

Comparative Study of Food Waste in Homes in Two Metropolitan Areas: Guayaquil (Ecuador) Vs. Valencia (Spain)

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Abstract

The world generates 1.3 billion tons of food waste every year, which, in turn, generates economic losses equivalent to 940 billion dollars a year (FAO, 2013). However, this poses a particular challenge, since the lifestyle, consumption trends, and purchasing habits are in continuous change (Oláh et al., 2018). Here we compare the annual food waste of 120 families from two metropolitan areas, corresponding to the city of Guayaquil (Ecuador) vs. Valencia (Spain), 60 families from each city. Food waste is evaluated using questionnaires designed by the Ministry of Agriculture Fisheries and Food (MAPAMA, 2017), which collects information on the total waste content (kg/home/year). The total food waste content obtained in Guayaquil is 85.9 kg/home/year, and in Valencia it is 72.8 kg/home/year. While in Guayaquil, 78.3% of the waste generated by the families surveyed is avoidable and 21.7% is unavoidable, in Valencia it is 96% of the families surveyed generate avoidable waste and 4% of unavoidable waste. According to the criterion classification of avoidable waste, open and over-cooked foods account for 60.4% in Guayaquil, while in Valencia they account for 54% of the total, on the other hand, waste derived from unhealthy food, either due to expiration or poor conservation, in Guayaquil account for 39.6% while in Valencia they account for 46% of the total. The results show waste values in the range of those obtained in the household food waste quantification panel in Spain 2016 which was 71.2 kg/home/year, although some difference is observed between the two communities in the classification of this waste as avoidable or unavoidable.

Keywords: Household, food waste, quantification, awareness

References

FAO, 2013. <http://www.fao.org/docrep/018/i3347e/i3347e.pdf> Oláh, J., et al., 2018. LogForum 2018, 14, 127-138 MAPAMA, 2017: "más alimento, menos desperdicio".

Acknowledgments: This research was supported by the Universitat de València (UV-18-INV_AE18).