RETASTE Conference Abstracts
RETASTE-FWM-1367-In-person Oral
Rethymno, September 16-18, 2026
© Author(s) 2026 CC BY 4.0 License
DOI:10.5281/zenodo.23678395

Food Waste in School Catering in Austria

Gudrun Obersteiner, Sandra Luck, Reinhold Ottner and Elisabeth Schmied

BOKU University, Austria

Abstract

Food waste is a multifaceted phenomenon influenced by individual, collective, and systemic behavioural patterns. It affects various social contexts and thus represents a central element of the sustainability of food systems. In this context, school canteens play a key role, as they have a significant influence on eating habits and dietary choices. For this reason, school food service facilities represent key areas for action in the prevention of food waste. As part of the foodCIRCUS project, funded by Interreg Central Europe, the implementation of waste prevention measures in school food service focuses on the two Austrian regions of Vienna and Lower Austria in order to account for both urban and rural conditions. As part of initial measurements, food waste was examined between February and June 2025. In total, 23 institutions were surveyed. At all schools, sorting analyses were conducted on two dates that had been coordinated with the respective educational institutions. The objective of these surveys was to collect and systematically evaluate quantitative and qualitative data on the amount, composition, and points of origin of food waste. The sorting analyses involved differentiating and quantifying the collected food waste according to its origin, composition and type. A total of 6,187 portions were delivered across the 23 educational institutions, corresponding to 3,204 kg of food. Of this, 1,444 kg of food waste was analysed. This corresponds to an average loss rate (ratio between the amount of food waste and the quantity of food delivered to the institutions) of 44%. The loss ratio ranged between 27% and 59%. On average, 544 g of food per child was delivered to the schools, but only 310 g per child was consumed. This means that 244 g per child were discarded. Furthermore, the results highlight that particularly the serving leftovers (24%) represent a key area for future measures aimed at reducing food waste, while plate waste (9%) and unserved food (7% or 3%) present comparatively smaller but still relevant opportunities for improvement. When measured against the quantities delivered for each course, especially high loss rates were observed for soups (48%) and salads (63%). The loss rate for thickened soups is notably higher at 61%, compared to the loss rate for clear soups (42%). Consequently, children, on average, prefer clear soups over thickened ones. Additionally, it is noticeable that the number of children present at almost all institutions is lower than the planned attendance. On the survey days, around half of the institutions were missing 10% or more of the children originally registered for the meals.

Keywords: food waste, school food, sorting analysis, loss rate

ACCEPTED