



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: 23

### Are all Pupils Equal as Food Waste Makers?

Reducing food waste is widely recognized as a crucial step towards building a more sustainable food system. In order to reduce waste numerous interventions, such as information campaigns, have been implemented, they often adopt a one-size-fits-all approach, assuming uniformity in the problem faced by all consumers.

This study aims to investigate the distribution of food waste generation among pupils in schools, recognizing that not all students contribute equally to the issue. Utilizing the Matomatic plate waste tracker, data was collected from 16 primary schools across Sweden, totaling 421,015 instances of plate wastage registrations.

The findings of the study reveal that 40% of the pupils in the studied primary school canteens did not waste any food at all. Among those who did waste food, the distribution was highly skewed, with a minority of wasting students (20%) accounting for a majority (60%) of the generated plate waste. Halving the waste generated by the group of high wasters would reduce overall plate waste by 31%. While there was slight variation between schools, all kitchens reported similar patterns, with the top 20% of plate waste events contributing significantly to overall waste.

These results underscore that plate waste generation is not a uniform problem among all pupils. Thus, interventions that target all students equally may not be effective, as the majority of the target group have limited potential to reduce waste. Instead, a more promising approach would involve identifying high-waste individuals and designing interventions tailored to this specific group. However, reaching these individuals, who may be resistant to general messages of food waste reduction, poses a significant challenge.

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### Additional Information

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[lowinfood.eu](https://lowinfood.eu)



### 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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### Är alla elever lika bra på att skapa matavfall?

Att minska matsvinnet är viktigt för att bygga ett mer hållbart livsmedelssystem. För att minska svinnet har många insatser, såsom informationskampanjer, genomförts. Dessa är ofta lika för alla och antar att alla konsumenter står inför samma problem.

Denna studie syftar till att undersöka hur matsvinn är fördelat bland elever i grundskolor. Med hjälp av tallrikssvinnsvägar från Matomatic AB samlades data in från 16 grundskolor runt om i Sverige, vilket omfattade totalt 421 015 registreringar av tallrikssvinn.

Studien visade att 40 % av eleverna i de undersökta skolmatsalarna inte slängde någon mat alls. Bland de elever som slängde mat var fördelningen mycket sned, med en minoritet (20 %) som stod för en majoritet (60 %) av tallrikssvinnet. Att halvera svinnet från denna högsvinnande grupp skulle minska det totala tallrikssvinnet med 31 %. Även om det fanns viss variation mellan skolor uppvisade alla skolmatsalar liknande mönster, där de 20 % som genererade mest svinn bidrog avsevärt till det totala svinnet.

Resultaten betonar att tallrikssvinn inte är ett likformigt problem bland alla elever. Därför kan insatser som riktar sig lika till alla elever på samma sätt vara ineffektiva, eftersom majoriteten av målgruppen har begränsad potential att minska sitt svinn. En mer lovande strategi skulle istället vara att identifiera individer med högt svinn och utforma insatser som är anpassade för denna specifika grupp. Dock innebär detta en betydande utmaning, eftersom dessa individer kan vara motvilliga att ta till sig generella budskap om att minska matsvinnet.

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