



Introduction

- This project was conducted in collaboration with the Catering and Dietetic Department of SVUH.
- Lunch is the meal with the greatest food waste in the hospital setting. ⁽¹⁾
- SVUH identified soup as a significant contributor to waste at lunch meal.

“Patients can fill up on soup, which often has a low nutritional content, and eat less of their lunch.”

- Green Healthcare ⁽¹⁾

Across several studies soup consumption was associated with...

- **Reduced hunger ratings** ⁽²⁾
- **Reduced subsequent energy intakes** ^(3,4)
- **Reduced total intake of the subsequent meal** ⁽⁵⁾
- **A 20% reduction in total energy intake at lunch when consumed as a preload** ⁽⁵⁾

Aims & Objectives

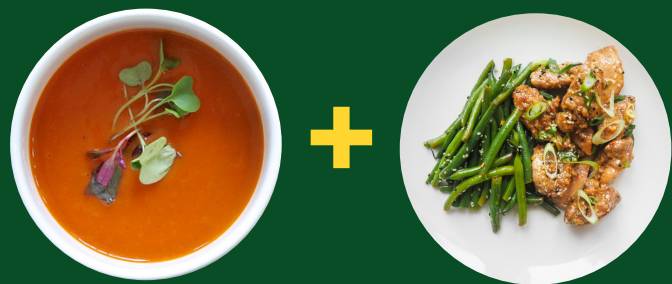
To evaluate the impact of removing soup prior to the lunch meal on energy intake, protein intake and/ or food waste from the main meal.



Methodology

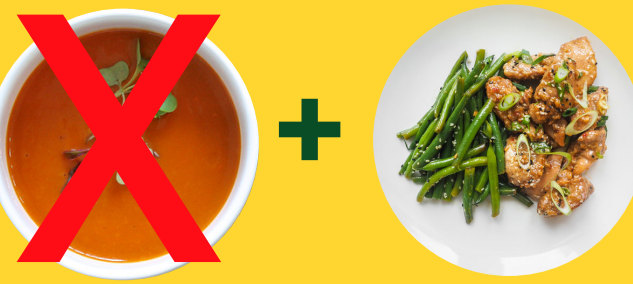
Visually estimated leftovers to determine food intake/ waste using an Audit tool .

CONTROL



Soup provided prior to main meal (4 days)

INTERVENTION



No soup provided prior to main meal (4 days)

Wards included:

- Ann's (oncology)
- Helen's (dementia & stroke)
- Our Lady's (stroke unity)
- Lucy's (general)

Results

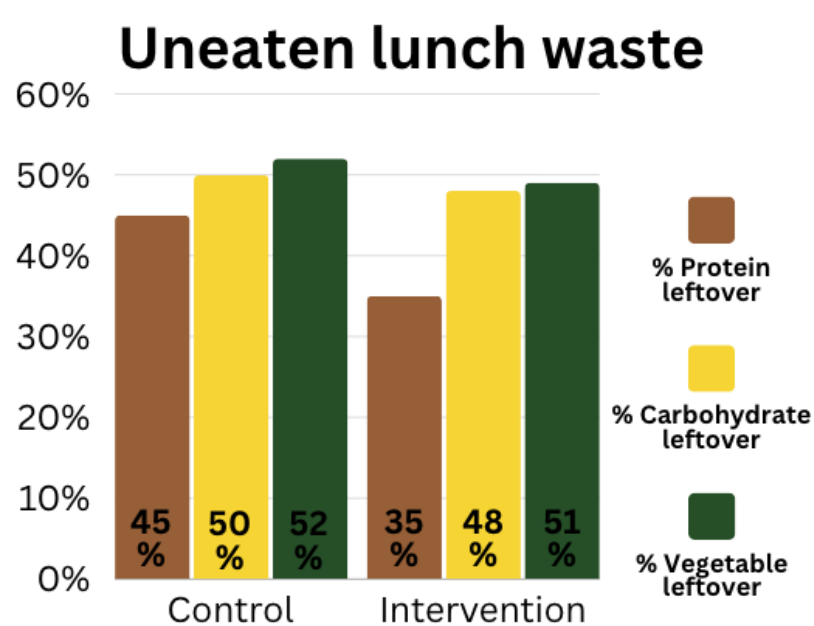


Fig 1

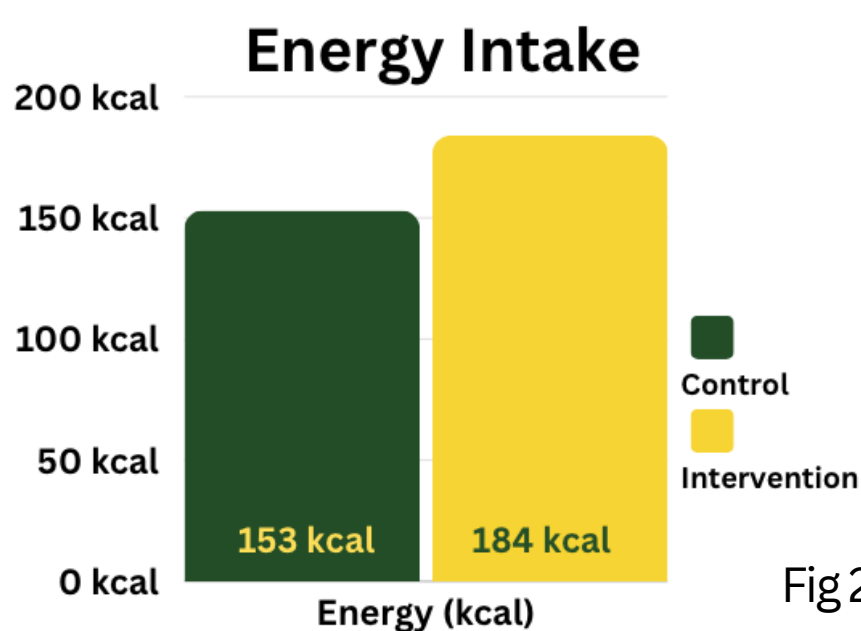


Fig 2

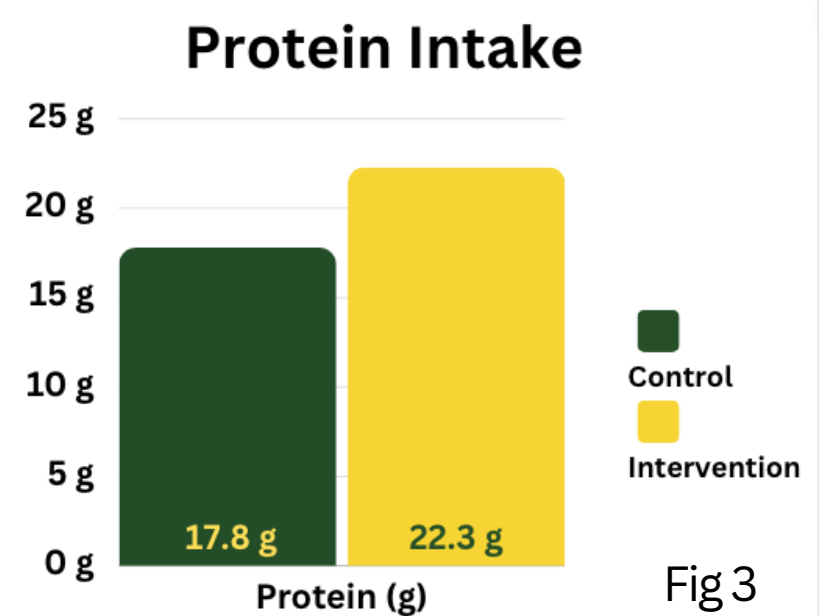


Fig 3

- The intervention reduced the uneaten waste of protein by 10%, carbohydrate by 2% and vegetables 1%
- The intervention resulted in an increase in the estimated average intake from the main meal for:
 - Energy by ~9% (184 kcal vs 153 kcal) across all wards.
 - Protein by ~11% (22.3 g vs 17.8 g) across all wards.
- Catering Staff: Reported positive feedback regarding a noticeable decrease in food waste on the wards and the elimination of soup has proven to be more time efficient for staff.

Conclusion

Removing soup prior to lunch has potential to reduce food waste and improve energy and protein intakes from the main meal.

Alternative recommendation:

Offer soup as an option on the main course menu along with a high protein sandwich. An ordering system has potential to reduce waste.

BIBLIOGRAPHY

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3. Rolls BJ, Fedoroff IC, Guthrie JF, Laster LJ. Foods with different satiating effects in humans. *Appetite*. 1990 Oct 1;15(2):115-26.
4. Rolls BJ, Bell EA, Thorwart ML. Water incorporated into a food but not served with a food decreases energy intake in lean women. *The American journal of clinical nutrition*. 1999 Oct 1;70(4):448-55.
5. Flood JE, Rolls BJ. Soup preloads in a variety of forms reduce meal energy intake. *Appetite*. 2007 Nov 1;49(3):626-34.

