

Food consumption and wastage at the canteen of the Faculty of Medicine, University of Kelaniya, Sri Lanka.



Group B2.3

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Introduction

Food is defined as something “intended to be, or reasonably expected to be ingested by humans”[1]. In recent years the problem of food wastage has become one of the most discussed topics at global level. Food wastage refers to food ready for human consumption but not consumed and then discarded [2]. Nearly 1/3 of the food produced in the world for human consumption every year - approximately 1.3 billion tons get lost or wasted [3]. Not only food wastage but the lack of waste management has become a major contributing factor in increasing rate of environment pollution. so that the knowledge regarding the reduction of food wastage and proper management is necessary

Objectives

1. To determine the amount of food consumed and wasted at the faculty canteen during lunch over a 6-day period, and
2. To determine students' perceptions on reasons for food wastage and suggestions to avoid wastage.

Materials and Methods

Study design-Descriptive Cross-sectional study

Study setting -Main canteen of the Faculty of Medicine, University of Kelaniya.

Duration of study- 1st of November 2019 to 1st of December 2019

Study population- Students who consumed lunch from the faculty canteen.

Sample size

- for estimating food wastage- 795 students who consumed lunch during that period were included.
- for the questionnaire - 200 students who wasted food on each day were included i.e., if the weight of the plate after consumption > weight of the plate. Students could fill the questionnaire only once.

Data collection tool - Self-administered questionnaire

Data collection procedure

- Participants were requested to measure the weight of their food plates (after food was served) and before putting residues into the dustbin using two weighing scales that were provided.
- Two stations were allocated for weighing plates, and the data were recorded by the members of the research group.
- The questionnaire was given to consenting participants. Students were given the questionnaire when plates were weighed after serving and before consumption, and the completed questionnaires were obtained at the time of weighing the plates after consumption.

Data processing and analysis - Microsoft Excel

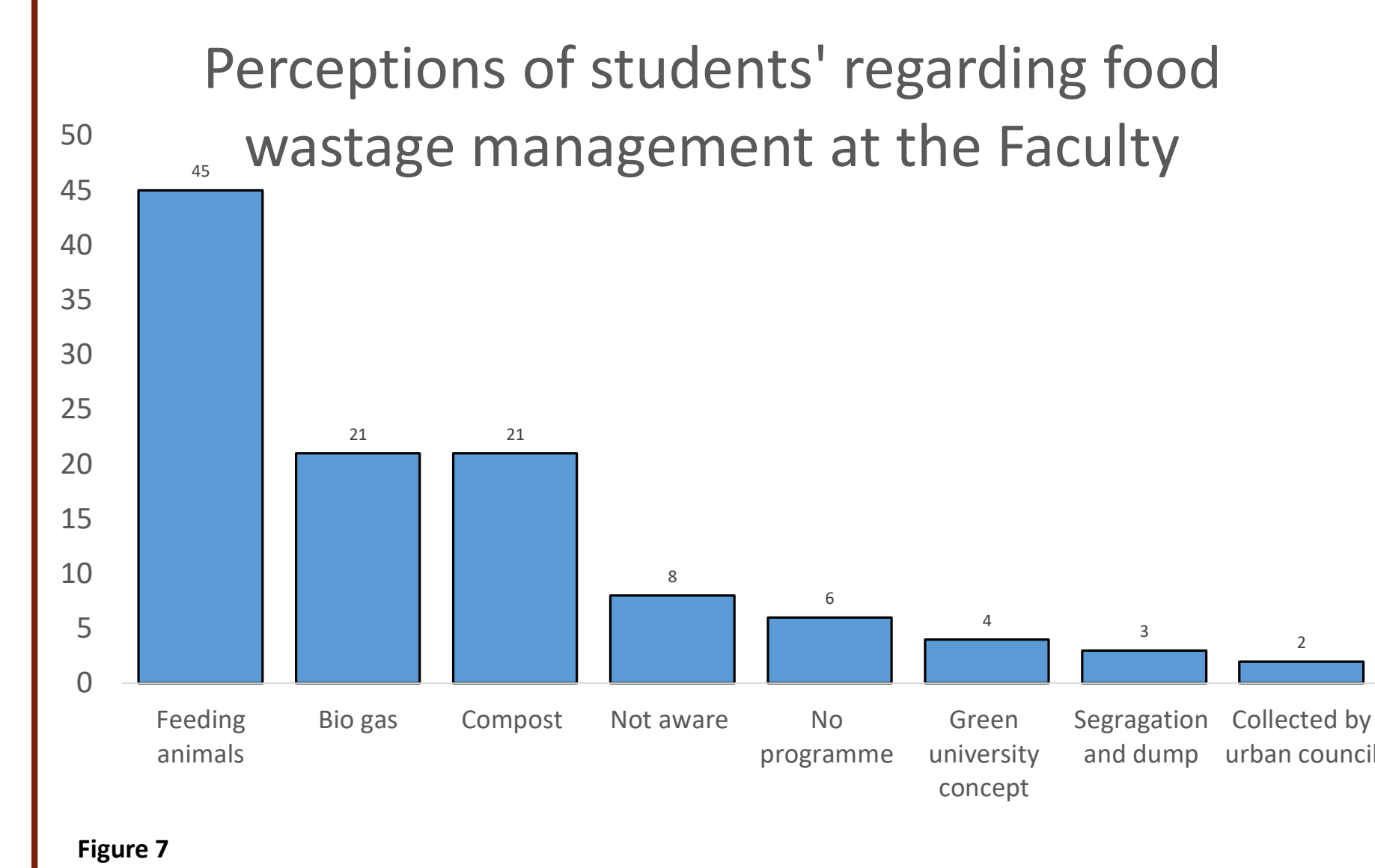
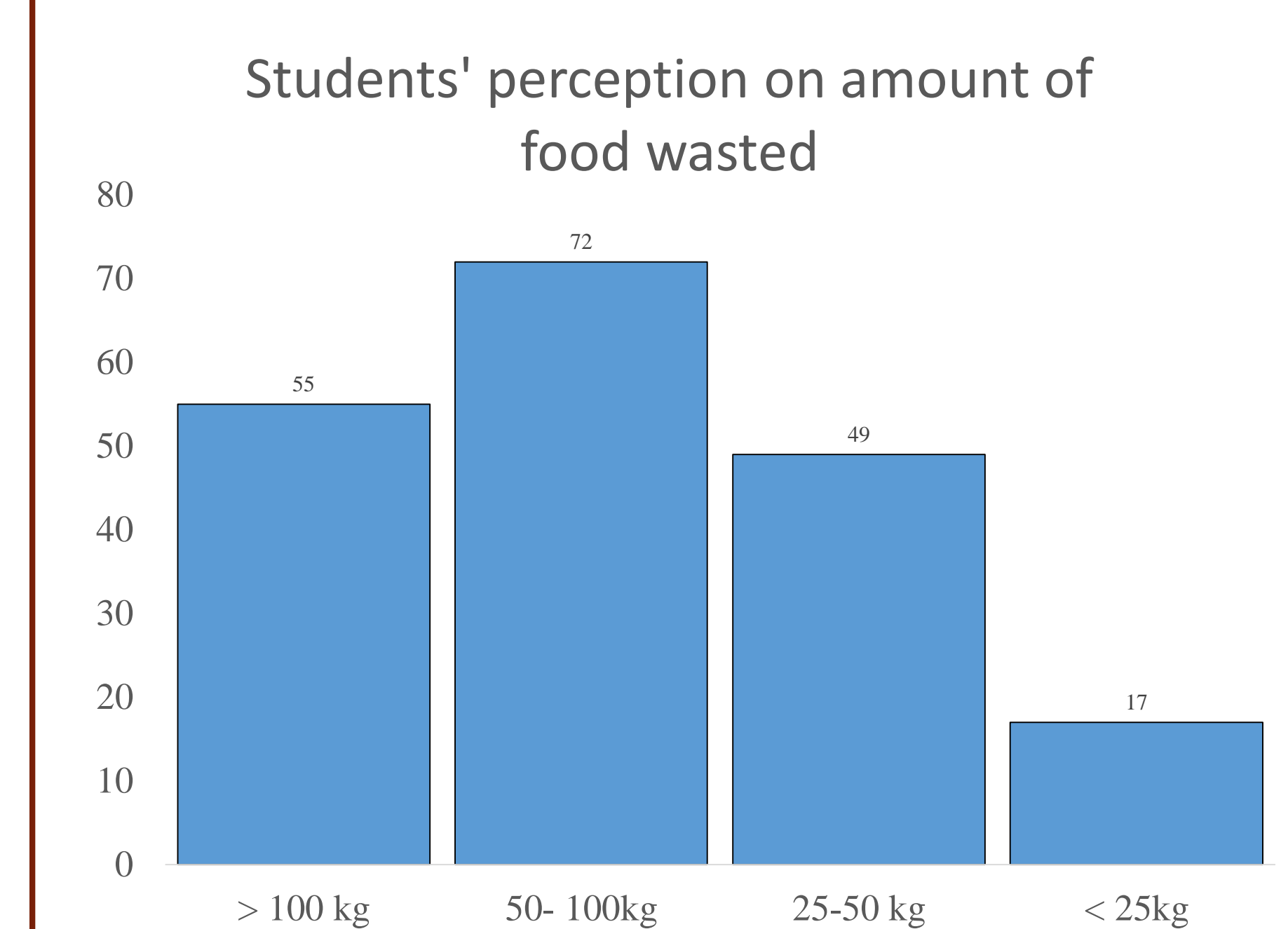
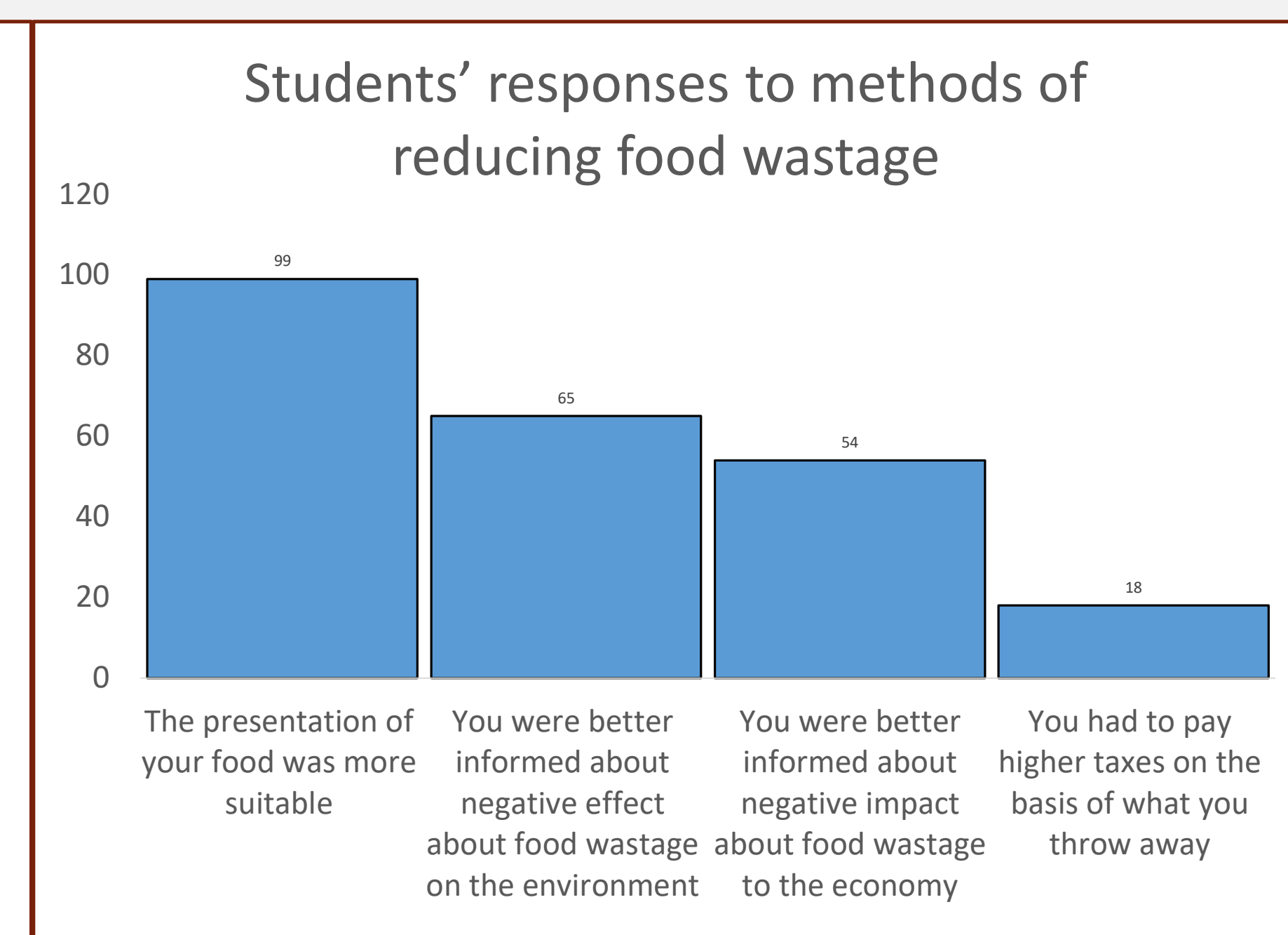
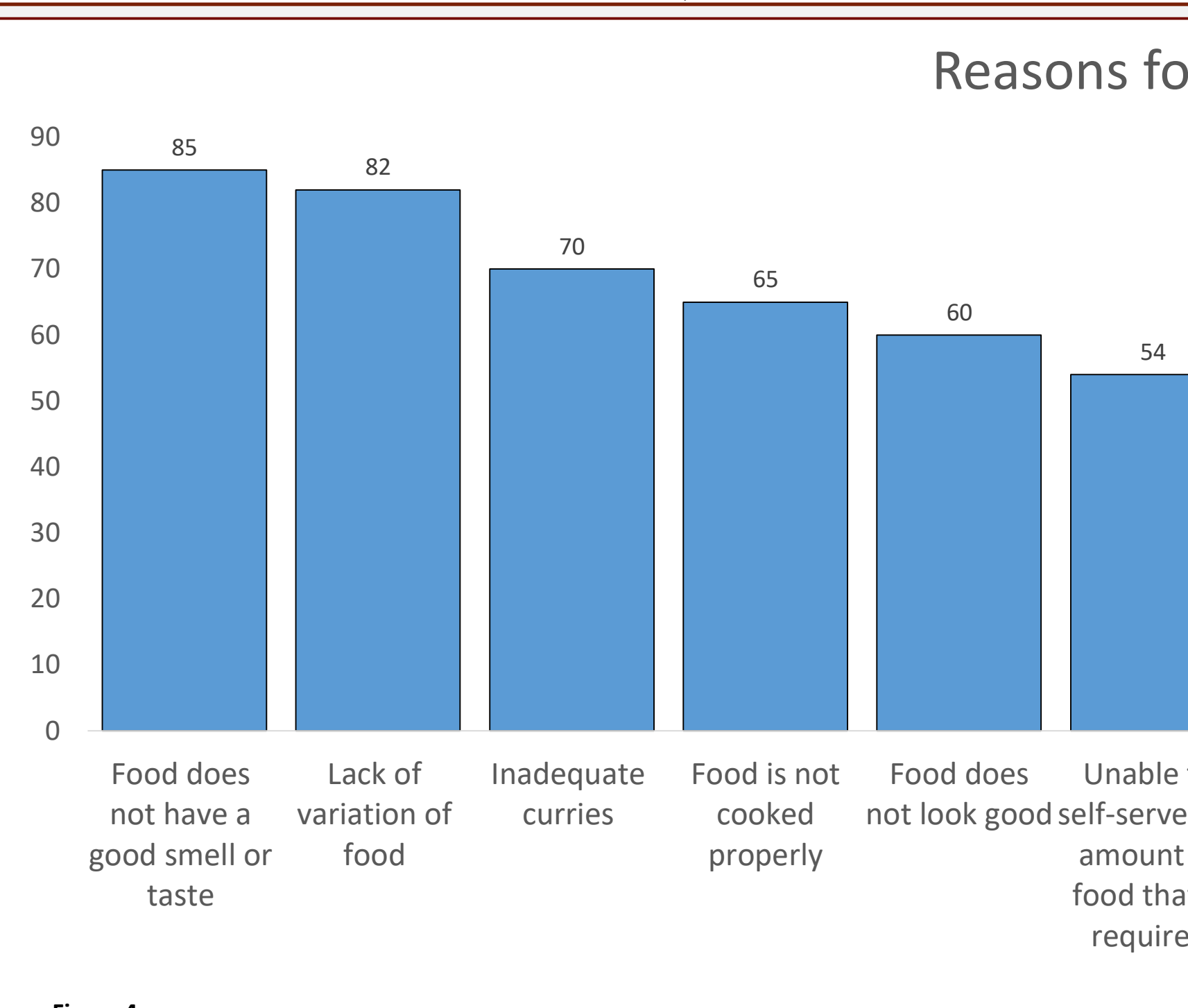
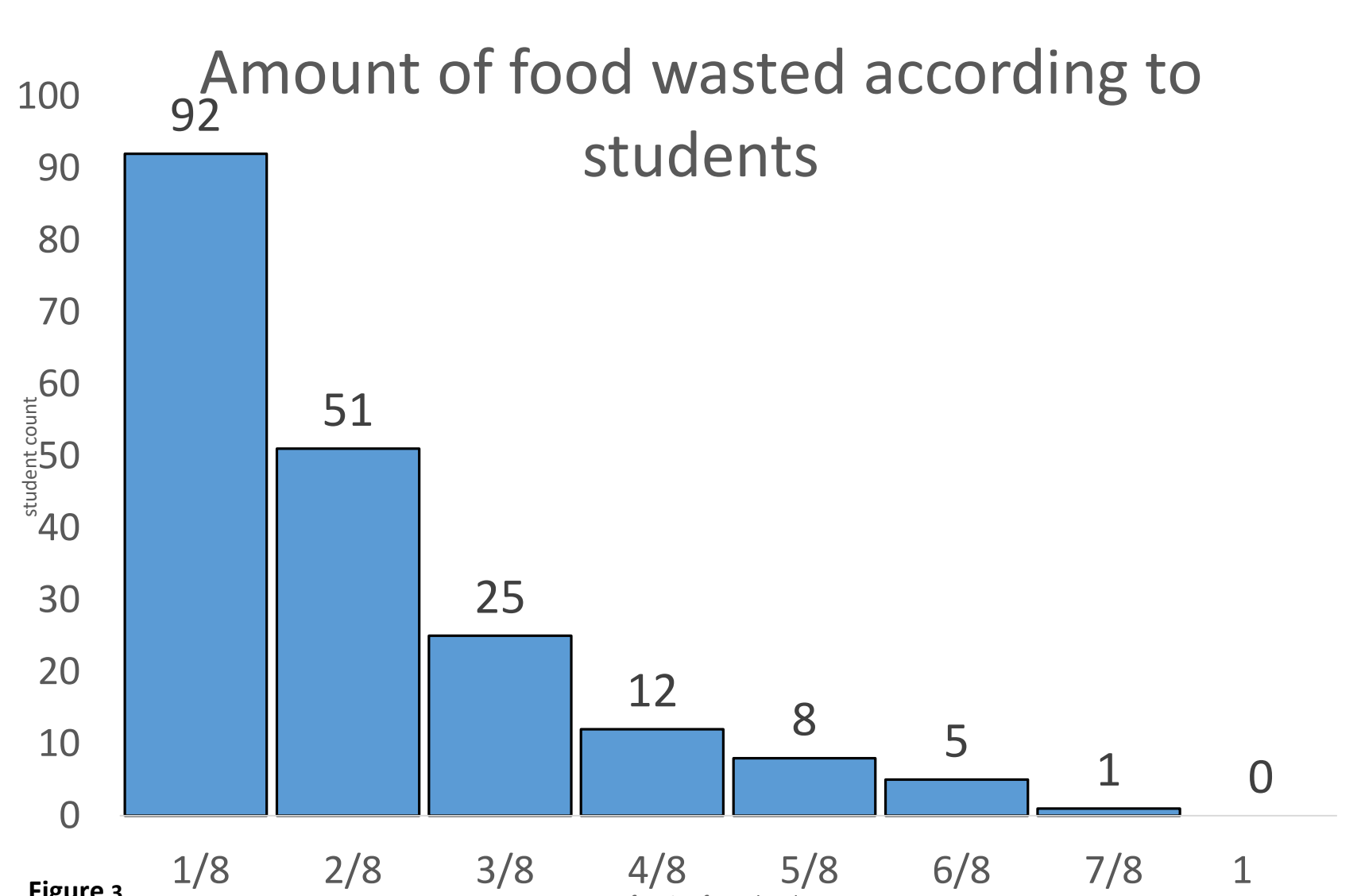
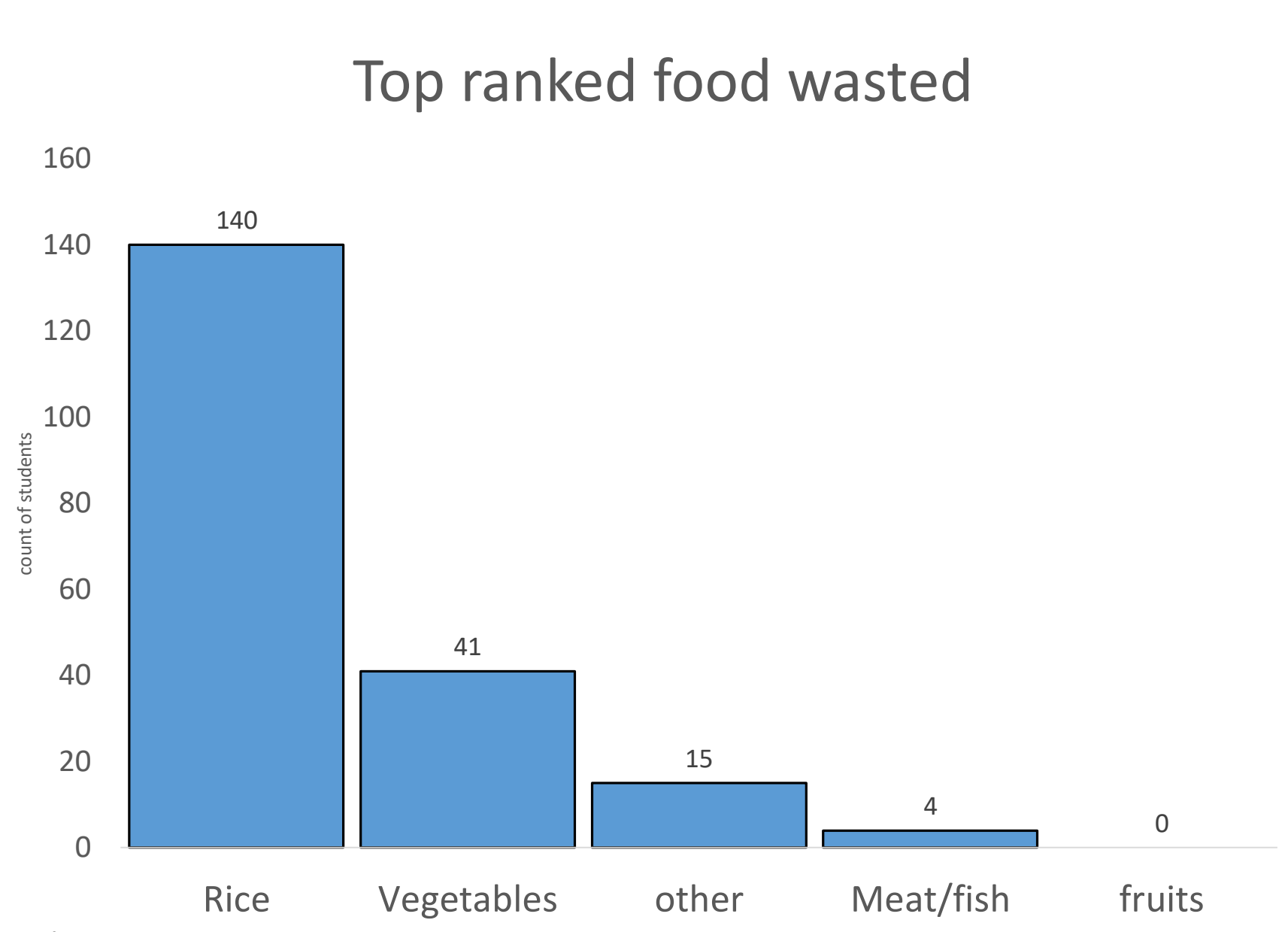
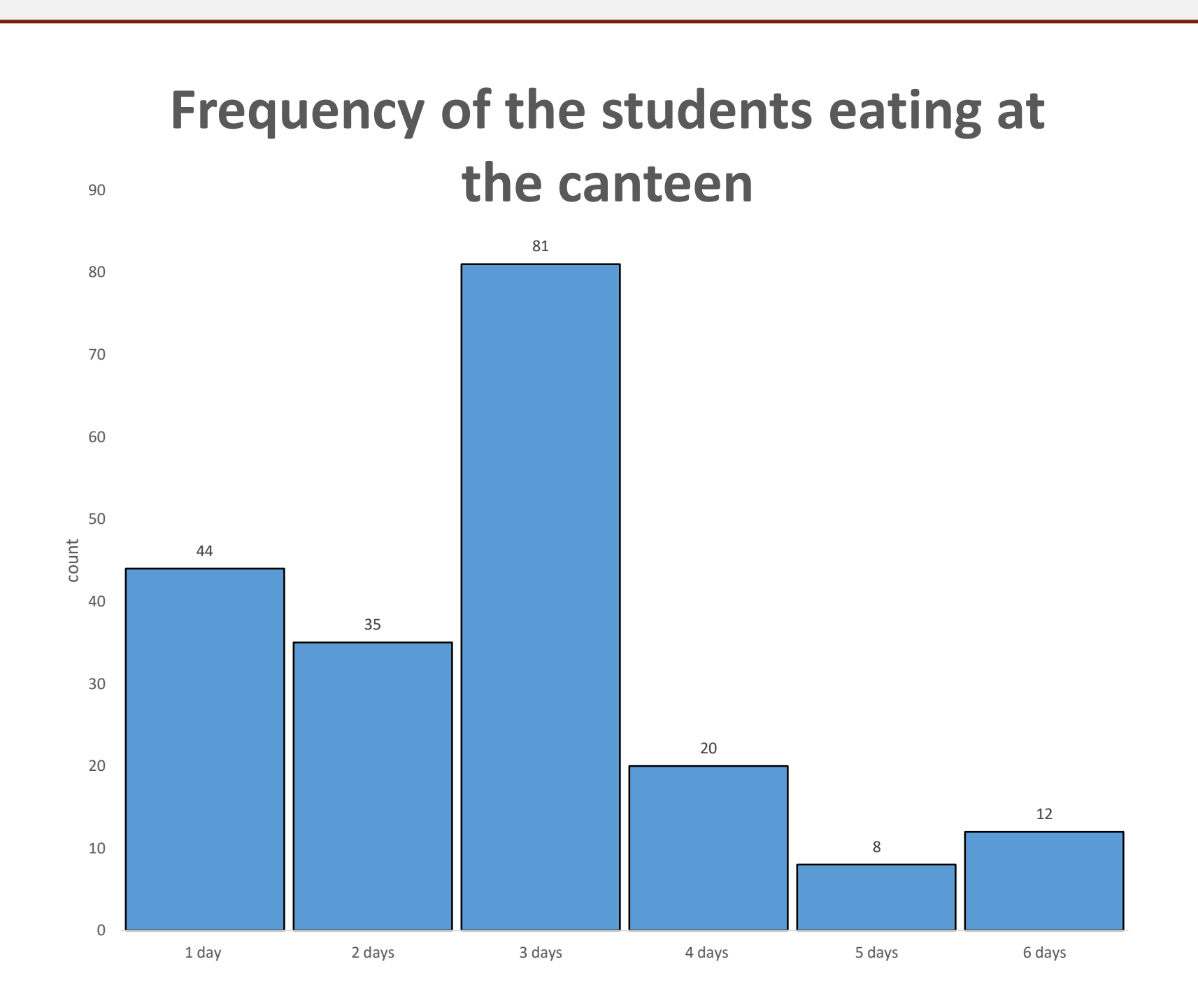
Results

Food wastage

- Out of 420.48 kg food served during the six days 110.87 kg of food was wasted - 26.4 % of served food was wasted.
- Mean food wastage per student- 139.5 g

Perception and knowledge of students on food wastage

- Top rank foods wasted according to students – Rice > vegetables > other> Meat/Fish>fruits. 70% of them waste rice mostly (figure 2)
- According to the students main reason (42.5%) for food wastage is because “the food does not have a good smell / taste.” 2nd reason (41%) is due to “lack of variation of the food” (figure 4)
- 92/200 students (46%) waste 1/8 of the food served to their plate. Figure 3)
- 99/200 students (49.5%) stated that they would waste less food if the presentation of food was better. (figure 5)
- 72/200 students (36%) thought that; about 50- 100 kg of food is wasted per day at the faculty canteen.(figure 6)
- To the open question “What is the current programme in the faculty for food waste management?” There were 110 responses that can be categorized into eight categories: feeding animals, biogas generation, composting, segregation and dumping, collected by urban council, no programme, not aware. Among them 45/110 (41%) responded as “feeding animals”. 8/110 (7.27%) of them were not aware of any programme. Figure 7)



Conclusion

- A large amount of food, mostly rice, is wasted at the faculty canteen during lunch every day.
- Wastage can be reduced significantly by improving the quality of the meal.
- Most students opined that waste food is fed to animals.

References

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- [2]J. Aschemann-Witzel *et al.*, “Key characteristics and success factors of supply chain initiatives tackling consumer-related food waste – A multiple case study,” *J. Clean. Prod.*, vol. 155, pp. 33–45, Jul. 2017.
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