

A Field Experiment on Biases in Food Waste Measurement Methods

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Acknowledgements:

We want to thank the Swiss National Science Foundation for funding this project (grant #197633).

Cite as:

Merian Sybilla, O'Sullivan Kevin, Stöckli Sabrina, Beretta Claudio, Tiefenbeck Verena, Müller Nadina, Fleisch Elgar, Natter Martin (2023), A Field Experiment on Biases in Food Waste Measurement Methods . *Proceedings of the European Marketing Academy*, 52nd, (114212)
Paper from the 52nd Annual EMAC Conference, Odense/Denmark, May 23-26, 2023



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Abstract

Reducing consumer food waste is currently on many national agendas. Despite the urgency of the issue, there is a lack of accurate measurement methods, making it difficult to quantify consumer food waste and identify effective interventions. Accurate measurement requires a deep understanding of how measurement methods are biased. In a field experiment with 369 households, we analyzed biases associated with different measurement methods (survey, diary, kitchen caddy) and procedures. Results allow us to quantify how different measurement methods deviate from each other and how biases impair reported and measured food waste estimates. Survey-based underreporting seems difficult to avoid, even when combined with other methods. Households' awareness of food waste can only partially explain this. The analysis further suggests that results are affected by an Experimenter Demand Effect. Based on the insights generated, we discuss ideas for the improvement of measurement methods.

Subject Areas: *Consumer Behaviour, Intention-Behavior Link, Retailing*

Track: Social Responsibility & Ethics