Reducing Household Food Waste

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Research question

Can providing a household with local food waste quantity and impact data (i.e. monetary, environmental and social) coupled with information to improve their food literacy motivate them to reduce their food waste disposal?
Household food waste survey

Replicated a survey undertaken by Swiss researchers in London, Ontario

71 Questions
- sociodemographic
- self-reported food wasting
- expanded TPB
- ranking motivators
- volunteers

Communications plan to attract respondents 23 May-8 July 2017
Theory of Planned Behavior (TPB)

Attitude

Subjective Norms

Perceived Behavioral Control

Food Wasting INTENTION

Food Wasting BEHAVIOR

Personal Norms
Household Planning Habits
Good Provider Identity

Self-reported food wasting behavior

1,263

4.8 times/week

11% self-reported no food waste

5.9 portions/week
# Food waste reduction motivators

<table>
<thead>
<tr>
<th>Motivator</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Reduce money wasted</td>
<td>58.9%</td>
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<tr>
<td>Reduce environmental impact (climate change)</td>
<td>23.9%</td>
</tr>
<tr>
<td>Reduce social impact (hunger)</td>
<td>17.2%</td>
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What it means

Reducing the amount of money wasted is the key motivator to reducing the amount of food that becomes waste.

Perceived behavioral control is more important determinant of food wasting behavior than intention.

Intervention development
Intervention development

Food waste measurement

Food waste measurement methodology

Avoidable & Unavoidable
Bread & Baked Goods
Dairy
Meat & Fish
Fruit & Vegetables
Dried Food
Other Food
REDUCE FOOD WASTE SAVE MONEY
REDUCE FOOD WASTE SAVE MONEY

On average each London household wastes 125kg of food worth $600 per year.

Tip 1
Plan your meals ahead of time.

Tip 2
Make a grocery list and stick to it.

Tip 3
Store your food properly.

Tip 4
Prepare just enough.

Tip 5
Love those leftovers.

To learn more about these tips go to www.foodwaste.ca
Hello
Please find your Household Food Waste Reduction Toolkit.
Check inside the toolkit and at www.foodwaste.ca for more details!
Treatment household food waste reduction significantly greater than control households.

31% decrease of total food waste
30% decrease of avoidable food waste
32% decrease in unavoidable food waste

Avoidable food waste decrease for all food waste types (17-56%)
What we found

More avoidable food waste (treatment)

Number of people in a household

Amount of garbage set out

Food safety attitudes

Good provider identity

Correlations all significant at 0.05 level (2 tailed) or better
What we found

Less avoidable food waste (treatment)

Backyard Composter Usage

Intention

Personal attitudes

Perceived behavioural control

Correlations all significant at 0.05 level (2 tailed) or better

van der Werf, P.; Seabrook, J.A.; Gilliland, J.A. The quantity of food waste in the garbage stream of southern Ontario, Canada households. Plos One 2018, 13, e0198470.

