



Redesigning food aid at a micro level to reduce food waste and food insecurity

How do we redesign food aid at a micro level to reduce food waste and food insecurity? ~ Carli Evans



Biotechnology and
Biological Sciences
Research Council

University of
Southampton

University of
Hertfordshire UH

“Every community could benefit from a food growing space.” (pantry user SO16 9, 2026)

THE PROBLEM IS THE SOLUTION:

- **Rising cost of living = food insecurity:** 7.2 million food insecure households in 2022/2023 (House of Commons)
- 4.6 million **tonnes of surplus food** going to waste this year in the UK (Fareshare, 2026)
- **By linking the two issues**, they can counteract each other.
- Can increased awareness around food waste and sustainability help bridge the gap?
- I wanted to find out: **are pantry users interested in food waste and food sustainability projects?**

community gardens:
"they bring people together, teach valuable skills, and provide access to fresh produce"

FINDINGS

Previous studies show no clear definition of food aid outlets and under-researched. Food waste is a bigger topic and it carries stigma e.g. “reduced to clear” stickers. I asked pantry users about the quality and usefulness of food, personal waste ethos, and food sustainability, the 5 key findings were:

1. **Mixed perception of food quality:** “very good” and “about to turn”; depended upon location, access to cold storage, time of day & year
2. **100% opposed to food waste:** “disheartening” “so annoying”
3. **Disability is a factor:** 75% had a disability in their household and this impacted what was most useful food items
4. **18/20 would like a growing space:** providing “goodness & gratification”, “bring people together, teach valuable skills & provide access to fresh produce”
5. **Volunteers valued** and many wanted give special thanks: “committed”, “friendly” and “grateful”

CONCLUSION:

Results show that a “zenzone for well-being” would be to strengthen a sustainability, creating a viable green space.

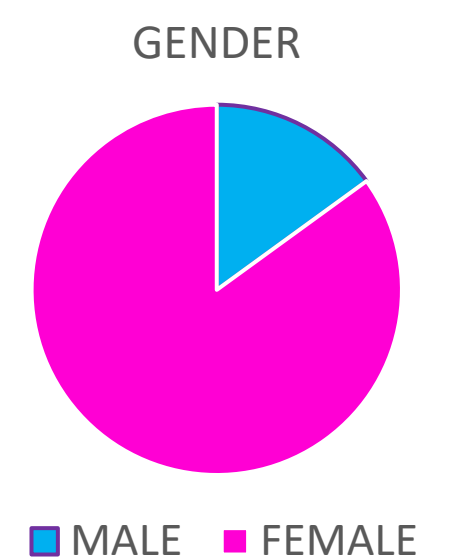
- A community garden or growing space is important to the community of SO16 that access food aid.
- Food pantry users believe it could have a positive impact on their physical and mental well-being.
- They will use it for connectiveness, as well as learning new skills and growing fresh produce to share with the local community.

METHOD:

- 20 Participants recruited from two SO16 £5 for 13 items food clubs
- 10 face-to-face interviews
- 10 online interview questions via QR
- Data transcribed & thematically coded

Participants:

- 17 female 3 male
- **Age** –average mode & median: 48



Challenges:

- rich qualitative data but a small sample
- locations may have changed the outcome
- more venues would have to be investigated to get a more reliable result
- heat and time also effected the availability of pantry users
- using eye-catching posters could be more exciting and engaging

THANKS:

Southampton Voluntary Services for use of their building
All the volunteers
Bethan & Cara for guiding us and keeping us on track
Marketplace Millbrook
Stephens Dance Centre

REFERENCES:

Blake, M. (2026) *Building resilience: The role of food clubs in UK food security*. Comic Relief Report
O'Malley et al. (2026) *Exploring the Role of Social Supermarkets in Addressing Food Insecurity and Food Waste: A Scoping Review*, Nutr Bull. 51(2)
Stahacz, et al. (2024) *The impact of food aid interventions on food insecurity, diet quality and mental health in households with children in high-income countries: a systematic review*, Public Health Nutrition, 27(1)

<https://ecrloss.com/research-paper/the-true-cost-of-unsold-food-in-retail/>
<https://www.port.ac.uk/news-events-and-blogs/news/frugal-habits-not-quick-fixes-key-to-tackling-global-food-waste-study-finds>