



Multi-actor design of low-waste food value chains through the demonstration of innovative solutions to reduce food loss and waste

LOWINFOOD

PRACTICE ABSTRACT No: 22

How Involvement in Innovations Changes Food Waste Attitudes and Behaviours

Reducing consumers' food waste requires increased awareness, and better attitudes and behaviour. We know that active involvement in food management tasks is more effective in triggering change compared to passive interventions like information campaigns. Thus, as part of the LOWINFOOD socio-economic evaluation, we assessed if the employees, household members, and high-school students involved in demonstrating our innovations experienced a positive change in their awareness, attitude, intention, and behaviour towards food.

To this end, we collected survey responses before and after the demonstration of 12 innovations of different types: food waste prevention governance, consumer behavioural change, supply chain efficiency, and food redistribution. We know well that questionnaires are not reliable when dealing with food waste. So, we did not ask directly about this challenge but how much our participants agreed with a series of statements. Our study was run in nine EU countries, for a total of more than 500 responses across the two phases!

Involvement in the LOWINFOOD innovations against food waste increase participants' moral concern for this societal challenge and their intention to act for addressing it beyond the demonstration context. It also reinforced the relationship between their intention and the actual behaviour. The impact was stronger on women and on people with higher education, while influencing young people, including high-school students, proved more challenging.

Among employees, positive change was driven by innovations dealing with supply chain efficiency (Kitro, FoodTracks, Mitakus) and with food waste prevention governance (our supply chain dialogue), while food redistribution actions seem less effective. Household members also experienced significant positive change thanks to their involvement in the demonstration of CozZo. Interestingly, none of our indicators, for none of the innovation types, experiences a negative change.

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LOWINFOOD has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101000439.

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Additional information

Active involvement in interventions is very effective in changing people's attitudes and behaviours when happening in workplaces. Unfortunately, asking directly about food waste quantities and behaviours leads to unreliable results. In LOWINFOOD, we developed an evaluation strategy based on the Theory of Planned Behaviour, a widely adopted framework in environmental psychology that allows to explain individual behaviour in specific contexts and its determinants. We overcame the questionnaire bias by focusing on change between before and after involvement in our innovations, rather than absolute values.

All Practice Abstracts prepared by LOWINFOOD can be found [here!](#)



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ABOUT LOWINFOOD

The LOWINFOOD project, launched in 2020 and coordinated by the University of Tuscia, Italy, is working to deploy and improve a set of 14 innovative solutions to the food waste problem, by demonstrating their effectiveness and market potential. The core activities of the project are all focused on the evaluation of the efficacy of these innovations in reducing food losses and waste, in terms of the amount of food waste avoided as well as their environmental and socio-economic impact.

CONSORTIUM



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