

The Importance of Setting Accurate Monitoring Procedures to Prevent Food Waste at Retail Stores

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Abstract

In the retail industry, the generation of food waste is linked to unsold products or items that for various reasons are not accepted by consumers. According to most studies, the share of food waste at stores is estimated between 1% and 2%, but food waste represents a significant commercial issue for retailers, due to low margins and high costs for in-store operations. It is also considered an ethical issue, regarded with increasing attention by the public opinion. In the context of a national study of food waste assessment at different stages of the supply chain, the quantity of food waste produced by 13 supermarkets in Italy was monitored for 12 months. An improved recording routine was applied during the study period, including the standard bar-code recording plus a manual weighting and annotation of the waste of unpacked items that are usually disposed of without recording. By comparing the resulting data with those recorded before the beginning of the study, the existence of huge amounts of unrecorded food waste was disclosed, especially for fruits and vegetables, packed cold cuts and groceries. The rate of food waste on sales raised from 1.01% to 1.33% during the implementation of the improved recording routine, showing that food waste data available to store managers were not accurate before the study. Moreover, a significant decreasing trend of food waste was observed in the stores during the study period, suggesting that the implementation of a more accurate recording procedure can have a positive effect on the attention of the stores' staff and management towards food waste prevention. This was confirmed by interviews with store managers conducted at the end of the study period. Therefore, setting a careful monitoring of food waste in retail stores can be regarded as a first and key action of prevention, thus making managers more aware of the real quantity of food discarded and increasing their commitment on actions against food waste. The effort needed in terms of time and human resources to improve the recording operations is likely to be largely rewarded by a decrease in the rates of food waste.

Keywords: retail food waste, supermarket records, food waste prevention, in-store waste, unrecorded food waste

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University of Bologna. The general aim of the project is to contribute to reducing food waste at the national level, by quantifying food waste in Italy and proposing preventive measures to reduce food waste at different stages of the food chain.