



MILAN BEXPO 2015:

A behavioural study on food choices and eating habits

Executive Summary

15 October 2015

This behavioural study examined consumer choices in relation to food sustainability, and was carried out at the Milan Expo 2015 among EXPO visitors, by CentERdata, GFK, and Ecorys. This project examined two aspects related to consumer sustainability: consumer use of sustainability information and food waste.

Consumer use of sustainability information

Consumer use of sustainability information was studied by means of an experimental field study carried out in the COOP Supermarket of the Future. In this supermarket consumers could look up product information through interactive displays, on for instance price, nutritional values and several sustainability aspects of the product. The main aim was to investigate whether exposure to sustainability-related information in an innovative, interactive way translates into more sustainable product choices. In addition, we investigated if sustainable activation in one domain (non-food) spills over to another domain (food). In the study 300 consumers participated. One group of consumers received a sustainability pre-task after which they visited the Supermarket of the Future (group 1), one group of consumers visited the Supermarket of the Future without a pre-task (group 2), and a control group consisted of Milan Expo visitors who did neither visit the Supermarket of the Future nor received the sustainability pre-task (group 3). The study reveals the following key insights:

- The Supermarket of the Future seems a promising concept with several innovative features that have the potential to enhance sustainable consumer behaviour. The atypical setting makes generalizability of results difficult, though. For example, many supermarket visitors did not make any purchase and customers mainly bought drinks.
- That being said, when consumers are activated to process sustainability information before entering the supermarket, this seems to enhance their interest in the innovative shopping concept even if the activation is not food related. But strong evidence that the increased interest translates into more sustainable consumer choices in the Supermarket is lacking.

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- Consumers consider price and nutritional values, rather than sustainability, the most important attributes to gather information on. Consumers pay equal attendance to the different indicators related to sustainable information (carbon foot print, sustainability logos, and organic logos). Results may be driven by informational sequence as price and nutritional information were presented before the sustainability information at the informational screens. Information overload may also play a role.
- Store visitors have stronger intentions to pay attention to sustainability information in the future than non-visitors. Participants in the study are allowed to donate to good causes as a reward; interestingly, store visitors donate more to sustainable charities than non-store visitors do. As such, the store visit seems to act as a sustainability activator.

Food Waste: Date marks

The issue of food waste was investigated by means of two experimental lab studies carried out at EXPO; 500 Milan EXPO visitors participated in the two studies. The main aim of the first lab study was to investigate consumers' decision to use or dispose non-perishable (long shelf-life) foods and how this was affected by date marking: the presence of a best-before date, a production date or absence of any date on the food package. The perception of product quality, safety and likelihood of disposal were measured at various time points. This experimental approach provides unique insights into how consumers treat products with different date marks that deviate from current market practices, by manipulating the type of date mark while keeping the rest constant. The most important results are as follows:

- Understanding of the best before date (BBD) can be improved, only 47% of consumers participating in the experiments indicated the meaning of the best before date correctly whereas consumers are often not aware of this ignorance. This is in line with other studies (see for instance results from the United Kingdom - WRAP, 2014).
- Whether it is preferable, from a food waste prevention point of view, for a food product to be labelled with a BBD date or not, depends very much on how long consumers store products at home prior to using them. Before the BBD has been reached it seems better to have a BBD on products (less disposal; higher perceived product quality and safety perceptions) than no date or a production date. However, after the BBD is reached, consumers are less likely to throw out a food product if there is no date indicated on the label i.e. no BBD or production date. This pattern is even more pronounced for products with a long perceived shelf-life by consumers.
- Overall, consumers are more likely to dispose a product across all time points when a production date is provided compared to no date at all. Providing a production date is less effective (products with long shelf-life) or equally effective (products with short shelf-life) compared to no date mark.

Food Waste: imperfect foods

The main aim of the second experimental lab study was to investigate how to increase consumer acceptance of imperfect (strangely shaped) foods with effective communications. We investigated whether persuasive messages can be used as an alternative to diminish the need for price

reductions on imperfect fruits and vegetables. More specifically we analysed the effectiveness of an authenticity message (stressing that the food is "naturally" imperfect) or an anti-food waste message, in combination with: no price reduction, a moderate price reduction (15%) and a sharp price reduction (30%) (2x3 design). The results are as follows:

- Price reductions lead to higher willingness to buy imperfect foods. If no price reduction was provided 74% of consumers would buy the perfect foods while only 26% prefer the imperfect ones. With a moderate price reduction 31% of people would buy the imperfect foods and with a sharp price reduction 39%.
- Providing persuasive messages increases the willingness to buy imperfect foods more strongly. If an anti-food waste message or authenticity message was provided, more respondents (41% and 42%) would buy imperfect foods, but at normal prices and thus preventing a drop in retailers' revenues.
- Price reductions in combination with persuasive message frames are most effective:
 - If an anti-food waste message was provided, more respondents would buy the imperfect foods with a moderate price reduction (51%) and a sharp price reduction (51%).
 - If an authenticity message was provided, more respondents would buy the imperfect foods with a moderate price reduction (40%), and a sharp price reduction (50%).
- Authenticity messages increase quality perceptions and decrease the necessity of price reductions of imperfect foods...

