

TITOLO: Alternative protein food: agro-food system economic and management impact and consumer acceptability

Progetto di ricerca

Alternative protein food products can be a viable substitution of conventional animal-based food. Alternative proteins are those obtained from sources other than conventional animal-based, i.e., from sources that are plant-based, microbe-based, ocean-based, fungus-based, and insect-based. Consumer growing pull for these products is the perfect ground for the European diets to become more sustainable & healthier (following the EAT Lanced commission's objectives) in line with the European Green Deal & Farm to Fork Strategy. However, to date, animal-based products are totally key in our diets, as 94% Europeans consume animal-based products on a daily basis.

There is need to facilitate and accelerate the protein shift. For unlocking the potential of alternative proteins to transform the food system, alternative sources of protein and products must be mainstreamed across all levels. The agro-food system should aim to facilitate sustainable and healthy diets by shifting promising alternative proteins and products from niche to mainstream - making them more available, accessible, and acceptable to all population groups (young people, adults, elderly, vulnerable groups - of low socio-economic status, ethnic minorities, living in rural locations) and everywhere (urban, peri-urban, and rural areas).

Thus, there is need to:

- identify the consumer behavioural determinants and the necessary agro-food environment governance frameworks that enable a higher uptake of alternative protein products
- empower the food system actors to make alternative protein products an easy and economically viable choice via their diversified & increased market supply and ensured favourable agro-food environment conditions
- ensure that the project developments in alternative protein products and agro-food environment will bring positive changes in terms of health and sustainability of the European food system.
- ensure that the developments are in line with the regulatory framework and ethical aspects.

The research fellow will support research activities aimed to:

- identify determinants of integration of alternative protein products into diets of European consumers
- explore the different typologies of built food environment promoting/hindering alternative protein choices
- uncover points that need to be leveraged both on a consumer level and downstream in the value chain to influence consumer choices and integrate alternative protein products in their diets
- find and promote pathways to design effective food environments that facilitate the transition towards sustainable and healthy food behaviours
- impact assessment within the socio-environmental impacts of the developed food products supported by agro-food environment solutions via the True Price methodology, e.g., regarding impact on climate change & water use;

- understand the economic implications for the middle food system actors of the new products and agro-food environment solutions (cost-benefit e.g., regarding turnover growth, supply costs etc.);
- understand the policy and regulatory viability of the alternative protein product developments

Piano di attività

The research fellow's activities aim to contribute to the analysis of food supply chain management and economic dynamics. In particular, he/she will focus on:

- the economic and management aspects of new products and agro-food environment solutions on the middle food system actors –a cost-benefit analysis will be based on the data gathered from qualitative and quantitative interviews.
- assess the economic impacts that alternative protein ingredients and product development may have on the middle food system actors (special focus on supply chain impact).
- assessment of the marketability and economic agro food chain sustainability of the products appreciated by consumers.
- analysis of cost-structure and profitability of agri-food products along the supply chain;
- study of consumer perceptions toward innovative and economically, socially, nutritionally sustainable food products.

Activities will focus on:

- (i) statistical-economic analysis of agri-food products in the European market for analysis along agri-food supply chains;
- (ii) literature review analysis and meta-reviews of sources useful for research activities;
- (iii) content analysis of focus groups transcriptions with specific software, such as NVIVO;
- (iv) organization of “living labs” as food environments in cooperation with local food chain stakeholders;
- (v) contributing to structuring and data collection through face-to-face interviews and focus groups with agri-food supply chain actors in Italian and English on business economic and financial issues;
- (vi) contributing to consumer data collection through interviews, surveys related to market dynamics and new consumer trends (equity, fair trade, eat local, food business models) and case study analysis;
- (vii) data processing through multivariate statistical techniques, including factor analysis, cluster analysis, regression.

The research activity will be conducted in English. The research fellow will work on Like-a-pro project, funded by Horizon Europe (Grant Agreement Project 101083961).

The listed activities will be carried out under the supervision of Prof. Antonella Samoggia, scientific project leader and mentor.