



Overview

The need

Cosmetic standards are frequently listed as a driver for food waste occurring along the supply chain. However, food discarded due to it's unusual shape or size could be recovered through processed products. The entrepreneurs from the Dutch initiative "Verspilling is Verrukkelijk" manufacture products that are made of these food ingredients, which would have otherwise gone to waste. These were offered at a dedicated shelf in the local franchise JUMBO supermarket; but, how did customers react to them?

The solution

Two strategies to increase consumer awareness towards these "Verspilling is Verrukkelijk" products were sequentially implemented in the supermarket and effects were monitored.

The benefits

Both strategies seemed to increase customer awareness to the products and boost sales, leading to more food being saved from going to waste.

Wonkey veggies and customer preference at JUMBO supermarket



Two customer attention strategies were tested, within the Dutch initiative "Food waste is delicious", to increase sales of misshapen fruit and vegetables

Jumbo is a large high-service supermarket chain based in the Netherlands. The organisation has approx. 600 stores, employing more than 35,000 people and has an annual turnover of approx. €7.4 million [1].

Background

Approximately one third of all food is wasted globally [2]. In Wageningen (Netherlands), the local franchise JUMBO supermarket - in person of entrepreneur George Verberne - is committed to reducing food waste.

This commitment was shaped into the "<u>Verspilling is Verrukkelijk</u> (VIV)" (*translation*: "Food waste is delicious") initiative, which started in March 2018.





Figure 1 - The dedicated "Verspilling is Verrukkelijk" shelf at JUMBO Verberne

The initiative was supported by MVO Nederland and REFRESH's Wageningen University & Research. Together with 17 local and national surplus entrepreneurs - such as Kromkommer, Potverdorie, De Verspillingsfabriek and Instock - Jumbo placed a dedicated shelf in the store, with several products on offer (Figure 1).

These products range from soups, pastas, marmalades, spreads, juices and beers, and are all made of ingredients that would have otherwise gone to waste.

The supermarket and surplus entrepreneurs were very interested in how to increase the awareness of customers these products to and subsequently increase product sales. From the beginning, the intention was to make this a profitable undertaking and to become part of day-to-day business. Together with Wageningen University & Research, a pilot study was implemented to investigate the following questions:

- 1. What are the consumer drivers and barriers to buying VIV-products?
- 2. Which strategies are most effective in increasing consumer awareness and influencing buying behaviour of VIV-products?
- 3. What are the advantages and disadvantages of each tested strategy for the different stakeholders involved: consumers, supermarket and entrepreneurs?
- 4. How does the presence of VIV-products influence the (brand) image of the supermarket?

What was the solution?

Two strategies to increase consumer awareness and influence buying behaviour of VIV-products were selected based on customer preferences. At baseline, a real-life survey was performed with 386 supermarket customers at the JUMBO store, who rated the attractiveness of 10 different strategies on a 5-point scale. Furthermore, they answered several questions about their experiences with, and opinions about, the VIV-shelf. Subsequently, two selected strategies were implemented in the store for a fixed period.



Implementation



Figure 2 - A picture of the 'Second placement' strategy (with blue label) in store.

First, a 'second placement' strategy was tested (Figure 2). This involved placing VIV-products on regular shelves adjacent to their regular counterparts for a period of two weeks.

Secondly, the 'food-saved-monitor' strategy (Figure 3) was tested for a period of two weeks. This involved displaying short statements next to a VIV-shelf, informing the customers with attractive messages on food waste facts and the number of kilos of food rescued through making these surplus-based products available to customers.

To evaluate the effectiveness of these strategies, sales data was collected to monitor whether actual sales of the VIV-products increased. Furthermore, during implementation, customers were asked to fill out a short survey with evaluation questions about the 'second placement' and 'food-saved-monitor' strategies.

Surplus entrepreneurs with VIV-products on JUMBO shelves:

Instock, Thijsthee, Betuwse Krenkelaar, De Bokkenbunker, Kromkommer, Soupalicious, Glorious Bastards, And Cheesetrade, GRO, De Verspillingsfabriek, Coco Conserven, Yespers, Potverdorie!, Twisted Jams, De Tweede Jeugd, BeeBlue, De Lekkere Man, The Ketchup Project.

www.verspillingisverrukkelijk.nl



Figure 3 - A picture of a VIV-shelf using the 'food-saved-monitor' strategy

Outcomes

During the baseline period, about 60% of the respondents had seen the shelf with VIV-products, of which ~35% had seen them on the day they filled out the survey. In contrast approximately 40% of the respondents stated that they hadn't noticed the shelf with VIV-products. The majority (62%) of consumers that noticed the shelf at the specific measurement day and had positive first impressions (e.g. good initiative, nice concept, beautiful products). Furthermore, respondents moderately agreed that the VIV-shelf had a positive effect on the brand image of the supermarket.



Twelve percent of respondents stated they had bought VIV-products before, of which, 75% had only purchased the products once or a few times per year. The most important reasons given for purchasing VIV-products were: 1) to reduce food waste; 2) the importance of buying sustainable products; and that 3) the products are tasty. The most important reasons for not purchasing VIV-products were: 1) I don't use these products; 2) I never saw the VIV-shelf; and 3) the VIV-products are too expensive.

In the baseline period, 5.7 VIV products were sold per day. During the intervention periods, sales increased significantly towards 9.4 (second placement) and 9.5 (food-saved-monitor) VIV-products per day. The two intervention strategies also attracted attention towards the dedicated VIV-shelf, because the VIV-shelf was more often noticed during the intervention periods compared to the baseline period.

The majority of surveyed customers (87-97%) did not consciously notice the two interventions, although the 'second placement' intervention was more often noticed than the 'food-saved-monitor' intervention. Customers also rated the 'second placement' intervention as more effective in increasing attention for the VIV-shelf and in encouraging sustainability awareness. Finally, customers in this store agreed that both supermarkets and themselves have a big role in reducing food waste.

Thoughts for the future

Both strategies were relatively simple and cheap to implement, as limited materials, time and effort was required. For all stakeholders, it is beneficial if small changes in store are effective in increasing sales and contribute to food waste reduction. A strong advantage of the 'second placement' strategy is the fact that customers more frequently encounter the option to actually see and buy the VIV-products. On the other hand, the 'second placement' strategy requires more shelf space and two store places have to be checked for stock, which is disadvantageous for the retailer.

The biggest advantage of the 'food-saved-monitor' strategy is that it may motivate consumers to buy the products, since they become aware of how much food is wasted (touching on their sense of urgency). Another advantage is that the entrepreneurs can show the story behind their products. Furthermore, the monitor provides information on how much food can be saved by purchasing VIV-products, and therefore consumers can consciously become part of the solution. However, the VIV-products are on a dedicated shelf, so consumers have only one chance to see and buy them.

In conclusion, it seems relevant to use different strategies to increase customer awareness and boost sales of VIV-products. However, since sales of the VIV-products are relatively low when compared to total supermarket sales, it is recommended that actions on reducing food waste are also taken and communicated for mainstream products.



References

- 1. JUMBO (n.d.). JUMBO Key Data. Retrieved June 10, 2019, from https://www.jumborapportage.com/jaarverslagen/2018/corporate-jaarverslag/kerngegevens
- 2. FAO (2011). Global food losses and food waste. International Congress "SAVE FOOD" at Interpack 2011, Düsseldorf, Germany. Online: http://www.fao.org/docrep/014/mb060e/mb060e00.pdf