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BOOK OF ABSTRACTS

6TH MEETING OF YOUNG RESEARCHERS OF UNIVERSITY OF PORTO





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Influence of satisfaction with school meals on food waste in fourthgrade children

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Introduction: School meals play an important role in children's food habits development [1, 2]. In spite of schools meals usually being nutritional balanced, these are frequently rejected [3], so that benefits are no longer assured [4]. Food sensory characteristics influence children acceptance concerning school meals [5], being an important determinant of food waste [6]. Objectives: To evaluate children's satisfaction with school lunch sensory characteristics and its

impact on plate waste.

Population and methods: There were included all fourth-grade children attending 6 schools from Oporto. Data collection was performed in two sequential days: on the first day, plate waste was evaluated by the physical measurement; on the second day, it was collected socio demographic and anthropometric data and satisfaction of children with school lunch in relation to sensory characteristics was evaluated.

Results: Plate waste was 20,5% for soup and 32,4% for the main dish. The waste obtained by protein and carbohydrates-rich foods was 13,5% and 31,3%, respectively. The most dissatisfaction was observed for appearance and smell of meals served. It was found that as satisfaction with sensory characteristics increased, food waste reduced, with significant results for soup taste and smell and the main dish taste.

Conclusion: Children's satisfaction with school lunch had influence on plate waste. In order to reduce food waste, besides improvement of taste and appearance of meals, interventions for school community should be planned, to increase satisfaction and acceptability of school lunch.

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