

A food waste framing can help promote purchase of suboptimal potatoes

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Introduction

Huge quantities of produce are discarded along the food value chain due to quality norms. One example is fresh potatoes, where only around 50% of the potatoes produced reach the consumer. In this project, we used an online study to investigate if food waste information-framing can make suboptimal potatoes more appealing to consumers.

Aim 1: Test if food waste information can help motivate consumer choice of suboptimal potatoes.

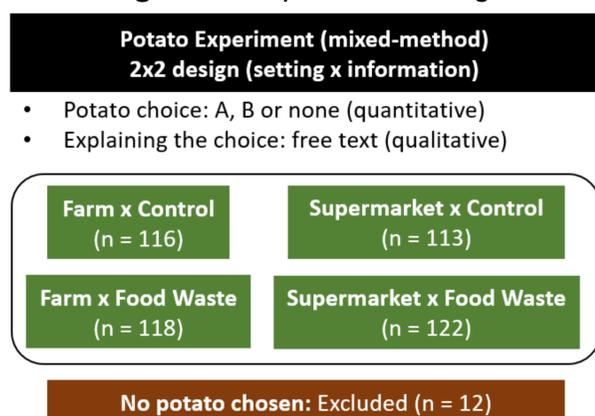
Aim 2: Investigate the reasons for the potato choice.

Method

481 participants (51% female)
Age: $M = 47$, $SD = 16$ years

Participants were randomly assigned to one of four experiment conditions (Figure 1). They were asked to choose between two potato options. In the experiment condition, additional food waste information was presented (Figure 2).

Figure 1: Experiment design



Key Findings

- Food waste messages increased participants' willingness to choose suboptimal potatoes
- Reasons for choosing the optimal potato included product price and aesthetics.

Figure 2: Information shown to participants

Potato A	Potato B	
Type: Firm cooking potatoes Origin: Switzerland Price: 2 CHF per kg Size: 30-60 mm Appearance: beautiful skin, no misshapen tubers	Type: Firm cooking potatoes Origin: Switzerland Price: 2 CHF per kg Size: 30-65 mm Appearance: Skin may show scab in certain places, slightly misshapen tubers possible	Control
These are potatoes that are currently commercially available in supermarkets.	These are potatoes that do not meet the usual standard specifications due to blemishes. However, they are ideal for cooking and their utilisation helps to reduce food waste.	FW
		

Results

We find that adding food waste information clearly increased the probability of participants choosing less attractive potato B (25% vs. 41% and 29% vs. 46%, Table 1).

Table 1: Choice of optimal potato A or suboptimal potato B across the four experimental conditions (n = 469)

Conditions	Potato A (optimal)		Potato B (suboptimal)		Total (n)
	n	%	n	%	
Farm shop/control group	87	75.0	29	25	116
Farm shop/food waste group	70	59.3	48	41	118
Supermarket/control group	80	70.8	33	29	113
Supermarket/food waste group	66	54.1	56	46	122
Total	303	64.6	166	35	469

Note. Participants who did not choose a potato were excluded.

Most frequent reasons for choosing optimal potato A

- Appearance (e.g. looks better, looks matter)
- Price (e.g. more value for money, less to cut off)
- Quality (e.g. potato B looks spoilt)
- Convenience (e.g. does not need peeling)

Most frequent reasons for choosing suboptimal potato B

- (Food) waste (e.g. to do something against food waste, I do not like / want to waste food)
- Usable (e.g. is still good)
- Appearance (e.g. looks do not matter, no need for perfection)
- Recipe (e.g. some recipes require peeling)

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