



**Állatorvostudományi
Egyetem**

Possibilities to reduce household food waste based on consumers' opinions in the light of the SDGs

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Chania, Greece

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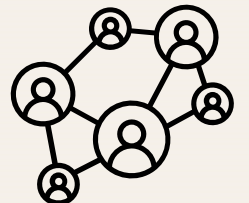


Food Economics Research Group – Department of Food Hygiene

- Multidisciplinary research: food consumption, food waste, food chain safety
- Quantitative and qualitative consumer studies
- Policy recommendations, networking
- Food waste related research projects
 - HORIZON-Wasteless-101084222 WASTE QUANTIFICATION SOLUTIONS TO LIMIT ENVIRONMENTAL STRESS
 - HADEA SMP-FOOD-2022-FoodWaste-Stakeholders-AG- 101112149 – How to Reduce Food Waste and Catalyse Actors in the Hospitality and Food Services Sector
- National and international committees:
 - EU Platform on Food Losses and Food Waste
 - European Consumer Food Waste Forum (Dr. Gyula Kasza core expert)
 - EU Citizens' Panel on Food Waste (Dr. Gyula Kasza member of the scientific committee)
 - Food is Value Forum (Ministry of Agriculture, Hungarian Food Bank Association)
 - National Biowaste Working Group



wasteless





Wasteless

maradeknelkul.hu

National Food Waste Prevention Programme – Hungary *Since 2016*

- Extensive educational programme targeting children
- Consumer campaign
- Sectoral food waste prevention best practices
- Monitoring household food waste in Hungary
- Contribution to the EU mandatory food waste reporting



Current FW data

- **1.3 billion** tonnes of food waste each year globally¹
- **931 million** tonnes in retail, food services, households²
- **58.5 million** tonnes each year in the EU³
- **31.3 million** tonnes in households in the EU³
- **65.5 kg/person/year** in Hungarian households⁴

¹FAO, 2011. <https://www.fao.org/3/i2697e/i2697e.pdf>

²UNEP, 2021. <https://www.unep.org/resources/report/unep-food-waste-index-report-2021>

³Eurostat, 2022. <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220925-2>

⁴Kasza et al., 2020. <https://doi.org/10.3390/su12083069>

Household food waste kg per capita (2020)	
EU	70
Portugal	124
Italy	107
Malta	92
Luxembourg	91
Greece	87
Lithuania	86
Austria	83
Latvia	82
Denmark	79
Germany	78
Cyprus	71
Belgium	71
Czechia	69
Hungary	66
Slovakia	65
France	61
Estonia	61
Sweden	61
Poland	60
Netherlands	59
Finland	53
Croatia	53
Ireland	48
Slovenia	36
Spain	30
Bulgaria	26
Norway	78

EU Food Waste Policies in accordance with SDG 12.3

Circular Economy
Action Plan

EU Platform on Food
Losses and Food Waste

2018/851

2019/1597

EU Green
Deal

European
Consumer
Food Waste
Forum

EU Citizens'
Panel on FW

EU FW reduction
legally binding
targets

2008/98/EK

2019/2000

Farm to Fork
Strategy

2015

2016

2017

2018

2019

2020

2021

2022

2023

TARGET 12.3



HALVE GLOBAL PER CAPITA FOOD WASTE

„By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses”

Research questions

- Consumer's estimation of FW levels in their households
- Consumer perspectives of FW reduction
- Difference between the perception of avoidable (edible) and unavoidable (inedible) FW
- Prospects to reach SDG 12.3 target from the aspect of the consumers



Methodology



282 households (**758** individuals)
Average size of households: **2.7** persons



Survey period:
3 November 2021 – 18 December 2021



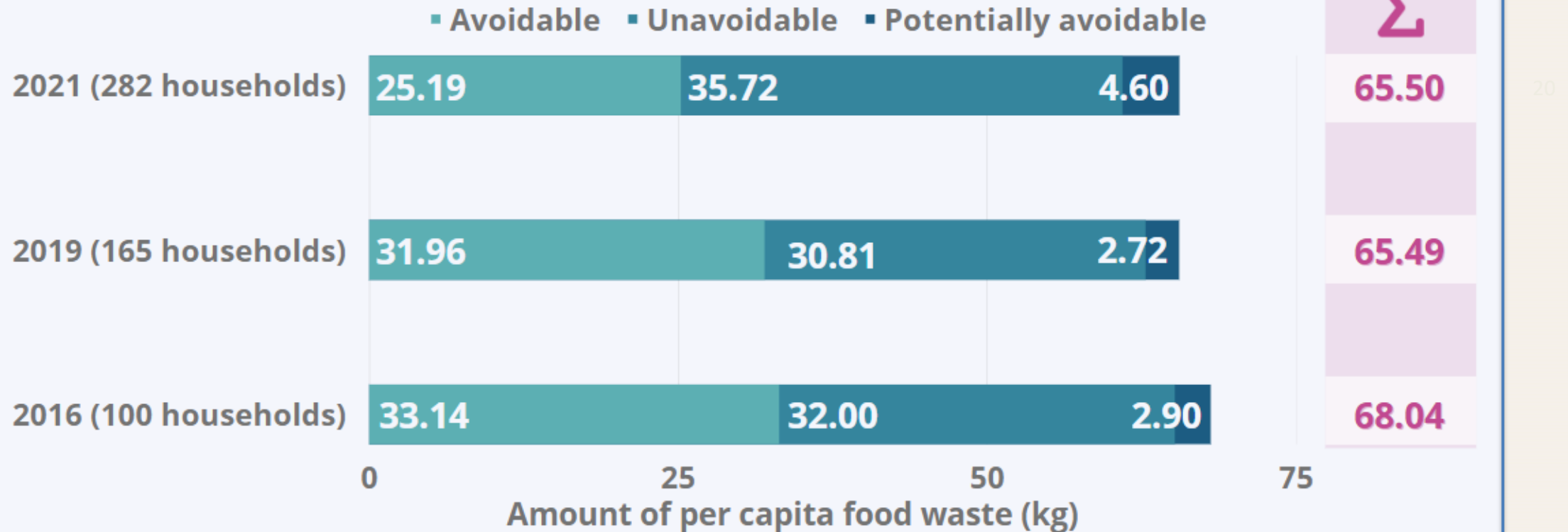
Methodology: **Direct measurement**
Food waste logbook for 1 week + input and output questionnaires
Data have been extrapolated for one-year consumption cycle

The methodology complies with
EU-FUSIONS recommendations and **Commission Delegated Decision (EU) 2019/1597**.



Results

FW trends in Hungarian households (2016 – 2021)



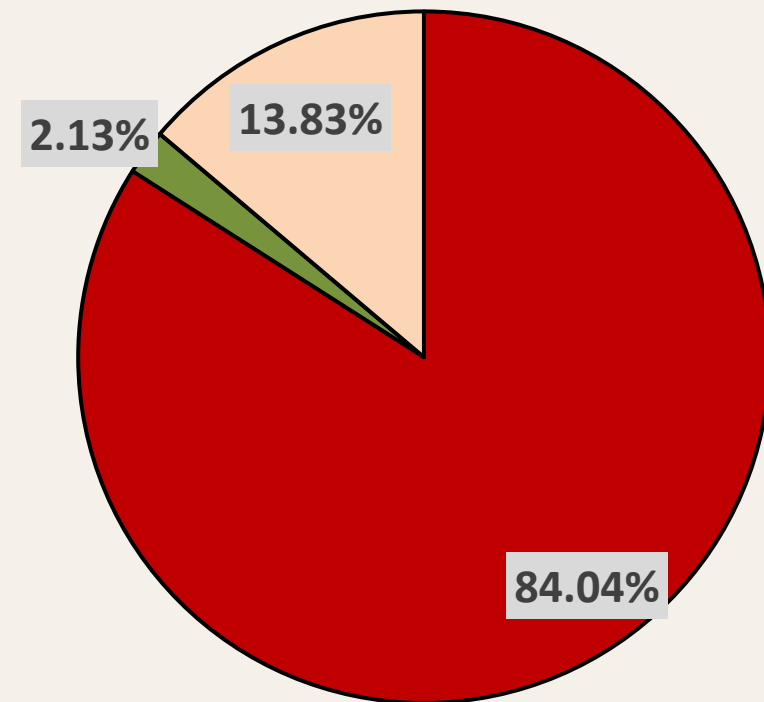
24% decrease: half way to SDG 12.3 in terms of **avoidable**



Households' estimation

- **Actual** total FW: **65.5** kg/capita/year
- Actual avoidable FW: 25.19 kg/capita/year
- **Estimated** total FW by households: **33.7** kg/capita/year
- Average **underestimation** (compared to total FW): **48.5%**

Estimation of total FW by households

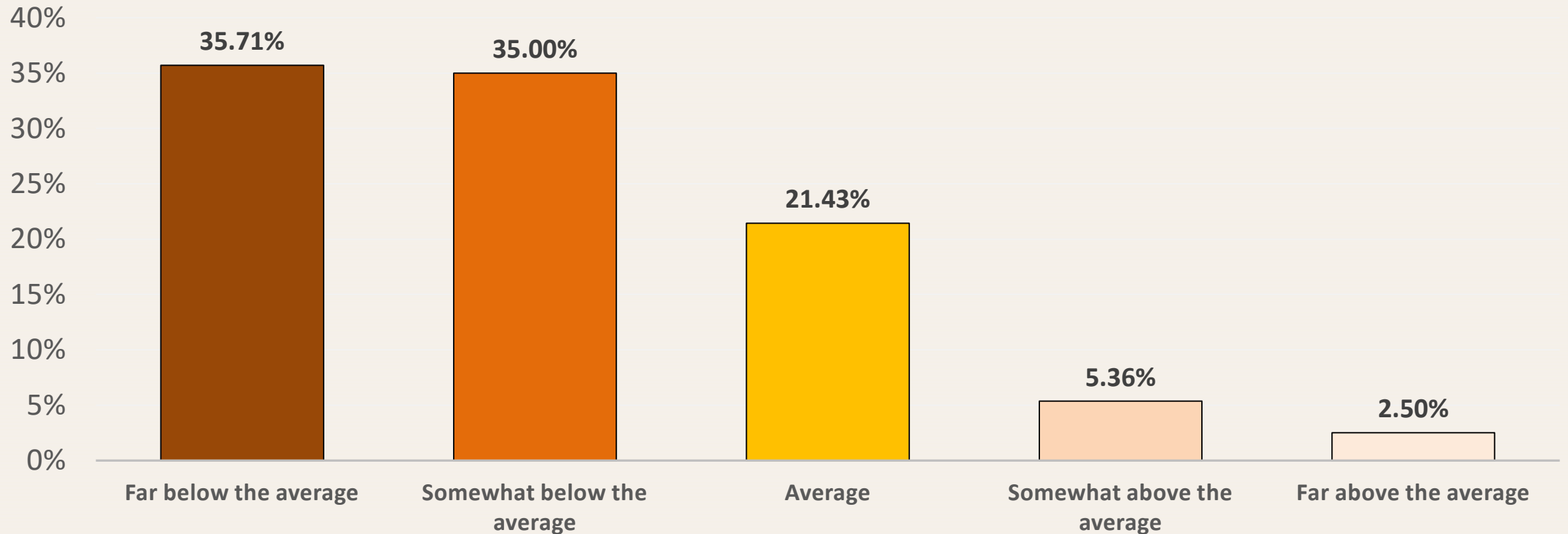


■ Underestimated ■ Estimated correctly (+/- 5%) ■ Overestimated



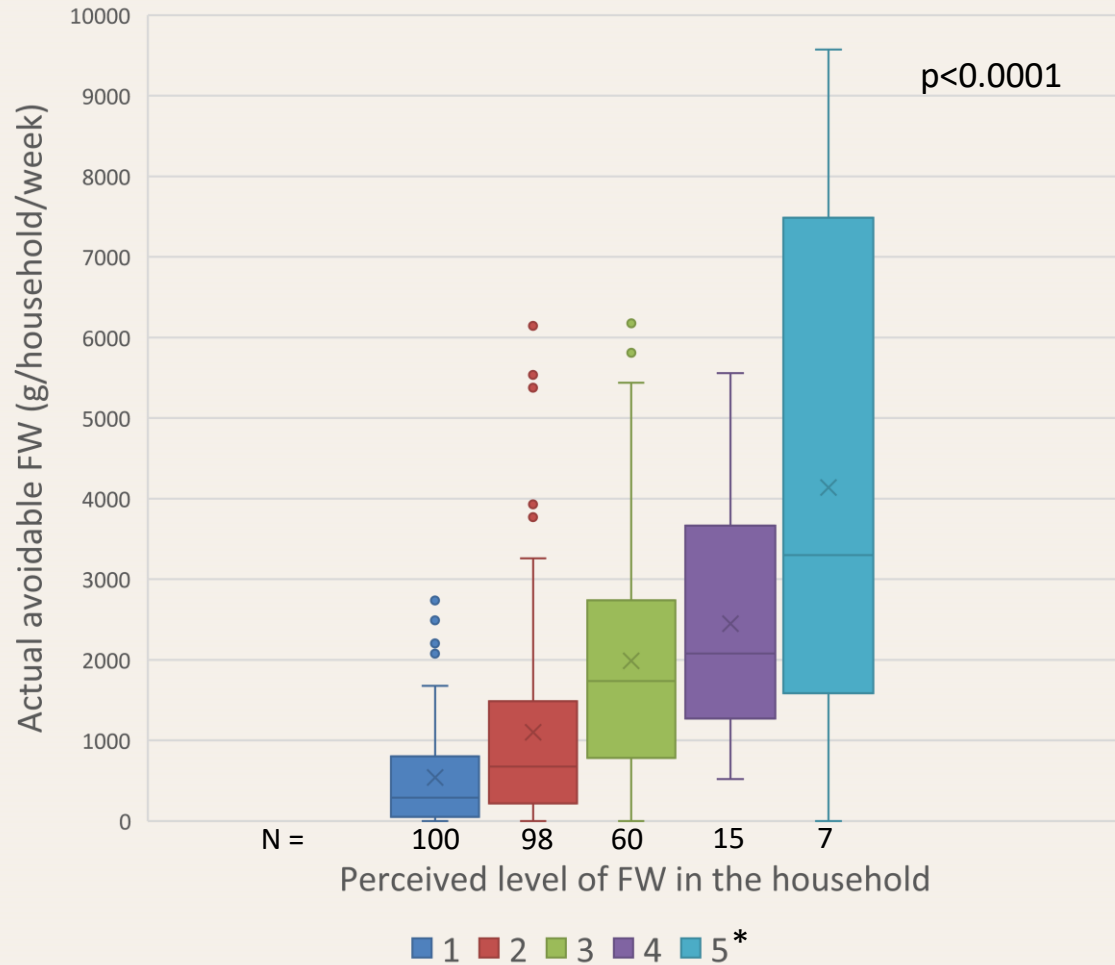
Households' perceived FW level

According to your opinion, how much food waste is generated in your household?

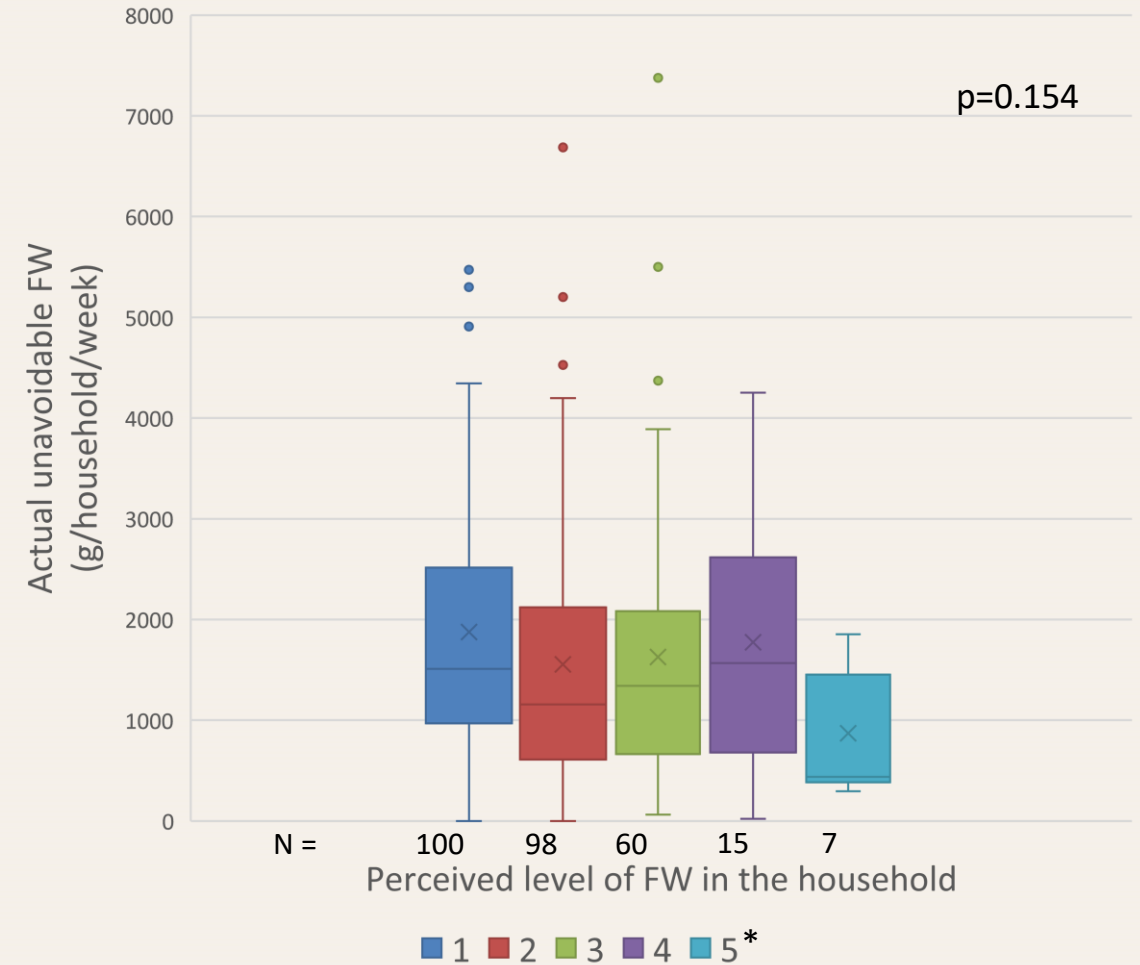


Actual vs perceived level of FW in the household

Actual **avoidable** vs perceived level



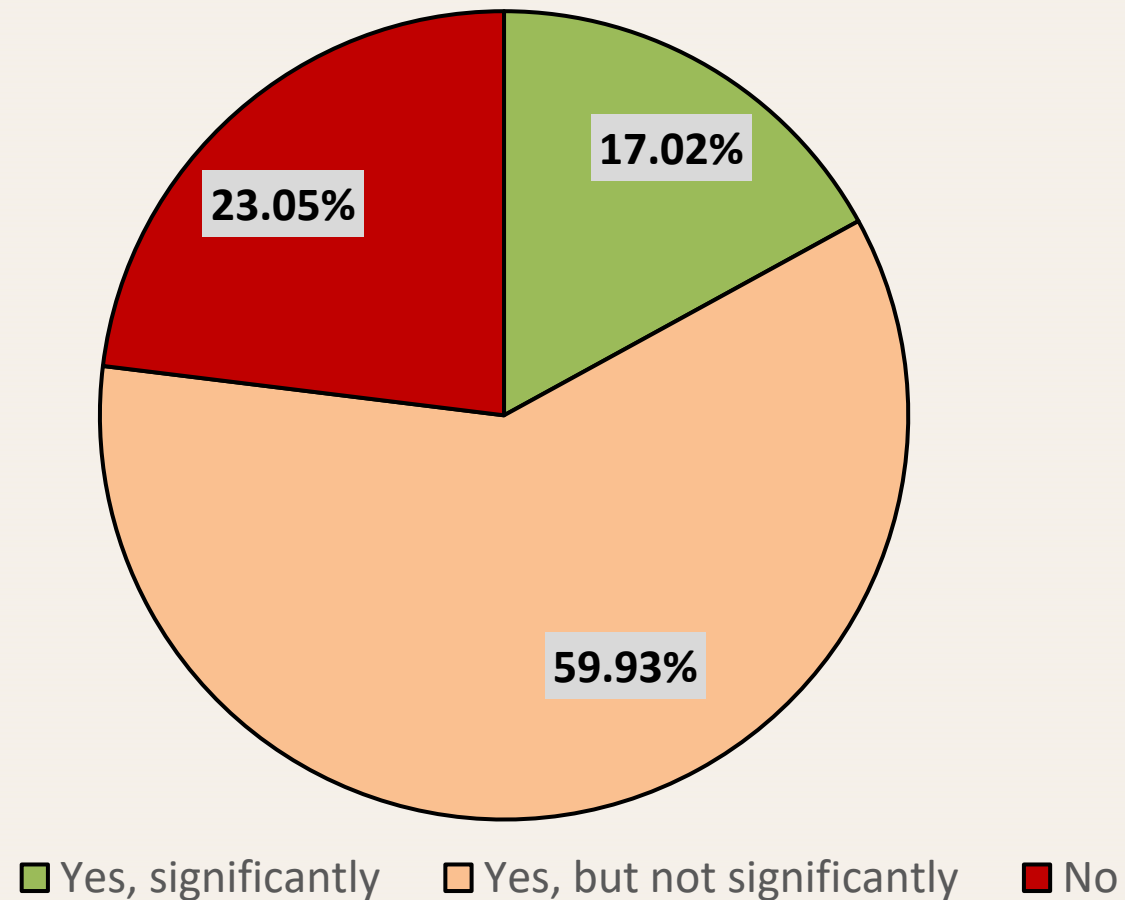
Actual **unavoidable** vs perceived level



*1: far below the average; 5: far above the average

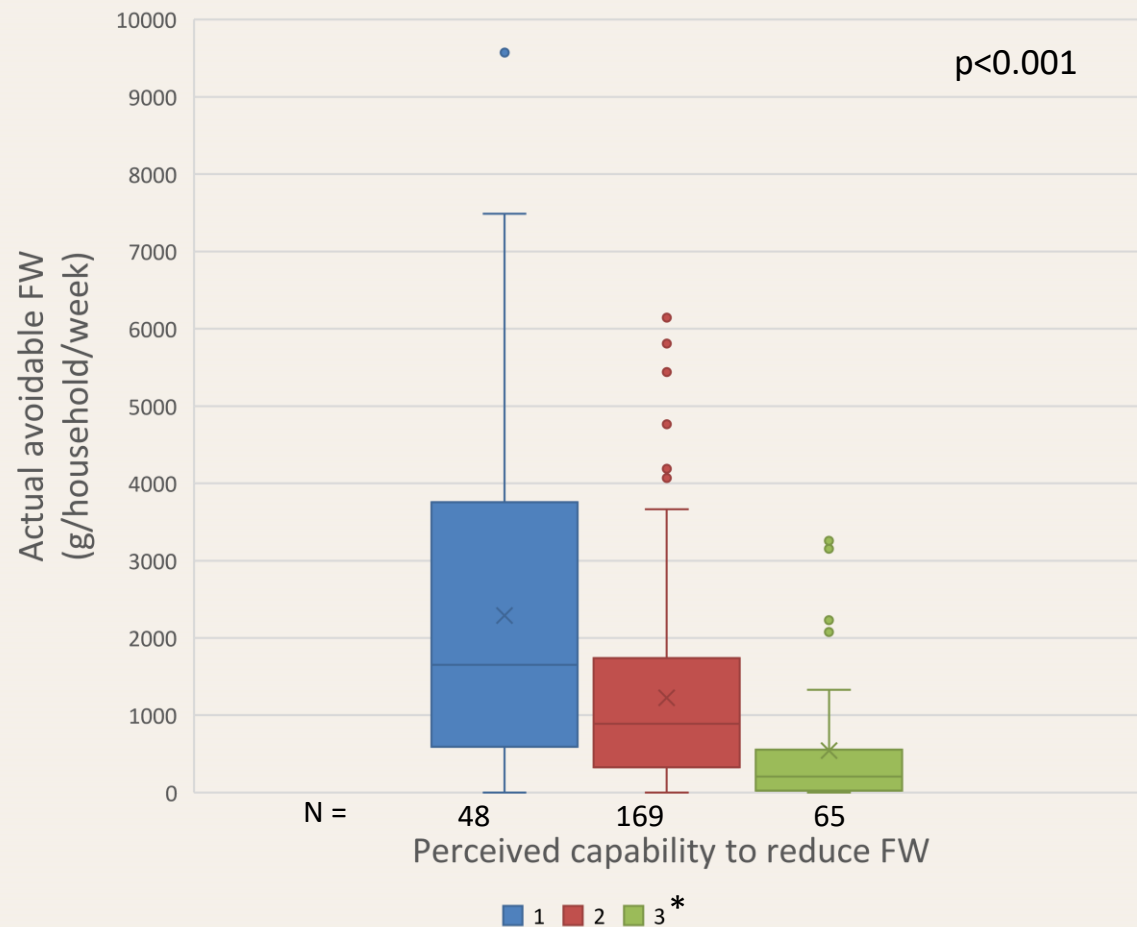
Perceived capability to reduce

Do you think that your household would be able to decrease food waste?

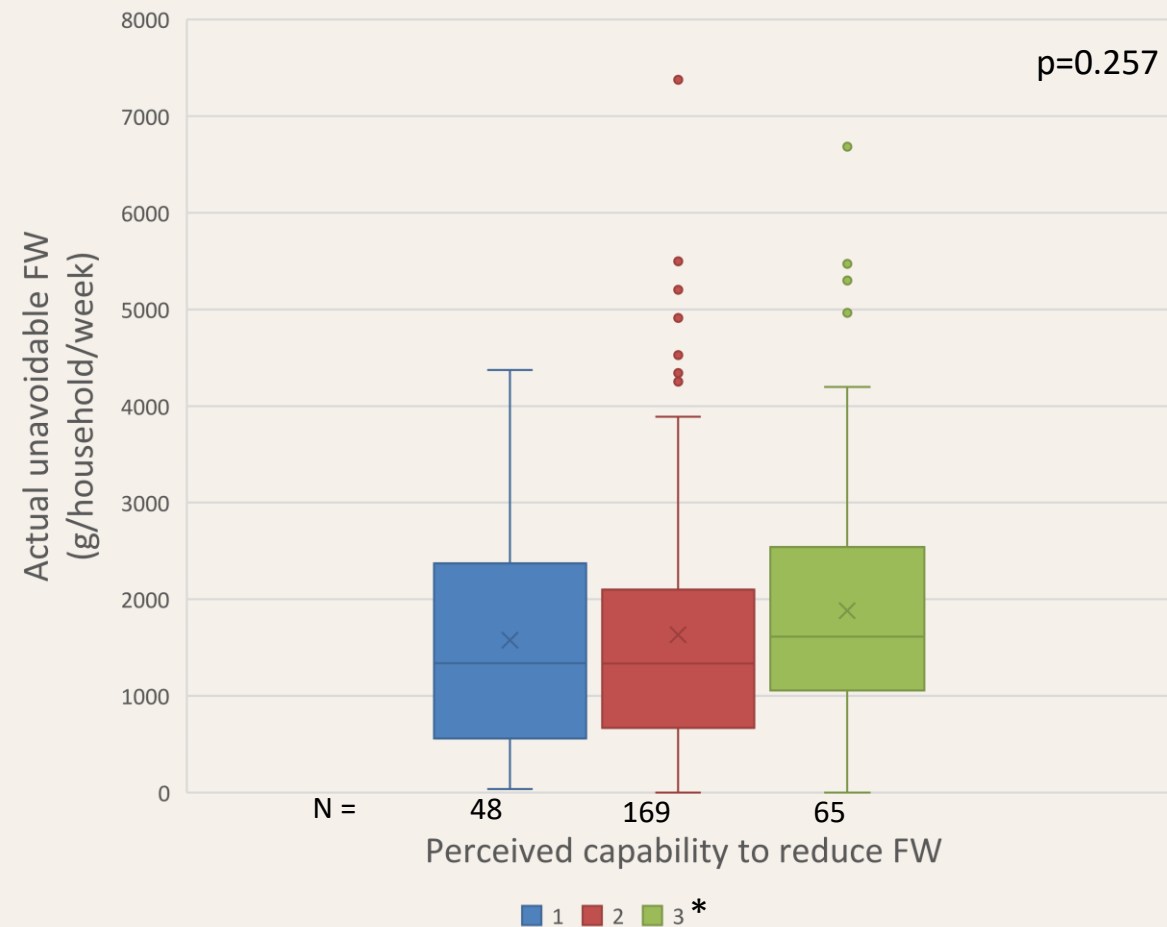


Actual FW and perceived capability to reduce

Avoidable FW and perceived capability to reduce it

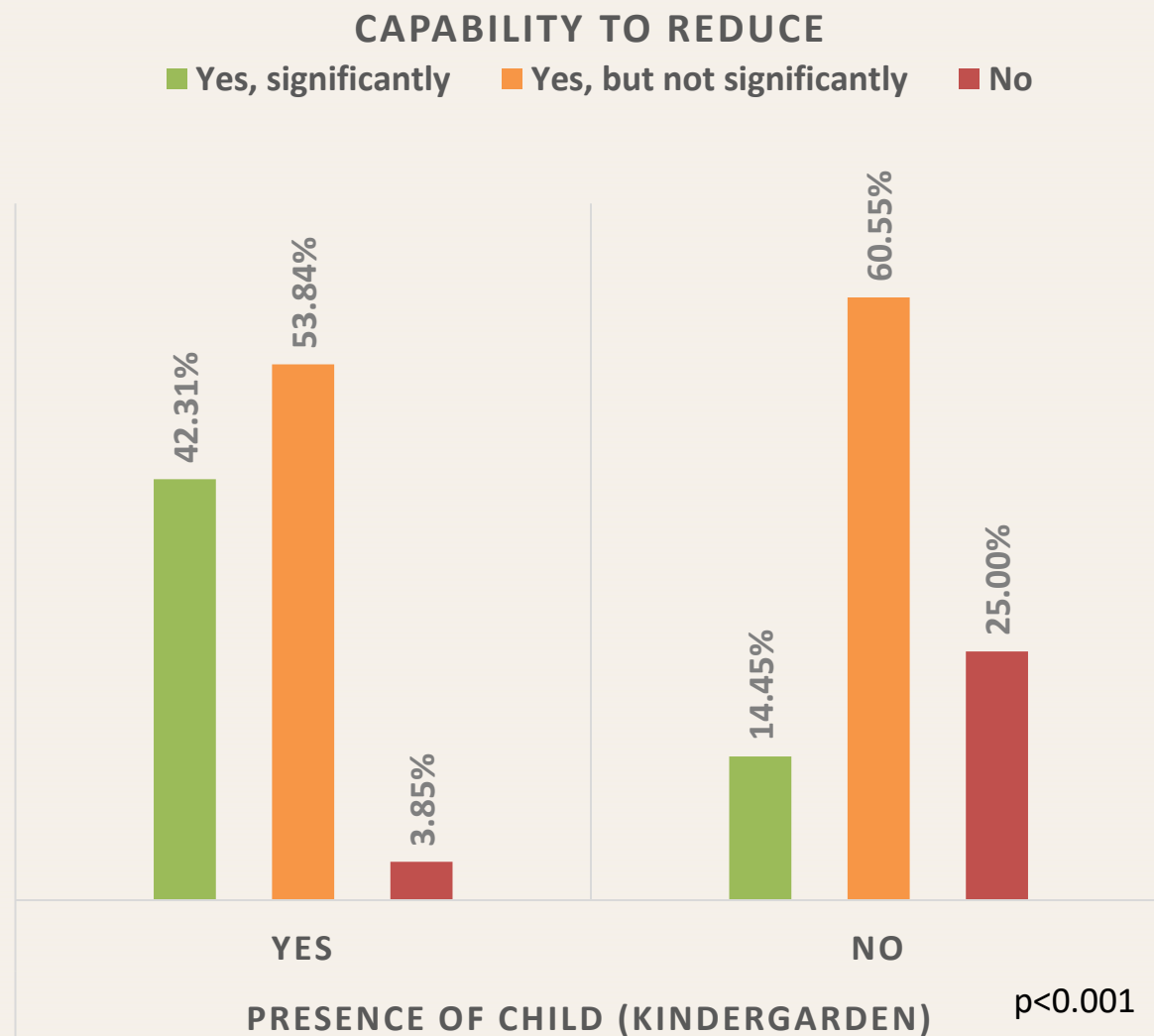


Unavoidable FW and perceived capability to reduce it



*1: Yes significantly 2: Yes, but not significantly; 3: No

Demographic characterization – perceived capability to reduce





Demographic characterization – perceived capability to reduce

Significant differences not detected:

- Size of the household (number of persons)
- Type of residence (village, city, capital)
- Type of house (house with garden, other)
- Composting (yes, no)

Conclusions

- Consumers underestimate their household FW levels
- There is still potential to reduce FW in the households
- Avoidable food waste has higher impact on consumers' perception
- Unavoidable food waste might not be perceived as such by the consumers
- National programme has been successful – actual wastage decreased by 24% since 2016 in Hungarian households
- Legally binding targets are suggested in accordance with research findings
- Awareness raising, education – key instruments



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Thank you very much for your attention!

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