

Acceptance of a University Menu According to the Waste Assessment of the Comstock Visual Estimation Method

González-Santana R.A, Gómez-Urios C, Blesa J., Frígola A. and Esteve M.J.

Department of Preventive Medicine and Public Health, Food Sciences, Toxicology and Legal Medicine. University of València, Avda Vicent Andrés Estellés, s/n 46100 Burjassot, València.

Abstract

It has been reported that food waste accounts for the largest land fill deposits, and an average annual loss of \$100 billion. Because of the large size of Universities, food waste should be among the important issues for universities (Thapa et al., 2016). Alternatives to weighing food are visual estimation, i.e., direct observation by an experimenter, and photographic methods. Visual estimation has high reliability, requires less labor, less time, and less space, but requires trained observers (Brautigam et al., 2014). The purpose of this research was to amount of lunch plate waste and to collect information to raise awareness for the reduction of food waste in university dining halls, used by students as well as administrative and academic staff. For this research, the food waste at the Valencia University's dining halls in Valencia (Spain) was examined by visual estimation of waste on the trays using the Comstock method; 5-point scale: item 5: all; item 4: 3/4; item 3: 1/2; item 4: 1/4; and item 5: none (Comstock et al., 1981). A photography method was used to measure waste of starter, main course and dessert on 942 trays during one month by a trained nutritionist. No residue (item 0) was found in 90% (847) of desserts, in 83.5% (790) of the starters, and in 67.4% (635) of the main courses. Most of the residue, valued as a higher percentage of dishes with a higher amount of residue, was occurred in second dishes with the 16.8% (159) of item 1 (1-25%) and 12.8% (121) of item 2 (26-50%), followed by the first dishes where 10.4% (98) were cataloged as item 1 (1-25%), and for desserts where 3.82% (36) shown an item 4 (76-100%) and it was almost entirely wasted. The menus offered in the catering service of the University of Valencia are well accepted by users, but it is necessary to investigate the reasons for the waste with an emphasis on the differences between first and second course, as well as to investigate why in the category of desserts there is a surprising percentage of item 4.

Keywords: Food Waste, Universities, Food Services, Consumer Waste, Spain.

References

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