# **TRADINNOV**



## **Tradinnovations:**

An advanced interdisciplinary educational approach to support innovation within food heritage adapted to specific populations needs































Project : Tradinnovations : an advanced pluridisciplinary approach to support food innovation

Duration : 2023-2026 Budget : 400 000€

Type: Erasmus+ | Cooperation partnership

#### PROJECT BACKGROUND

Food and cooking habits are important features of all societies as they link with the social life and cultural habits. Tradition is present in the food system in both rural and urban areas and is demonstrated at home, on the street and in restaurants with modern trends trying to put it back to life. The term "tradition "derives from the Latin word "tradere", which essentially means "to transmit "or "to send". Tradition thus represents a form of transmission or an information flow through time, of ideas, praxes, habits, methods, etc. Through such continuity, traditions not only have a link to the past but also push towards the future (Cannarella and Piccioni, 2011). The food engineering/science curriculum has several objectives mainly to train graduates to be capable of accompanying the needs of society, the food transition, to develop short and sustainable circuits and innovate based on these constraints.

Currently, there is a gap between existing food engineering/science curriculum and market needs for graduates having skills in culinary sciences for new product development. The educational challenges are thus adapting the teaching and learning schemes to innovate in a sustainable way based on food heritage, culture and territory. Tradition and modernity are not necessarily conflicting terms: they collide when one of these human expressions becomes an absolute value. For this reason, progress and modernity are opposed to tradition when modernization tends to interrupt the links with the past (Cannarella and Piccioni, 2011).

Culinary precisions in recipes describe the technical or procedural information present in a recipe, which provides added value and successful result.

Tradinnovations project starting point is the scientific study of this precisions as a framework for education, not only in food science, but also in other disciplines such as social sciences and humanities, allowing for multidisciplinary approaches and cross-fertilization between a broad range of sciences. These precisions also allow for novel approaches to education at all levels, as shown through educational efforts in several countries as well as educational research. Finally, they provide a unique arena for the interaction between science and society (Fooladi and Hopia, 2013).

The approach we propose in the project Tradinnovations is an advanced and interdisciplinary learning to support innovations within the local food heritage of each country and adapted to specific vulnerable populations needs (malnutrition among elderly and Alzheimer population, challenges in obesity among young people, dietary needs of pregnant women and young children, ...). It proposes original set of hybrid teaching and learning tools to widen up student's food culture and skills and

fostering their intercultural and intergenerational (among vulnerable populations) interactions.

#### PROJECT OBJECTIVES AND MAIN RESULTS

The project targets several actions in education and social outreach with vulnerable populations with specific nutritional needs as well as European and international expansion. The following objectives are targeted:

- Build an advanced and interdisciplinary learning approach to support innovations by constraint within the local food heritage of each country and adapted to specific populations needs
- Generate specific educational paths in the form of generic building blocks to be deployed in European partner's countries
- Stimulate scientific, socio-economic and educational symbiosis while integrating closely local agri-food and culinary landscapes in each partner country.
- Engage inter-cultural fostering among European students around culinary heritage

To tackle these issues, Tradinnovations will develop the following results:

- An online educational platform with specific paths (tailored to students coming from different study programs and with specific resources and knowledge complementary to student's current curriculum)
- Interdisciplinary resources fed into the platform to enable students to study traditional recipes and their renovation by crossing different fields (history and anthropology, food engineering, molecular gastronomy, nutrition, sensory, gastrophysics.)
- Database of socioeconomic stakeholders working on vulnerable populations needs suffering from nutritional disorders to integrate student's innovation project's upon these needs

- A practical step-by-step guideline that will be used as an educational framework around "traditional recipes and their innovation under constraint" for endusers (students, educators, vulnerable populations)
- A consolidated community of European and international domestic and commercial food actors engaged into healthy and sustainable food

#### Work Package breakdown



#### **PARTNERS ORGANISATIONS**

#### Consortium

1. France: Institut Agro

Ireland : Technological University Dublin
Spain : Polytechnic University of Valencia

Slovenia : University of Ljubljana
Finland: University of Turku

6. Portugal: NOVA School of Science and Technology

### Associated partners: socio-economic actors / international institutions

1. Lebanon: Holy Spirit University of Kaslik

2. France: Inrae

3. Norway: University College VoldaThe Faculty of Humanities & Education

- 4. France: Musée National d'Histoire Naturelle
- 5. Chaire UNESCO on Food, Culture, and Development, de l'Université ouverte de Catalogne (UOC)
- 6. Scinnov, R&D Innovation Alimentaire (France),
- 7. Normandie Innovation Management Entreprise Consommation (NIMEC, France),
- 8. ESIAT (Tunisie)

The consortium consists of 6 academic partners from 6 European countries. 8 associate partners join from 4 different countries. All partners share similar challenges related to education and new food design (at culinary and industrial scales), energy and food transitions as well as cultural and societal diet needs. The consortium covers a variety of backgrounds and expertise, ensuring the implementation of multilevel and interdisciplinary partnerships that cover much of the European space, with an international extension to Mediterranean countries like Lebanon and Tunisia. The selection was naturally done based on the partners' relevant work and experience, and the pertinent complementarity they bring for the objectives. They have previous successful collaboration between some of the organizations. The consortium has also been formed in a way that balances the educational and societal multidimensional outreach and this is relevant from the support of associate partners.

#### **Competences and complementarities:**

- In the educational programs (agricultural-food engineering/culinary innovation and food product development/food science and technology/gastronomic sciences)
- In the educational teaching fields (sensory analysis/molecular gastronomy/food quality/nutrition/food and culture/food marketing)
- In the level of maturity in science/culinary synergy: some partners have long experiences in this synergy ( TUD; NOVA; TURKU; UPV; INRAE; Scinnov; National Museum of Natural History NMNH; NIMEC) while others are aiming to increase it in their institutions (IA; UL; ESIAT; USEK).

The following associated partners will be involved:

- INRAE: Hervé This, vo Kientza, co- creator of Molecular and Physical Gastronomy, director of the Inrae-AgroParisTech International Centre of Molecular and Physical Gastronomy
- NMNH: Christophe Lavelle, expert in food art and science and teaches in many universities and professional schools. He is the author of more than 50 research papers and 15 books.
- Unesco UOC: F.Xavier Medina is a full professor (Social

anthropology/Anthropology of Food), Faculty of Health Sciences, Universitat Oberta de Catalunya (UOC), Barcelona, Spain. World Chair of the International Commission on the Anthropology of Food and Nutrition (ICAF).

- IRD: Esther Katz, Anthropologist, specialist in anthropology of food, ethnobiology and food heritage.
- VUC: Fooladi has for 20 years worked in science education, food education and interdisciplinary with multimodal online teaching resources. He develops university-museum collaboration
- NIMEC: Bruno Cardinale, national education INSPE and culinary teaching, associate researcher NIMEC
- Scinnov: R&D expertise and consultancy for restaurants and enterprises
- Esiat: Focus on mediterranean diets
- Lebanon: USEK having a previous 5 year's project on culinary food heritage preservation and development by molecular gastronomy