

P1.116 Consumers' barriers towards bio-based and home compostable packaging

Isabella Endrizzi¹, Danny Cliceri², Eugenio Aprea^{1,2}, Flavia Gasperi^{1,2}

¹Research and Innovation Centre, Fondazione Edmund Mach, San Michele all'Adige (TN), Italy. ²Center Agriculture Food Environment, University of Trento/Fondazione Edmund Mach, San Michele all'Adige (TN), Italy

Abstract

In the fresh produce sector, appropriate food packaging reduces food loss and waste by preventing damage during transportation and significantly extending shelf-life.

In this framework, innovative bio-based and home compostable (BBHC) packaging could help, having the double potential to reduce on the one hand plastic waste problem and the other hand to better preserve food freshness compared to petroleum-based packaging.

Nevertheless, end consumers are the main contributors to food waste for several causes, a few of them related to poor design/instructions and inappropriate use of packaging.

This work, part of the SISTERS European project, through a critical analysis of the most recent studies conducted on European consumers, identified and analysed the main barriers to the spread of BBHC packaging. Consumers' barriers to BBHC purchase could be summarised in these five thematic areas:

1. Lack of knowledge and understanding: consumers are unfamiliar with new materials, especially bio-based ones and are easily misled by terminology and design elements used to label packaging.
2. Negative beliefs and scepticism: consumers do not trust the information regarding the performance of materials, or technical claims reported.
3. Consumer concern and neophobia towards new technologies and materials that could contaminate or modify the characteristics of food.
4. Poor engagement: consumers are little involved in the "green" theme or think other factors such as price are more important.
5. A physical barrier i.e., the lack of access to appropriate waste management.

The analysis of the literature also revealed that different cultures assign different weights to the values of recycling, reuse and biodegradability and trust differently to the information on the packaging.

Based on these results, an online questionnaire will be developed to simultaneously investigate the five barriers, considering consumers' behaviour, attitudes and personality traits with the aim of collecting at least 1000 responses in five EU countries.

Keywords

food packaging
bio-based
home compostable
consumers' purchase barriers