Quantifying unopened packaged food waste at Cabrini Health: a pilot audit

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Introduction

At Cabrini Health, a significant volume of packaged food items served to patients remain unopened and unused, contributing to food waste with negative impacts on the environment. A preliminary Australian study tested bacterial levels on returned non-perishable food, results suggested reusing certain packaged hospital food items may be safe and feasible[1].

Aim

The purpose of this audit was to measure the existing amount of unopened packaged food waste, including its weight and the associated costs for food services. The secondary aim was to investigate strategies to divert wastage from landfill.

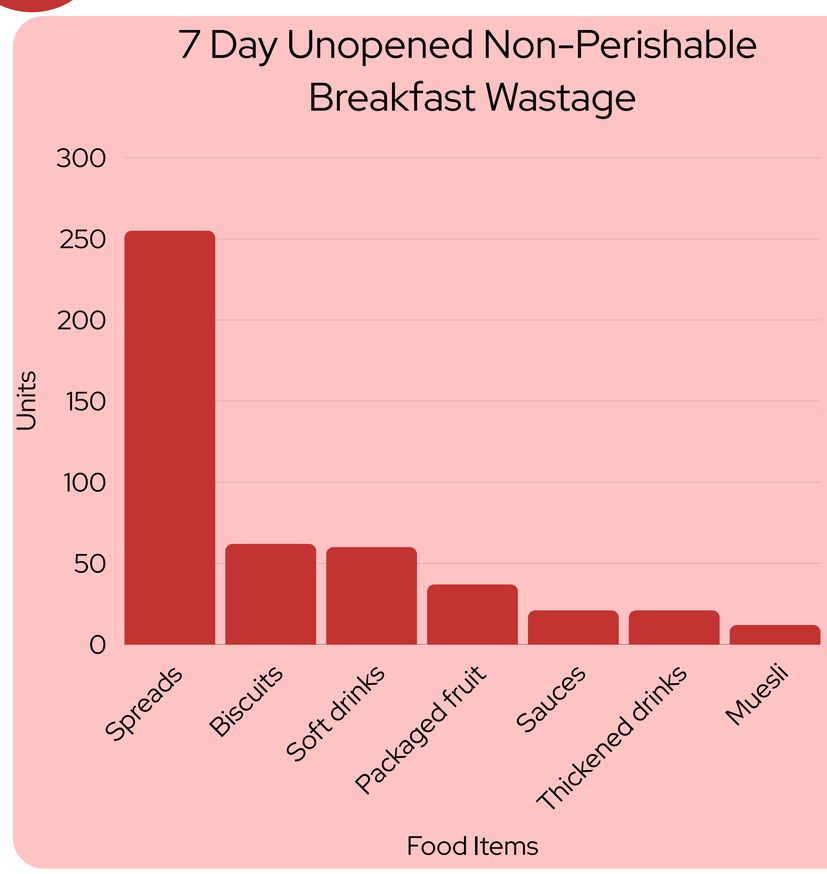
Methods

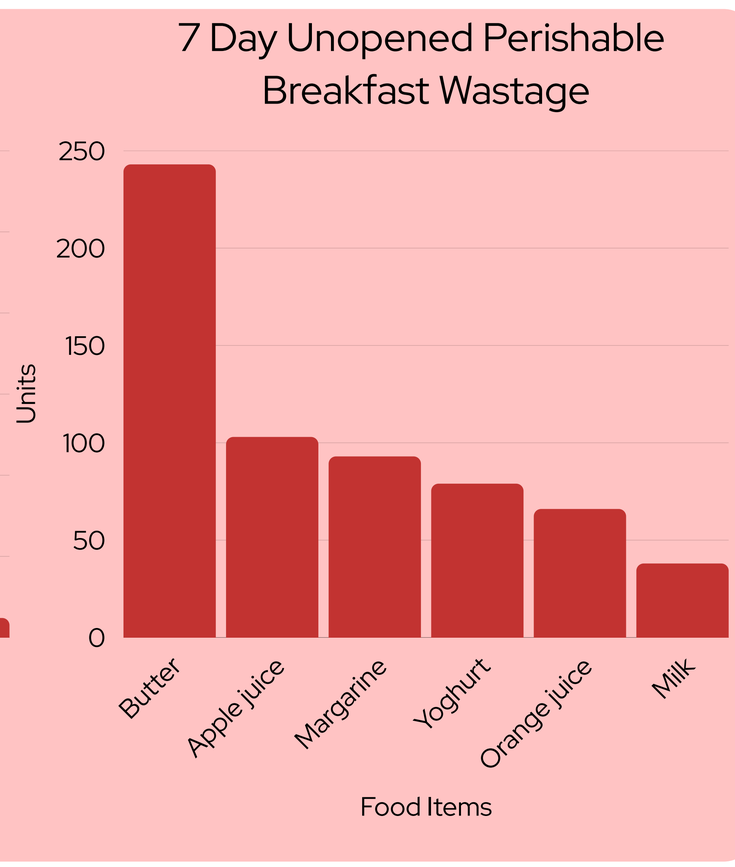
- This pilot study was conducted by a La Trobe University student under guidance of the Food Service Dietitian.
- Unopened packaged food items were collected from breakfast trays returned to the hospital kitchen over a 7 day period.
- Waste weight was calculated from packaging net weights. Cost was determined by hospital pricing multiplied by discarded units.

Image 1. Returned breakfast trays.

Image 2. Accumulated unopened packaged food, collected over 3 days.

Results





When extrapolated annually, the total estimated cost of unopened packaged food waste for breakfast reached $23,239 annually, lead by soft drinks at $3,432.

The total weight of unopened packaged food waste for breakfast reached 3,271kg with soft drinks accounting for 624kg annually.

Recommendations

- Liaison with infection control regarding reuse policies.
- Liaison with the Director Food Services regarding switching to shelf-stable juice for reuse or donation.
- Training food service staff in sustainability, and partnering with charities to donate items such as condiments, cereal packets, drinks and biscuits.

Limitations

This study was limited in time and confined to one meal period, therefore results may underestimate total waste, highlighting a need for a larger audit covering all meal time periods across the 14 day menu cycle.

References: 1. Lewandowski, P. A., Barker, L. A., Howard, A. B., & Collins, J. (2023). Packaged hospital food appears safe and feasible to reuse. Nutrition & Dietetics. Advance online publication. https://doi.org/10.1111/1747-0080.12801