



# Food Waste in Eastern Zone Hospitals

## Objective

To evaluate the impact of the change from traditional meal service to the Steamplicity system in Newfoundland and Labrador Health Services' Eastern Zone hospitals on food waste and costs.

## Practice Points

1. The Canadian Coalition for Green Health Care and Project Drawdown state that “by reducing food waste we can reduce the need for resources used to produce food and thus reduce the emissions released in the process.”
2. Food waste accounts for approximately 6% of global greenhouse gas emissions\* and in hospitals studies have found 14% of the waste produced is food.#
3. Steamplicity, a patented micro-steaming system that enables a range of raw and pre-cooked ingredients to be freshly cooked in minutes, was implemented in hospitals within the Eastern Zone. The system also allows for increased patient choice at meals.

\*Hannah Ritchie (2020) – “Food waste is responsible for 6% of global greenhouse gas emissions” Published online at OurWorldInData.org. Retrieved from: <https://ourworldindata.org/food-waste-emissions>

#Overview of Organics Diversion Requirements and Practices for the Canadian Industrial, Commercial and Institutional Sector. Final Report Prepared for Environment and Climate Change Canada. Retrieved from: [https://partnersinprojectgreen.com/wp-content/uploads/2023/03/Consultant-Report\\_Overview-Canadian-ICI-Organic-Waste-Practices\\_Spring-2021.pdf](https://partnersinprojectgreen.com/wp-content/uploads/2023/03/Consultant-Report_Overview-Canadian-ICI-Organic-Waste-Practices_Spring-2021.pdf)

## Methods (N. MacDonald)

1. Food waste audits were conducted in all inpatient units at the three hospitals in the Eastern Urban Zone (Health Sciences Centre, St. Clare’s Mercy Hospital and Dr. L.A. Miller Centre) in 2016 and 2018 following the implementation of Steamplicity.
2. Average cost of meal trays was determined along with average wastage and cost per tray.
3. Patient select data were analyzed for any patients who had the opportunity to select their meals during the 2018 audit.

## Results

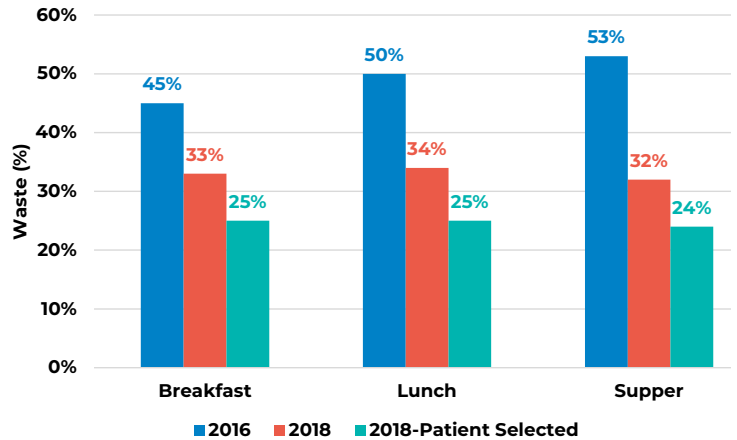


Figure 1. Average Waste per Tray by Meal in 2016 and 2018

- Average waste per tray decreased across all meals from 2016 to 2018.
- Larger decreases were observed at all meals when patients selected their meals.

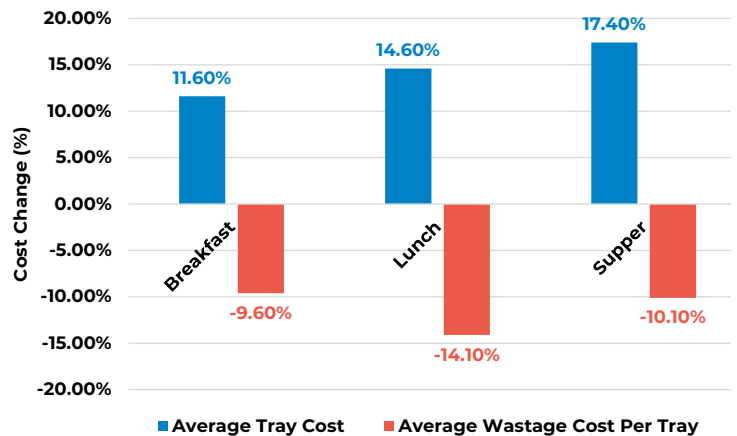


Figure 2. Average Cost Change from 2016 to 2018 by Tray Cost and Wastage Cost per Tray

- The costs of trays increased across all meals from 2016 to 2018. The reduction in waste resulted in lower cost of waste per tray in 2018.

## Conclusions

1. Based on results of the 2018 audit, estimating annual waste from patient trays at the Health Sciences Centre, St. Clare's Mercy Hospital and Dr. L.A. Miller Centre, there was an 11.5% reduction in overall costs from 2016.
2. Findings show that patient-selected meals result in even greater reduction of waste and cost savings. Providing patient select options to all patients would likely further improve waste and cost numbers.
3. With increased food costs since 2018, focus on reducing food waste and associated costs continues to be relevant. Compass One Healthcare, which operates food services within the Eastern health zone, has launched a new food waste software "Waste Not 2.0" which targets and helps to support the control and reduction of food waste.