of more valuable foods in the present and for the future.

With this in mind, 124 food scientists from 29 countries were engaged in the FC&EM conference throughout the two days, presenting and discussing their work. The program included two plenary talks, three keynote speeches, 46 oral presentations and 35 poster communications.

The first plenary communication, by Professor Ilija Djekic, from the University of Belgrade (Serbia), was about the "Role of food safety tools in supporting the food supply chains". Today's requirements for food supply must undergo strict regulations that aim to protect consumers from hazards and ensure safe and effective transformation of the food products from the primary production until they reach the final consumers.

The second plenary communication was by Professor Edite Teixeira de Lemos, from the Polytechnic Institute of Viseu (Portugal), titled "The Mediterranean Diet: a dietary pattern or a Medical Prescription?". It is well acknowledged the role of the Mediterranean Diet in the prevention of non-communicable diseases and its beneficial effects on health and well-being. This dietary pattern, traditional to the peoples in regions around the Mediterranean Sea, has been recognised by the United Nations and was inscribed in 2013 on the Representative List of the Intangible Cultural Heritage of Humanity.

Professor Cristina Chuck-Hernández, from the Technologic Institute of Higher Studies in Monterrey (Mexico), gave the first keynote speech, titled "Consumer perception about entomophagy in a megadiverse country", devoted to the practice of eating insects in a country with multicultural influences. In Mexico, there are some regions where entomophagy is traditional and other areas where insects are not so common as human food. This problem also mirrors the asymmetries between the world's countries, since there is a great diversity of cultures with different degrees of acceptability toward eating insects. These have emerged in the last decades as a more sustainable alternative to other sources of animal protein, but some neophobia still poses relevant challenges, particularly in western cultures.

The second keynote communication, presented by Professor Manuela Pintado from the Catholic University of Porto, Centre for Biotechnology and Fine Chemistry (Portugal), was about antioxidant fibre as a key bioactive in the valorisation of food plant by-products. Dietary fibre contains relevant amounts of natural antioxidants, particularly phenolics, which are associated with compounds that are not digested along the gastrointestinal system. The antioxidant effect of these compounds is linked with beneficial properties like prevention of lipid and protein oxidation, improvement in quality, stability and free radical quenching capacity, and several related health benefits. The polyphenols bound to the fibre are more protected against processing effects, as temperature treatment, but in the intestine are released by enzymes, thus being highly available, more than free polyphenols.

The last keynote speech was given by Professor Otilia Bobis, from the University of Animal Sciences and Veterinary Medicine Cluj-Napoca (Romania), and concerned “Bee products as valuable source of nutrients and bioactive compounds. Normal or functional foods?”. Bees are a major element with a pivotal role in the environment as pollinators, but they also provide us, humans, with valuable products that, besides their nutritional value, contain important bioactive compounds that help promote human health.

We believe that the program of this conference allowed the enrichment of all participants, with valuable invited speeches, oral communications, e-poster presentations and discussion moments. It constituted a valuable opportunity for exchanging experiences, enhancing knowledge, and establishing possible future cooperation among food scientists worldwide. On behalf of the Organising Committee, I thank the support from the Polytechnic Institute of Viseu and CERNAS Research Centre, and congratulate all participants, presenters and listeners, for having chosen to engage in this scientific event.

The Coordinator of the
Organizing Committee of the FC&EM

Raquel Guiné

Polytechnic of Viseu, ESAV, CERNAS/IPV, Portugal



Plenary Communication

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- 11 The Mediterranean Diet: A dietary pattern or a Medical Prescription?

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DEVELOPMENT OF THE EISUFOOD QUESTIONNAIRE: EDIBLE INSECTS AS SUSTAINABLE FOODS

Sofia Florença¹, Cristina A. Costa², Paula Correia², Manuela Ferreira³, João Duarte³, Ana Paula Cardoso⁴, Sofia Campos⁴, Ofélia Anjos⁵, Raquel Guiné²

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The regular consumption of insects has been reported as part of the traditional diet of more than two billion people in the world. Insects have demonstrated to be a more sustainable alternative than other sources of animal protein. Therefore, they are expected to contribute to diminish the pressure on the planet and on ecosystems in face of the growing need to feed the world population. Besides their role in the protection of the environment, edible insects also possess a good nutritional value and they are a source of bioactive compounds with some beneficial effects on the human body. However, in many Western societies the consumption of edible insects faces many challenges, due to some resistance and even neophobia. The objective of this work was to develop and validate a questionnaire to assess the knowledge and perceptions about edible insects.

The sample was composed of 367 Portuguese participants, all adults, who answered the survey online between July and November 2021. The data were used to undertake a statistical validation, based on reliability analysis, complemented with factor analysis. For all treatment the software SPSS version 26 was used.

The results showed that all the seven scales of the questionnaire were validated based on the values of the Cronbach's alpha: 1 – Culture and Tradition ($\alpha = 0.740$), 2 – Gastronomic Innovation and Gourmet Kitchen ($\alpha = 0.901$), 3 – Environment and Sustainability ($\alpha = 0.932$), 4 – Economic and Social Aspects ($\alpha = 0.843$), 5 – Commercialization and Marketing ($\alpha = 0.793$), 6 – Nutritional Aspects ($\alpha = 0.912$), 7 – Health Effects ($\alpha = 0.832$). Additionally, the 64 items were grouped into fourteen factors, of which F1 and f2 were the most representative (corresponding to 28.0% and 7.7% of explained variance). Based on these results, the instrument was considered validated and can be further used to investigate the knowledge and perceptions about edible insects in different contexts, such as different countries, as it is intended in the ambit of the EISUFOOD project, taking place in 18 different countries simultaneously.

Keywords: Edible insect; Validation; Scale; Internal reliability; Factor analysis



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**ABSTRACT BOOK:
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& EATING
MOTIVATION**

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