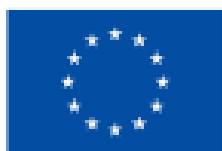




# IMPACT REPORT FOOD WASTE REDUCTION IN DEMO CASES



Co-funded by  
the European Union



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# Introduction

Food waste is a significant issue in healthcare institutions with implications for costs, sustainability and patient satisfaction. This report consolidates findings from food waste impact measurements across four hospitals: AZ Delta, AZ Sint-Lucas, UZA, and Ziekenhuis Geel. Each hospital employed strategies to reduce food waste and this report highlights successes, challenges and recommendations based on the impact studies.

## Approach

The impact measurement was conducted in the same manner as the baseline measurement (refer to the baseline report). This report, prepared by FoodWIN, evaluates the progress made in comparison to the baseline measurement. It outlines the results of the impact study and identifies the remaining challenges faced by the hospital.

### How to Best Interpret the Results

Three key indicators are critical for understanding the findings:

1. Total Weight of Food Waste (kg): This measures the overall scale of the issue for a specific meal or type of waste.
2. Waste-to-Production Ratio (%): This indicates the percentage of food waste relative to the total production volume.
3. Food Waste Per Person Per Day (kg): This metric provides a per capita assessment of the waste generated daily.



## The impact of the implemented actions

### AZ Delta

- Results: Food waste reduced by 33%, saving 30,500 kg of food and 100 tons of CO<sub>2</sub> equivalent. Per-patient waste dropped from 260g to 200g daily.
- Key Successes:
  - Optimized menu with popular dishes.
  - Reduction in portion leftovers (70% reduction).
  - Improved meal packaging and storage, extending shelf life.
- Challenges: Despite progress; starches and soups remain high contributors to waste (14,500 kg and 13,000 kg annually, respectively).
- Analysis: A well-executed waste reduction program with measurable improvements. Focus on refining portion sizes for starches and soups could yield further reductions.

### AZ Sint-Lucas

- Results: Minimal change in total waste (25% of food produced), but a 30.45% reduction in evening meal waste. Total annual waste: 40.1 tons with 198g per patient per day.
- Key Challenges:
  - High waste in warm meals, particularly starches (8,000 kg) and proteins (6,580 kg).
  - Plate waste accounts for 70% of meal waste.
- Successes:
  - Reduced evening meal waste through better portion control.
  - Lowered buffet waste with redistribution strategies.
- Analysis: While waste in warm meals increased slightly, evening meal improvements demonstrate potential for targeted interventions. Starches and proteins need continued attention.

## UZA

- Results: Waste decreased by 19%, saving 7,000 kg of food and 22 tons of CO<sub>2</sub> equivalent. Daily per-patient waste dropped from 286g to 232g.
- Key Successes:
  - Introduction of separate sauce servings.
  - Enhanced monitoring through Waste Watch technology.
- Challenges:
  - High waste in starches (9,400 kg) and proteins (7,100 kg).
  - Inconsistent measurement practices leading to unreliable data.
- Analysis: UZA achieved notable reductions but faces challenges in data accuracy and managing high-waste components. Moving to an à la carte system could address portion mismatches.

## Ziekenhuis Geel

- Results: Food waste increased by 16%, now constituting 32% of production (27,150 kg annually). Daily per-patient waste rose from 286g to 342g.
- Key Challenges:
  - High waste in warm meals (38% of production).
  - Starch overproduction (e.g., 19 kg on Mondays).
- Successes:
  - Breakfast waste reduced by 26%, with improvements in bread portions.
- Analysis: Despite focused actions, overall waste increased; highlighting inefficiencies in production adjustments and serving warm meals in the evening. Further analysis of production schedules and menu planning is needed.

## Conclusion

The collective efforts of the four hospitals reveal the potential for impactful food waste reduction in healthcare settings. Among the hospitals, AZ Delta stands out with a significant 33% reduction, attributed to the effective implementation of several strategies. These include optimizing menus with more popular dishes, maintaining detailed statistical records of waste for better forecasting, and employing advanced preservation techniques such as autpasteurization. These techniques, along with revised packaging methods, extended the shelf life of key items like soups and sauces.

Further improvements were achieved by critically evaluating portion sizes, aligning them more closely with patient needs. An innovative IT tool was also employed to automatically cancel meals for patients who must fast before operations, reducing unnecessary preparation and waste.

These actions highlight the importance of data-driven decision-making, technological integration, and proactive menu planning in tackling food waste. Hospitals like AZ Sint-Lucas and UZA demonstrated progress in targeted areas, such as reducing buffet and evening meal waste, but face challenges in further minimizing waste from high-volume components like starches and proteins. Ziekenhuis Geel's overall increase in waste underscores the necessity of revisiting production schedules, meal planning, and staff training.

By adopting the successful measures identified across these cases and addressing existing challenges, healthcare institutions can significantly reduce food waste, enhancing cost-efficiency and sustainability while contributing positively to patient care and environmental goals.