

# Sustainability in Healthcare: Investigating oral nutrition supplement wastage in the hospital system



By Gina-Maree Teixeira  
Mount Isa Hospital

## Project Aim

To explore the amount of oral nutrition supplements being wasted and the cost to the health care system.

## Background

Oral nutrition supplements (ONS) are used to support patients' nutritional needs in hospital. Their wastage has been largely uninvestigated at Mount Isa Hospital. Investigation is needed to highlight the impact of wastage on the health service.

## Future Recommendations

Clear Shelf life requirements for stock

Staff upskilling for accuracy of ONS provision (type, flavour, time)

Sanitisation and redistribution of unopened products<sup>1</sup>

Changes to clinician prescribing practices

## Methods

### Pre-Consumer

ONS discarded by staff due to expiry or damage.

In the hospital kitchen and on the wards.

### Post-Consumer

ONS discarded by patients after being served.

In the hospital kitchen and on the wards.

## Results



- **9%** (182) of bottles were **wasted to landfill**, most due to expired stock. This is likely underrepresented.
- **36.4%** of each bottle was wasted.
- **\$360.16 cost wastage** over 5 months.

## Benefits

### To consumers:

- Receiving the correct product could increase consumption and reduce flavour fatigue.
- Increase nutritional adequacy and reduce malnutrition risk<sup>2</sup>



### To the HHS:

- Aligns with **environmental sustainability** goals.
- Reduction in procurement costs and the redirection of funds.
- Improved patient satisfaction of ONS

### References:

1. Lewandowski, P. A., Barker, L. A., Howard, A., & Collins, J. (2023). Packaged hospital food appears safe and feasible to reuse. *Nutrition & Dietetics*, 80(2), 173–182. <https://doi.org/10.1111/1747-0080.12801>
2. Nazanin Asghari Hanjani, Pishva Arzhang, & Azadbakht, L. (2025). Effect of oral nutrition supplements on anthropometric and functional parameters among community-dwelling older adults: a systematic review and meta-analysis of randomized controlled trials. *BMC Nutrition*, 11(1). <https://doi.org/10.1186/s40795-025-01010-8>