

## **What do local stakeholders think about the novel food processing technologies? A case study in Greece and Malta**

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In recent years, novel food processing technologies have been the focus of innovative food processing research. Novel food processing technologies offer a range of benefits covering various aspects of the food industry, from production and distribution to consumption, including improved quality and nutritional values, reduced food waste, increased efficiency and productivity, sustainability due to efficiency in the use of resources, economic benefits and market competitiveness. However, increasing the adoption of novel food processing technologies is necessary to ensure their potential benefits are utilized more. Adopting novel food processing technologies can face various technological, economic, regulatory and societal obstacles. Therefore, it is crucial to explore the opinions of local stakeholders in adopting novel food processing technologies. In this article, we used Q-methodology to identify potential barriers to adopting novel food processing technologies by investigating the perceptions of various actors in Greece and Malta, including local and supply chain stakeholders. Fifty-one stakeholders, twenty-seven from Greece and twenty-four from Malta, were asked to rank from strongly agree to strongly disagree with forty statements regarding the social, economic, environmental and governance aspects of novel food processing technologies. Factor analysis was used to interpret the results, and three different factors, each representing different perceptions, were determined for Greece and Malta. Surprisingly, these three perceptions were represented by various stakeholder groups, and the analysis results revealed that not all respondents from the same sector shared the same perception. One of the most important results of the study is that the stakeholders in both countries focus on the benefits of the novel food processing technologies in different aspects. For example, it was determined that the Greek stakeholders attach more importance to the social and environmental benefits of the novel technology, while the stakeholders in Malta attach more importance to the economic benefits. Stakeholders' concerns about cost, lack of knowledge and understanding about novel food processing technologies, resistance to change, and technical expertise may be considered barriers. However, at the same time, the social, economic and environmental benefits mentioned by the stakeholders may provide an opportunity to adopt novel food processing technologies.

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