Food by-products: from Waste to Resource

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Abstract

Nowadays, the problem of food waste is recognized as a key challenge on the way to sustainable resource management. Losses and waste of raw materials and food products have a negative impact on the natural environment, the nutritional status of the population, and food security. Particularly, significant attention is devoted to fruit and vegetable processing due to the abundance of valuable bioactive substances with health-promoting properties. In addition, in order to re-use these recovered bioactive compounds, functional foods and nutraceuticals have been developed.





National impact

Research on food waste has garnered significant interest from companies, leading to the acquisition of national and regional funding. Collaborations with small, medium and large local food companies play a fundamental role in the industrial application of the research findings. Most of national projects are carried out in collaboration with other Italian Universities, Research Institutes and small and medium-sized enterprises (SMEs).

International impact

The research has a significant international impact to promote circular economy, contributing to the achievement of the SDGs. In addition, it enhances the visibility of UNICAM achievements, underlines the excellence of our region, and strengthens networks with foreign Universities, Research Institutes and Agri-Food Companies.

Funding sources of projects

- ✓ European (LIFE, PRIMA, M-ERA.NET)
- ✓ National (MUR, MASAF, PRIN, PNRR)
- ✓ **Regional** (PSR, PR Marche FESR)
- ✓ Industrial (private companies)
- ✓ Academic (FAR)

National collaborations

- Universities (University of Bologna, University of Parma, University of Milan, University of Teramo, University of Urbino, University of Piemonte Orientale, University of Padova, University of Florence)
- Research Institutes (CNR, ENEA, CREA, IZSUM, CIHEAM, ISMEA)

International collaborations

- University of Reims, France
- Instituto Nacional de Investigação Agraria e Veterinaria (INIAV), Portugal

Relations with Companies:

- Fileni S.p.a.
- Indena S.p.a.
- Baldi Carni S.r.l.
- Sabelli S.p.a.
- Simonelli Group S.p.a.
- Esseoquattro S.p.a.
- Fertitecnica Colfiorito S.r.l.
- NDG Group S.r.l.
- New Flavours S.r.l.
- D.I.MAR. S.r.I.
- Luca Bianchi
- Pierpaoli S.r.l.
- Synbiotec S.r.l.
- Troticoltura Cappa

- University of Valencia, Spain
- University of Tiaret, Algeria
- Wageningen University, Netherlands
- Technische Universit
 ät Dresden, Germany
- Universidad de La Laguna, Spain



